

London School of Economics and Political Science

Social Policy Department

Ph.D. Thesis

Vulnerability and Poverty:

An assets, resources and capabilities impact study of low-income groups in Bogotá

Candidate: Mr. Andrea Lampis

Supervisor: Professor Jo Beall

UMI Number: U615692

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U615692

Published by ProQuest LLC 2014. Copyright in the Dissertation held by the Author.
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

THESES

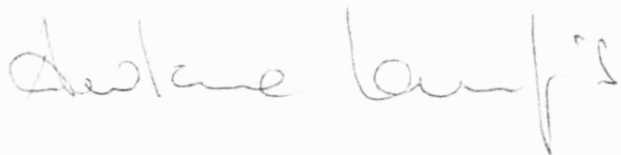
F

9137

Certification of authorship

I certify that this thesis is the product of my own original work as far as every part of it is concerned.

London, 20th May 2009

A handwritten signature in cursive script, appearing to read "Andrew Banks".

Abstract

This research analyzes the dynamics of vulnerability in Bogotá through a study conducted on a 900 households sample during 1997 and 1998. It builds on Moser's key findings and her Assets Vulnerability Framework, concentrating on causal relations between critical life events faced by households, the causes that directly determine them, the consequences or short-term impacts these events implied and, finally, the strategies they adopted in order to face, cope with, as well as react to them. The main added value of the research can be found on the methodological ground. That is, in a further operationalisation of vulnerability analysis as a tool for poverty studies and micro-level livelihoods-centered social policy. The insights provided to answer the main question concerning the research question about the possibility to operationalise vulnerability analysis beyond Moser's Assets Vulnerability Framework show that this is possible on the basis of life events-related vulnerability patterns employment, which have in income-generation, health, violence and the inner dynamic of the household are the interlocking epicenters of a crisis that involves simultaneously a number of dimensions in the lives of low-income groups in Bogotá, well beyond the lack of income. Confirming Moser, Pryer, Rakodi and Chambers' findings the research illustrates that different vulnerability patterns reflect different degrees of resilience in the face of the crisis. Since nowadays the debate on vulnerability is not anymore restricted to the respective merits of a static versus a dynamic understanding of poverty, but it is embedded into a wider social protection debate. Therefore, the thesis opens a dialogue not only with a technical but also a social policy dimension of the debate concerning the level of operative decisions about people's livelihoods, choices, well-being and freedoms and it is on this ground that the thesis finds also a conceptual relevance.

Table of Contents

Introduction	12
1. Conceptual Framework	24
1.1. The Concept of Vulnerability: a Comparison of Different Definitions.....	27
1.2 The Poverty Debate of the 1990s and the Core Conceptual Justification of the Research	38
1.2.1 From the Basic Needs to the Capabilities Approach: Relevant Elements for a Vulnerability Approach.....	40
1.2.2 The Inquiry into the Dynamics of Poverty at the Level of the Institutional Shift	50
1.3 The Influence of Amartya Sen’s Thought on the Elaboration of a Vulnerability Approach	54
1.4. Vulnerability, Security and ‘Freedom From’	56
1.4.1 Vulnerability and Entitlements: an Unnoticed Crossroads?	58
1.5 The Debate on Vulnerability: Initial Insights on Assets and Coping.....	61
1.5.1 Moser’s Assets Vulnerability Framework.....	64
1.5.2 Vulnerability, Disasters and Social Capital: Another Contribution to the Creation of Vulnerability Analysis	73
1.6. Livelihoods, Assets and Capital: Implications for Vulnerability Analysis	77
1.7 The Shifting Policy Agenda of the Nineties and the Social Risk Management Paradigm.....	81
1.7.1 The Poverty Alleviation and Reduction Debates of the 1990s: Why is Vulnerability Relevant?.....	84
1.7.2 The Multi-Dimensionality of Poverty: Its Relevance for an Approach to Vulnerability Analysis.....	87
1.7.3 The Vulnerability Debate: Assets and Coping in the Face of Shocks and Risks	89
1.7.4 The World Bank Social Risk Management Approach and a Shifting Policy Agenda	90
1.7.5 The Social Risk Management Approach: Analysis and Critique.....	93
1.8 Poverty and Vulnerability in Colombia: Key Debates 1980-2000	98
2. Bogotá within the Country Context: Poverty Trends and Social Indicators	104
2.1. Demographic Structure and Trends.....	105
2.2. Urbanization Trends.....	110
2.3. The Economic Role Of Bogotá Within The Colombian Economy.....	115
2.4. Poverty Trends In Bogotá According To The Unmet Basic Needs Index	118
2.5. Income Poverty and Inequality in Bogotá.....	123
2.6. Employment and Income Instability: the Direct Cause of the Worsening of Poverty Indicators.....	126

2.7. Housing	129
2.8. Health	134
2.8.1. Health Care Reform in Colombia.....	134
2.8.2. Health Insurance in Bogotá	136
2.9. Education.....	138
2.10. Domiciliary Services.....	141
3. Methodology	144
3.1 The Genesis of the Research Question.....	151
3.2 The Operationalisation of Vulnerability	155
3.2.1 The Concept of ‘Life Event’ within the Vulnerability Framework	156
3.2.2 Assets and Resources: Risk and Losses	160
3.2.3 Patterns of Vulnerability: Life Events, Causes, Consequences, and Strategies	162
3.3 Conceptual Considerations about the Pre-Selection and Sampling Frame	167
3.3.1 Pre-Selection and Definition of the Sampling Frame: Analysis of Alternatives	168
3.3.2 The Pre-Sampling Simple Index: Mapping Poverty to Focus the Fieldwork ..	172
3.4 The Sampling Process	177
3.5 Qualitative Fieldwork Previous to the Interviews Stage.....	178
3.6 Data Collection: the Interview Stage	181
3.7 Vulnerability Patterns and the Use of Multiple Correspondences Analysis	182
3.7.1 Conceptual Elements of MCA	183
3.7.2 The Construction of the Final Data Base	185
3.7.3 Clusters and Patterns	186
3.8 Elements for the Interpretation of the Vulnerability Patterns Map.....	188
4. Research Results	191
4.1 Characteristics of the Sample.....	191
4.2 Socioeconomic Characteristics	197
4.1 Vulnerability Patterns in Bogotá in 1997/8.....	206
4.3.1 Analysis of Group A - Pattern No.1: Economic Crisis	210
4.3.2 Analysis of Group B - Pattern No.2: Health Crisis.....	230
4.3.3 Analysis of Group C - Pattern No.3: Household Dynamic	247
4.3.4 Analysis of Group D - Pattern No.4: Search for Capabilities	254
5. Vulnerability Analysis: Implications for the Debate and Policy.....	266
5.1 Implications of the International Policy and Poverty Debate for Social Policy in Bogotá	268

5.1.1 Debate on the Washington Consensus: Can anti-poverty programmes alleviate poverty?	269
5.2 Conceptual Implications of the Results.....	276
5.3 The Dynamic of Vulnerability: Multiple Patterns and Entry Points	278
5.3.1 Patterns of Vulnerability: Coping or Reacting?	282
5.4 Vulnerability and the Social Risk Management approach: a concluding remark ...	287
6. Conclusions	291
6.1. Conceptual and Social Policy Debates.....	291
6.2. Limitations of the Thesis Regards of the Research Question	295
6.3. The Operationalisation of Vulnerability: Contributions towards a Vulnerability Approach	297
6.4. The Research Agenda Ahead	299
Annex 1 Questionnaire.....	301
Annex 2 Codes for the data processing.....	319
Annex 4 Table of Burt.....	351
Annex 5 Correspondences analysis.....	388
Annex 6 SAS Programs.....	399
6. Bibliography.....	421

List of Tables

Table 1.1- Moser' s definition of types of vulnerability	66
Table 1.2- Moser's Asset Vulnerability Matrix.....	69
Table 1.3- Household strategies for reducing spending in Moser's research communities.....	72
Table 1.4- Household strategies for mobilising assets in response to changes in economic circumstances according to Moser's findings.....	73
Table 1.5 - A chronological systematisation of the vulnerability - livelihoods literature.....	79
Table 2.1 - Demographic Indicators Bogotá D.C. 1985 – 2005.....	106
Table 2.2 - Urbanisation trends in Colombia and Bogotá 1973 – 2005.....	113
Table 2.3 - UBN poverty in Bogotá by zone and locality: 1985-1997-2001-2003.....	120
Table 2.4 - Bogotá, monthly incomes by household deciles (2003).....	124
Table 2.5 - Unemployment and under-employment rates for non-poor, poor and extremely poor groups in Bogotá 1990-2003.....	127
Table 2.6 – Qualitative housing deficit by socioeconomic level and income in Bogotá in 2000.....	131
Table 2.7 – Geographical distribution of Illegal settlements geographical distribution in Bogotá 1980 – 2000.....	132
Table 2.8 - Population Covered by the Health System in Bogotá - 2005.....	138
Table 2.9 - Solid waste public collection service in Bogotá: absolute and percentage participation of residential users in 2001.....	141
Table 2.10 - Domiciliary service provision in legal settlements, percentage of households not reached by the service.....	141
Table 2.11 - Domiciliary service provision over the whole city (legal and illegal settlements), percentage of households not reached and reached by the service.....	142
Table 2.12 – Water, sanitation and waste collection services. Coverage by zone and locality in Bogotá – 1993	143
Table 3.1 - Values by locality for the pre-sampling index	173
Table 3.2 - Clusters of localities for the sampling frame and associated typology of poverty.....	176
Table 3.3 - Final simple by census unit, locality, number of interviews and map number of DANE.....	178
Table 4.1 - Respondent by parenthood with the head of household	192
Table 4.2 – Type of household by educational level of the head of household (%)...	193
Table 4.3 - Number of persons per household (%)	194
Table 4.4 – Number of children per household.....	195
Table 4.5 – Indicators used to assess the capital assets profile of sampled households by type of capital.....	197
Table 4.6 - Income by gender of the head of household.....	200

Table 4.7 – Income generation capacity: comparison between present level and one year prior to the interview according to a minimum criterion.....	201
Table 4.8 – Educational level of the head of household by type of headship.....	203
Table 4.9 – Cluster of life events ‘Assets and Consumption’.....	211
Table 4.10 - Cluster of life events ‘Employment & Income’.....	214
Table 4.11 - Cluster of causes of life events ‘Economic Factors’.....	217
Table 4.12 - Main associations between the cluster of consequences ‘Affecting the household economy’ and clusters of life events’ from the ECP.....	219
Table 4.13 - Cluster of consequences of life events ‘Affecting the Household Economy’.....	221
Table 4.14 - Association among the life events clusters and the consequences and strategies clusters and sub-clusters within the ECP of vulnerability.....	222
Table 4.15 - Cluster of strategies ‘Preserving Functionings and Capabilities’.....	225
Table 4.16 - Percentage contribution of the clusters of Group B to the variance explained by the axes.....	231
Table 4.17 - Cluster of life events ‘Deaths’.....	233
Table 4.18 - Cluster of life events ‘Illness and Health’.....	233
Table 4.19 - Ten first ranking perceptions of the implication of illness for a persons’ life.....	234
Table 4.20 - Cluster of causes of life events ‘Illness & Health’, sub-cluster 1a ‘Illness’.....	235
Table 4.21 - Cluster of causes of life events ‘Illness & Health’, sub-cluster 1b ‘The Body as an Asset’.....	236
Table 4.22 – Cluster of causes of life events ‘Illness & health’, sub-cluster 1c ‘Access to Health Care’.....	237
Table 4.23 – Cluster of life events ‘illness and health’ and its causes.....	237
Table 4.24 – Association among the sub-clusters of the cluster of life events ‘Illness & Health’ and the clusters of life events ‘Illness & Health’ and ‘Death’.....	238
Table 4.25 – Cluster of consequences ‘Affecting Physical and Mental Health’.....	239
Table 4.26 – Cluster of life events ‘Illness and Health’ and cluster of consequences ‘Physical and Mental Health’ vs. Clusters of Strategies.....	242
Table 4.27 – Cluster of strategies using formal and informal networks.....	243
Table 4.28 - Cluster of ‘Strategies Aimed at Preserving Functionings and Capabilities’.....	244
Table 4.29 - Cluster of life events Household Dynamic.....	250
Table 4-30 - Main associations (%) between the cluster of life events ‘Household Dynamic’ and clusters and sub-clusters of causes, consequences and strategies.....	251
Table 4.31 - Cluster of consequences of life events ‘Generating Problems and Tensions within the Household’.....	253
Table 4.32 – Cluster of causes ‘Assets and Capabilities Improvement’.....	256
Table 4.33 – Cluster of life events ‘Improvements in Living Conditions’.....	257
Table 4.34 – Life events cluster ‘Capability-building and Risk Assumption’.....	260

Table 4.35- Cluster of consequences of life events.....	261
Table 4.36 - Consequences Improvements in Living Conditions and Capabilities	263
Table 5.1 - GDP growth in selected Latin American countries.....	270

List of graphs

Graph 2.1 - Income poverty incidence in Bogotá (1990-2003).....	125
Graph 2.2 - Bogotá, D.C. Children of Schooling age of socioeconomic strata 1 and 2 by locality 2004.....	139
Graph 4.1 - Housing tenure	199
Graph 4.2 – Type of employment of the head of household.....	202

List of maps

Map 1 – Colombia’s internal migration by department – Census of 2005.....	110
Map 2 – Bogotá’ Unmet Basic Needs by household and localities.....	122
Map 3 – Illegal settlements in Bogotá in 2000.....	133
Map 4 - Bogotá population by locality in 1993.....	174
Map 5 – Vulnerability patterns axes 1 and 2.....	209
Map 6 – Vulnerability patterns axes 1 and 3.....	248

List of figures

Figure 1- The Sustainable Livelihood Framework	80
Figure 2- Lineal representation of vulnerability	164
Figure 3– Life events and the life cycle.....	165
Figure 4- Vulnerability pattern from the Life Events cluster 'Assets & Consumption'.....	224
Figure 5 - Vulnerability pattern from the Life Events cluster 'Indebtedness'.....	228
Figure 6 - Vulnerability pattern from the Life Events cluster 'Employment & Income'.....	230
Figure 7 - Main patterns of clusters leading to strategies aimed at preserving assets and generating better capabilities.....	286

List of Acronyms

AVF (Assets Vulnerability Framework)
CCB (Cámara de Comercio de Bogotá)
CEDE (Centro de Estudios Económicos)
CGR (Contraloría General de la República)
CID (Centro de Investigaciones sobre Desarrollo)
CIDER (Centro de Estudios Interdisciplinarios sobre Desarrollo)
CPRC (Chronic Poverty Research Centre)
CNQ (Consequence of life events)
CS (Causes of life events)
CSP (Capability Search Pattern)
CVP (Caja de Vivienda Popular)
DABS (Departamento Administrativo de Bienestar Social)
DANE (Departamento Administrativo Nacional de Estadística)
DAPD (Departamento Administrativo de Planeación Distrital)
DAS (Departamento Administrativo de Seguridad)
ECLAC (Economic Commission for Latin America and the Caribbean)
ECP (Economic Crisis Pattern of vulnerability)
ECV (Encuesta de Calidad de Vida)
ELN (Ejército de Liberación Nacional)
ENDS (Encuesta Nacional de Demografía y Salud)
EPS (Entidad Promotora de Salud)
FARC (Fuerzas Armadas Revolucionarias de Colombia)
GDP (Gross Domestic Product)
GEC (Global Environmental Change)
HCP (Health Crisis Pattern)
HDP (Household Dynamic Pattern)
HDR (Human Development Report)
HR (Human Rights)
ICBF (Instituto Colombiano de Bienestar Familiar)
ILO (International Labor Organization)

ISS (Institute of Social Studies)
IBD (Inter-American Development Bank)
IFI (International Financial Institutions)
IRD (Institut de Recherche pur le Développement)
ISS (Institute of Social Studies)
JID (Journal of International Development)
LE (Life events)
LSE (London School of Economics and Political Science)
MERPD (Misión para una Estrategia para la Reducción de la Pobreza y la Desigualdad)
MIP (Medición Integrada de la Pobreza)
MPS (Ministerio para la Protección Social)
NGO (Non-Governmental Organisation)
ODI (Overseas Development Institute)
OIT (Oficina Internacional del Trabajo)
OMS (Organización Mundial de la Sanidad)
PAHO (Pan American Health Organization),
PNUD (Programa de las Naciones Unidas para el Desarrollo Humano)
POT (Plan de Ordenamiento Territorial)
SDIS (Secretaría Distrital de Integración Social)
SHD (Secretaría de Hacienda del Distrito)
SISBEN (Sistema de Identificación de Beneficiarios de Programas Sociales)
SLA (Sustainable Livelihoods Approach)
SSB (Secretaría de Salud de Bogotá)
SSPD (Superintendencia de Servicios Públicos Domiciliarios)
ST (Strategies adopted in the face of life events)
UBN (Unmet Basic Needs)
UNAL (Universidad Nacional de Colombia)
UNCRD (United Nations Centre for Regional Development)
UNDP (United Nations Development Programme)
UNDESA (United Nations Department of Economic and Social Affairs)
UN-HABITAT (United Nations Human Settlements Program)
Uniandes (Universidad de Los Andes)

WB (World Bank)

WDR (World Development Report)

WHO (World Health Organization)

Introduction

This research is a contribution to the understanding of vulnerability, which is one aspect of the dynamic of poverty. It was inspired in the mid-nineties by the seminal work of Moser and Chambers on vulnerability and the non-income dimensions of poverty.

Most specifically, the study is meant to build on Moser's (1996) key findings from her assets vulnerability framework and, as such, seeks to build casual relations between critical life events faced by households, the causes that directly determine them, the consequences or short-term impacts of such events for households and, finally, the strategies households adopted to face, cope with, and react to life events. The research question this research poses is: *Can the vulnerability approach be operationalised beyond the Asset Vulnerability Framework?*

The fact that the research question is not phrased only as 'can the vulnerability approach be operationalised?' but is complemented by the specification 'beyond the Asset Vulnerability Framework' is justified on two grounds. Firstly, the fact that a number of important attempts to operationalise vulnerability were made by various scholars while the current research was being undertaken. Secondly, the specification 'beyond the Asset Vulnerability Framework' is meant to stress that Caroline Moser's work is considered the complete elaboration produced on the social dimension of vulnerability within the study of social development and its applications to policy.

Colombia was initially chosen for three reasons. It presented a relatively high level of development in a number of socio-economic and demographic indicators, including a percentage of urbanized population above 70% and, at the same time, a highly skewed income distribution with a Gini Index among the worst in the world (above 0.52 over the last ten years even with moderate estimates [CID, 2003]), and a high incidence of unmet basic needs¹ (UBN) and income poverty, the incidence of the latter never falling below

¹ The UBN index indicated that 26.8% of the Colombian population was basic needs poor in the major urban areas in 1993, while this percentage fell to 13.1% in 2003. The national totals were respectively 59.5% and 47.5% in the same years (Fresneda, 2007).

50% of the population over the last decade (op.cit). Second, compared to countries where urban poverty levels are comparable, Colombia was, and still is, a relatively under-researched country, mostly due to internal conflicts and levels of urban violence that generate a uneasiness for researchers and create a lack of appeal for students. Due to the above reasons, Colombia seemed to offer a peculiar added value over countries such as Mexico and Brazil where the relationship between poverty and vulnerability is still a key policy issue in many urban areas. Countries such as Argentina and Chile were not chosen since the international literature reviewed prior to the fieldwork did not place them among those with a high incidence of poverty, although they of course have their local poverty agendas. These agendas include the ‘new poverty’ of the middle class that confronted Argentina after the recession that began in 1998 on the one hand or, on the other hand, the policy issue of the evaluation of Chilean economic reforms and social programmes. The latter, based on targeted subsidies in the face of the challenge represented by the construction of a less unequal society. I eventually managed to establish some connections with Colombians that turned later into friendships for life, which contributed to the final choice.

The study analyzes the relationship between poverty and vulnerability in Bogotá through fieldwork, during which 903 households were interviewed between 1997 and 1998 on the basis of a statistically representative two-stage sample based on the Colombian Census data from 1993.

Chapter 1 is dedicated to the analysis of the relevant debates that from the end of the 1980s onwards have focused on the meaning of poverty, its conceptualization and measurement and from which the whole reflection on vulnerability develops and is mainstreamed. The chapter attempts to specifically contribute to four vibrant debates in contemporary development studies that are particularly relevant for research on the dynamics of urban poverty:

- a) The income versus non-income poverty debate of the 1990s.
- b) The analysis Sen’s contribution to the conceptual framework of the thesis and to the model adopted to empirically analyse vulnerability.
- c) The specific conceptual and methodological debates on vulnerability.

- d) The debates on livelihoods, assets, and capitals.
- e) The Social Risk Management approach, strongly related to the debate on the shifting social policy agenda of the late 1990s and the social and economic rights approach to poverty reduction policies.

The rationale regarding the academic relevance of the thesis is built around the notion that nowadays the debate on vulnerability does not only concern the tension between a static versus a dynamic understanding of poverty, but is embedded into a wider social protection debate. The centrality of the concepts of 'risk' and, partly, of 'vulnerability' within the Social Risk Management (SRM) approach promoted by the World Bank at the beginning of the decade have implied a shift of the vulnerability agenda, which is now more directly involved with the level of operative decisions about people's livelihoods, choices, well-being, and freedoms than previously.

Regarding the relationship between vulnerability and the poverty debates of the 1990s, a bottom-line argument put forward by the chapter is that research on vulnerability was historically halted by the birth of the Sustainable Livelihoods Approach (SLA) just when it was developing into a promising research path of empirical work that could have potentially improved the empirical strengths of SLA itself. The path opened by Moser's work during the mid 1990s with her Assets Vulnerability Framework (AVF) was discontinued and only partly replaced by the SLA and the World Bank work on the *Voices of the Poor* (Narayan et al., 2000). The vulnerability approach, it is argued, still stands as a missing link within nowadays dominant approaches to social protection and risk management. This thesis tries to make a contribution towards bridging that gap; this is what links within the main research question the vulnerability and the social protection debates through the concept of asset-based social policy.

The income versus non-income poverty debate of the 1990s concentrated on the analysis of the differences between poverty and vulnerability and connected with the specific debates raised by the literature on vulnerability. The seminal research finding by

Moser (1996) and the research agenda on vulnerability by Chambers² (1989) offer elements that represent further intellectual challenges to the validity of traditional monetary approaches to poverty, the analysis and critique of which occupies a relevant place within the chapter.

The problem with monetary approaches to poverty is not only one of measurement but one of what we mean by poverty (Ruggeri Laderchi, 2000) since income and consumption-based approaches are unable to explain the different command individuals, households, groups, and communities have over assets, the access they have to different kind of resources, and why they capitalise on them or not, according to context-specific situations. Furthermore, money-centric approaches to poverty tend to concentrate on the effects of poverty and, as such, are descriptive, concentrate on the ‘how much’ and ‘where’ questions without being able to tackle the ‘why’ and ‘how’ issues that are key to an attempt to explain poverty dynamics.

The contribution of the Amartya Sen’s thought plays a key role in the construction of the conceptual framework of the vulnerability approach as well as in a number of conceptual considerations and insights that directly inspire the formulation of a model to empirically analyse vulnerability patterns on the basis of critical life events. Firstly, Sen’s capability approach illustrates the importance of understanding in what space we are evaluating poverty and contributing to the debate illustrating the difference between instrumental liberties, intended as means towards the achievement of a better quality of life, such as income, and fundamental freedoms (Sen, 1985a and 1987). One of the working questions of the thesis is that vulnerability analysis closely relates to capability. On the one hand, taking inspiration on the basis of recent work by Wood (2007), this question is answered illustrating that there is a gap in the literature regarding the connection between the concepts of ‘freedom from’ and ‘freedom to’. There cannot be ‘freedom to’ achieve better capabilities without the security that shelters the process of assets accumulation and search for livelihood stability without ‘freedom from’ critical life events and entitlements protection, both at the individual and at the institutional level. This

² A research project he carried out with his research group at the Institute of Development Studies of Sussex (IDS).

is where the most recent and inspirational insights from Sen's work fit into a path of previous conceptual work this thesis had done on the basis of the entitlement approach from the same scholar (Sen, 1981). The process through which people's endowments generate social and market-based entitlements that allow people to secure their livelihoods is a milestone of any approach to social vulnerability and often a scantily recognized one too. In fact, it is Sen's powerful explanation regarding the buffering function of endowments and entitlements in the face of the risk of famines and the vulnerability of people to hunger that represented a path-breaking shift in the conceptualisation of poverty: it did show that poverty is dynamic and that assets matter to avoid the harshest effect of critical life events. These issues were not a research priority for Sen, who was much more interested in agency and in the relationship between justice and well-being, and these results therefore remained somehow downplayed for more than a decade³.

On the whole Sen's own contribution (Sen, 1981; 1999) as much as the insights from the early vulnerability studies as well as Moser (op. cit. , 1996) and Pryer's (2003) research, shows that critical life events affects assets and resources but, even more, the opportunity people have to gain those instrumental liberties that are needed to achieve a better quality of life and broaden their freedom; therefore vulnerability is strongly linked both to the capability approach and to the debate on development as freedom.

The specific conceptual and methodological contributions of research on vulnerability itself are introduced through a thorough review of the main insights coming from the early literature on vulnerability. Its merit is to provide empirical, case study-based evidence, illustrating that poor people have complex strategies based on assets maximization as well as the importance of a number of factors, such as health (Taal, 1989) and its impact on people's capacity to withstand critical situation as well as the key role of bread-winners both for the sustainability of households' livelihoods and in terms of the relationship between ill-health and economic resilience (Pryer, 1989). This contribution also raises a number of issues like that of the timing of critical events viz. assets use or depletion (Swift, 1989) and poses new cross-cutting questions research questions such as

³ I am here indebted beyond repayment capacity to my supervisor Professor Beall who pointed out to me the key relevance of the entitlement approach for vulnerability analysis.

that on the specific role played by assets for different groups, at different times, and in different geographical locations.

Caroline Moser's work is the central contribution to the construction of vulnerability analysis and to an asset-based approaches to poverty reduction policies. The adoption of the term assets by Moser as well as the new re-conceptualization she operates on it, reflect an in-depth understanding and conceptualization of the way poverty dynamic work for low-income groups: Moser showed that there is no single variable (education, health, or income) but a complex combination of factors, including socio-economic context, life cycle, power structures, and institutional arrangements of a specific society, that determine people's capacity to cope with critical situations. In this sense one can find in Moser's work the majority of the elements later retaken by the sustainable livelihoods approach without DFID fully acknowledging her contribution to it.

Her assets vulnerability framework identifies the assets that play the most important role in strengthening people's resilience in the face of critical life events, again not in theory but on the basis of empirical findings. A very relevant insight concerns the importance of labour as an asset because it contributes to re-politicise the debate on poverty, social protection, and policy against the technicalities of poverty measurement that occupied centre stage over the previous decade. With human capital and infrastructure, Moser analyses the productive and socio-economic importance of housing, showing its importance beyond the provision of public services, and introduces the analysis of such key non-material assets as household's relations.

The analysis of the debate on livelihoods, assets, and capitals takes on board a number of contributions (Beall and Kanji, 1999; Beall, 2002; Chambers, 1995; de Haan, 1999; Ellis, 1998; Mosse et al, 2002; Murray, 1999; Rakodi, 1999 and 2002; Scoones, 1998). As Solesbury (2003) has duly reconstructed, the process of adoption of the livelihood approach is actually a decade long process. Following the UK Government *White Paper on International Development*, the release by DFID (1999) of the ambitious

Sustainable Livelihoods Guidance Sheets framework challenges previous approaches to the understanding of poverty and plays a key role in displacing developing vulnerability analysis from the central stage.

The Social Risk Management (SRM) approach closely relates to the debates on the shifting social policy agenda of the late 1990s and, therefore can be thought of as the pole of two struggling positions, the other one being represented by the social and economic rights approach to poverty reduction policies. The discussion of the SRM is relevant for vulnerability since it inspires the World Bank position on ‘security’ in the WDR 2000/1 on the one hand, whereas on the other it is the landing pathway of the long-standing debate between income versus non-income approaches to poverty, but this time on the terrain of applied social policy and social protection; which is where the debate on vulnerability, risk, and livelihoods moved from the end of the 1990s onwards.

Critics of the SRM as well as of the approach of the World Bank to poverty presented in WDR 2000/1 have strong arguments that represent the rationale for an attempt to overcome the limitation of the SRM. After Hubbard (2001) it is observed that both the SRM approach and the WDR discourse on poverty and risk, dump the poor in the same conceptual container and push the debate totally in the opposite direction from that indicated by Moser with the asset vulnerability framework: the simplification of utilitarian and neo-liberal economics thus take the lead over proper research based on slow but sound progress, backed up by empirical fieldwork.

The dichotomy of risk put forward by SRM and WDR, dividing it in idiosyncratic and covariant, is an over-simplification of reality. First, most of the categories used under the covariant risk category apply also, or even more so, to idiosyncratic risks (Moser, op. cit.) and, second, it assumes that in reality there are risks that happen once, while case studies on vulnerability and livelihoods show that they tend to repeat themselves time and time again. Third, as indicated again by Moser (op. cit.) there is a serious lack of correspondence between the categorization of risks and what the World Bank says in terms of social risk management measures.

SRM limitations are of the uttermost importance in the face of the spread and success it had on the basis of the institutional bargaining power the World Bank has on many governments in developing countries. As indicated by Moser (2001) there is a problem with the conceptualization and operationalisation of the SRM framework that should be enough to ban its application on scientific grounds.

The chapter concludes by setting the research agenda for the methodological design of the research. This embeds the legacy of the debates reviewed before and points towards the need to further operationalise vulnerability analysis to inquire into the potential of a non-income- and non-asset-based approach to the understanding of how low-income groups cope with critical situations in Bogotá.

In chapter 3 the conceptual aspects of the methodology, the description of the fieldwork and its challenges, and the main conceptual elements of the multivariate technique of multiple correspondence analysis are the thematic blocks of the chapter. After a careful analysis of the limitations of the research, which are also retaken in the conclusions to clarify their implications for the research questions, the chapter illustrates the genesis of the research question and the operationalisation of vulnerability. Specifically, the sections that structure this part explain why and how the concept of life event came about to resolve the conceptual and methodological problems left open by Chambers' 'shock' and 'stress' concepts. Another central thread in this part of the chapter is the illustration of how the contributions of previous scholarship provided by those scholars revised in the literature such as Chambers, Moser, and Sen were translated into empirical elements of the model proposed to operationalise vulnerability. Section 3.2.3 specifically concentrates on the conceptual exploration of the potentialities embedded in a model that articulates four variables: life events, their consequences, their causes, and related strategies with the 'time' variable, for a further systematisation of a vulnerability approach that can be defined as being 'under construction'.

The second block of the chapter illustrates the alternative options for a sampling of low-income groups in Bogotá in 1996 – 1997, emphasising the difficulty in

finding income-based data; a reason for which the research finally resolved to use the UBN index. This thematic block follows then the sequence of the fieldwork stages trying to stick to a precise explanation of what was done and how, in order to allow for the possibility for others to replicate the methodology and to maximise external validity.

The third thematic block illustrates the main conceptual elements of multiple correspondence analysis. Particular attention is paid to the illustration of the differences between multiple correspondence analysis and multiple regressions, which is done from a qualitative non-technical perspective; as well as to the presentation of key terminologies and statistical formulas that occupy a central place in the technique utilised. The chapter finally closes by illustrating how the data to perform vulnerability analysis were collected and provides elements for their interpretation as far as concerns the maps used in chapter 4 to illustrate the results. The relevance of a methodology capable of gathering qualitative data, transform them in quantitative data and analyse them on both grounds must be stressed.

Chapter 4 presents the research results. The findings articulate around four main patterns of vulnerability that correspond to five critical processes that shape the dynamic of vulnerability in the peri-urban area embracing the whole south of Bogotá. The presentation of these patterns is preceded by the analysis of the demographic and socio-economic indicators concerning the sample on the basis of the questionnaire that was the main research instrument of the research. Great attention is paid to differences between mono- and bi-parental households as well as to the insights the indicators provide in terms of gender differences as far as the control over assets is concerned and, in turn, a greater or lesser predisposition to the impact of life events. Hereafter the text resumes the four main patterns and their most relevant implications.

- a. **Pattern 1 - Economic crisis:** centred on life events indicating problems with income generation and unemployment, it is directly⁴ caused by

⁴ This is what households told as the cause of recorded life events; ultimate causes have to be researched in the domain of capabilities failures, particularly in those related to instrumental freedoms as Sen (1999) defined them when analysing aspects such as economic facilities, social opportunities, and protective security.

unemployment and impacts households in the economic sphere, mostly causing cuts in consumption (itself a coping strategy); coping strategies see the prevalence of indebtedness and the use of informal credit networks and the increase of the workload as well as the mobilization of more workforce within the household.

- b. **Pattern 2 - Health crisis:** the second most important factor of the dynamic of vulnerability in low-income areas in Bogotá contains problems related with illness and, partly, access to health care services. Direct causes are illness itself and, roughly for a tenth of those affected by the health crisis, violence. Most immediate consequences impact physical and, significantly, psychological health and the economic sustainability of households, whereas coping strategies show that people rely mostly on informal family-centred networks of mutual help and support. To this pattern also contribute life events related to death and episodes of violence like assaults or thefts. Mostly caused by failures to avoid premature death by illness and violent actions, these crises spin around the loss of some member of the household and deeply affects the psychological balance within households as well as affecting income generation and consumption. Again, coping strategies mostly rely on informal family-centred networks and social capital as a factor playing an important role in fostering resilience.
- c. **Pattern 3 - Household dynamic crisis:** borne out of the tensions and conflicts between couples and relatives, this pattern of crisis shows how households and families enter dead-end spirals that affect all other dimensions of livelihoods. Main impacts concentrate on issues such as the breaking up of families, psychological health consequences, and economic difficulties. A much smaller percentage of households manage to face this typology of life events by uniting and attempting to overcome the crisis together. The corresponding coping strategies show that disempowerment, cuts in consumption, and indebtedness are the ultimate consequences of this type of crisis.
- d. **Pattern 4 – Capability search:** low-income groups try to build up their assets and capabilities through strategic actions that are reported as life

events by interviewed members. These mainly consist of small investments and, more generally, actions aimed at the achievement of better living standards. Life events range from those most empowering ones such as graduation, new or more secure employment, as well as either the purchase or construction of a house. This type of life event, entailing either the consolidation of material assets or the possibility to undertake some kind of relatively risky investment, seem to belong to less assets-poor households. On the contrary, more assets- and capability- poor households, talking of this type of poverty from a qualitative point of view, present a typology of life events that concentrate on situations such as the achievement of personal satisfaction related to marriages and births. They are equally important on an individual basis but less clearly linked with improvements in terms of control over material assets.

In chapter 5 these more technical insights are selectively re-elaborated tackling four critical reflections that share the common thread of clarifying the relevance of the research for conceptual debates and social policy. The first one is the tension between the relevance of income for vulnerability versus a multi-dimensional, multi-factorial approach. The thesis reconciles the two apparently opposite aspects by illustrating that vulnerability has multiple entry and outcome points among which income shortage occupies an important place. Vulnerability is ultimately linked with well-being through the impacts its patterns have on people's functionings and, as Sen has illustrated, income is a means that operates at the level of instrumental liberties but cannot be considered an end in itself. Having clarified this central interpretative point, the chapter analyses the implications of more passive typologies of strategies, putting forward the hypothesis of the existence of a strong nucleus of chronic poverty; that is, social groups heavily affected by assets- and capability-poverty, an issue that also leads to the final point of the research - challenges that lay ahead of the research. The chapter closes with a reflection on the implications of the findings and vulnerability analysis for the Social Risk Management approach, underlying how on the side of the latter the emphasis is on the issues of risk, insurance and costs, while on the side of the former there is a keener concern for human capabilities.

The final chapter of the thesis states the conclusions of this research. In this chapter, the contributions towards the conceptual debates presented in chapter 1 are assessed and briefly re-elaborated, whereas the following section retakes – as said – the analysis of the limitation of the research, in this case regarding its capacity to provide a satisfactory answer to the research question. The third section analyses the main contribution of the thesis towards a further operationalisation of the vulnerability approach in terms of differentiating between poverty and vulnerability analysis as well as concerning the basis it leaves for further research. The latter, with the findings presented on the vulnerability patterns, is considered to have potential for significant policy-oriented developments, which are listed in the final section that analyses the challenges ahead of the research, among many, surely that of translating the mass of work realised into a number of conceptual and empirical tools to be appropriated by applied poverty research and social policy planning.

1. Conceptual Framework

“Unlike poverty, vulnerability lacks a developed theory and accepted indicators and methods of measurement.” (Chambers, 1989: 34).⁵

“There are important gaps in the literature on that topic. There are no standard methodologies and no cross-disciplinary paradigm.” (Barrientos 2006: 4).⁶

As the above quotes by Robert Chambers and Armando Barrientos indicate with crystalline clarity, despite the passing of time, the operationalisation of vulnerability, the research problem addressed in this research, still remains a vibrant question open to new contributions within the broad field of poverty studies. If one thinks of the magnitude and variety of empirical studies on vulnerability and coping strategies, the above quotes emphasise the continued gap in the literature on poverty dynamics to which (social) vulnerability belongs.⁷ This empirical gap closely relates to the research problem explored by this thesis, recognising that, along the process leading to its completion, there have been a number of powerful and inspiring contributions. The current chapter describes how they fit within the construction of an original conceptual framework for vulnerability analysis that is anchored in the concept of ‘life event’. The research question itself embeds an explicit reference to one of those contributions, Caroline Moser’s Asset Vulnerability Framework (AVF):

⁵ Quoted from Chambers’ introduction to issue No. 2 of the twentieth volume of the IDS bulletin on ‘Vulnerability: How the Poor Cope’; a milestone in the literature on vulnerability.

⁶ Quoted from Barrientos’ recent paper on the relevance of vulnerability analysis for the understanding of poverty traps. He wrote within a broader reflection on the state-of-the-art of research on poverty dynamics and what it has to offer in terms of precise knowledge to the problem of chronic poverty enduring well into the 21st century.

⁷ This thesis will no longer use the term ‘social vulnerability’ for brevity. However, recognising that vulnerability as a concept and an operational framework embedding a problem of scale, it has to be explicitly declared that this research deals with social vulnerability. There exist legitimate and absolutely fascinating research projects concerning environmental, political, physical and systemic vulnerability, to mention just a few. It is a challenge to find research that presenting empirical evidence showing that many of these vulnerabilities can be connected if a common conceptual model centred on the capacity to cope, and the means that allow and foster coping, is explored. This goes beyond the aspiration of this particular piece of research.

*Can the vulnerability approach be operationalised
beyond the Asset Vulnerability Framework?*

To ask if the vulnerability approach can be operationalised beyond the AVF, implies that the analysis has to find its rationale within a constructive relationship with a number of critical debates that this chapter will address in the order listed below:

- 1) Deciding upon a definition of vulnerability that takes account of the existence of multiple definitions and approaches elaborated within different disciplines, often outside the boundaries of development studies.
- 2) Discussion of the poverty debate of the 1990s, placing a specific emphasis on the limitations of the monetary approach.
- 3) The influence of Amartya Sen's thought on the conceptualisation of the vulnerability framework proposed in this research. This will be done paying special attention to the analysis of two concepts that have fundamental implications for vulnerability analysis: those of entitlements and assets. Thus, firstly the relationship existing between the 'entitlement approach' and one of its core concepts, that of endowments, will be examined for the implications it has for the way in that the very idea of assets is used to provide solid grounding for the vulnerability approach. Secondly, an examination of the concept of assets itself, which is a central one within the vulnerability approach regardless of scholastic conceptual positions.
- 4) How the relationship existing between the concept of 'freedom from' and that of 'life events' literally locates the vulnerability approach rather than placing it in a direct conceptual and methodological relationship with the capability approach, which is built, among other principles, on the concept of 'freedom to'.
- 5) The debate on vulnerability will be discussed in terms of this concept and the identifiable differences between it and monetary conceptualisations of poverty concentrating on income and consumption.
- 6) The debate on livelihoods, assets and capitals, will be shown to illustrate the rise and fall of the concept of vulnerability in relation to the 'sustainable

livelihood approach'. The story of the concept itself within the tradition of poverty studies that developed from the 1980s onwards within the field of social development studies will be discussed.

- 7) The debate on the shifting social policy agenda of the end of the 1990s, with emphasis on the social risk management approach, will be analysed according to the different emphasis placed either on 'risk' or on 'vulnerability' upon which innovative and transforming social policy may or may not be constructed.
- 8) The debate on poverty and vulnerability in Colombia and Bogotá will be explored for the relevance this has for the whole topic of the research and its realisation. There would be no point in researching vulnerability in Colombia if the former were not a relevant issue at the local level. A specific discussion of poverty and poverty debates in Bogotá is left to the chapter that presents the context of the research (chapter 2).

What the present research shares with the debates and scholars central discourse surrounding above eight points, is dissatisfaction with the way poverty has been dealt with by income and consumption-based approaches. They are unable to explain the different levels and types of command that individuals, households, groups and communities have over assets, the access they have to different kind of resources, and why they capitalise on them or not, according to context specific situations.⁸ By the same token, they are unable to explain power relations, gender and contextual causes of social inequalities existing within households, social groups, local communities and the interaction of these with and within the broader social context. More specifically, they do not provide the means to understand the internal and external dynamics of poverty as embedded in a network of social, cultural, and interpersonal relations.

Within these debates, this chapter focuses primarily on those streams of thought and scholars which, directly or indirectly, have proposed either conceptual or

⁸ See section 1.3 for a more in-depth discussion.

methodological reflections on vulnerability over the past two decades. This choice is determined by the fact that this work fits within the debate on how poverty works, rather than directly addressing the problem of what poverty is, or how it should be measured. However, it is important to highlight that there is clear overlap between these areas of research. These will be highlighted in reviewing the relevant literature, bringing the discussion to a key question: why study vulnerability and not poverty?

1.1. The Concept of Vulnerability: a Comparison of Different Definitions

Over the last two decades, the aforementioned concern about *how the poor cope in the face of critical situations* has informed an entire research agenda and drawn the attention of researchers working on a multi-disciplinary perspective for poverty analysis on issues such as those relating to risk management, poverty impacts, poverty conceptualisations, assets and capability profiles, as well as the work of a number of analysts whose contributions fit within social protection debates.

Research carried out on vulnerability over the last two decades has highlighted that the perception of deprivation and the meaning attached to its aspects by those who suffer it, deserves greater epistemological attention insofar as it constructs a coherent body of knowledge on poverty of no lesser validity than the one produced at an academic level. The vulnerability approach also contains elements so far not fully explored allowing for close dialogue between concepts of vulnerability and capabilities. This is one of the issues addressed in this chapter, specifically in sections 1.4 and 1.5. This section deals with defining the concept of vulnerability. Two important points have to be stressed before undertaking this task. The first is that there has so far been no universally recognised and agreed definition of vulnerability. The second is that, to a large extent, the whole chapter deals with this problem. Therefore, the reader should take this section as the inception of an analysis of the concept of vulnerability; as the second part of the title of the section says “a comparison of different definitions”. In fact, the critical issue of finding theoretical and methodological unification of vulnerability is unaccomplished as yet.

The concept of vulnerability has been employed by a large array of micro-level studies and co-operation projects generating an interest that has neither faded away from the research agenda nor progressed to occupy centre stage within mainstream debates. We

are understating the implications of Global Environmental Change (GEC) and the challenges it poses in terms of new scientific problems. These are due to the nature and the scale of changes, which combine from slow to rapid onset events with unprecedented timescale implications for research and policy (Huq & Reid, 2005; Simon, 2007). These impacts are an issue of social vulnerability because they directly affect people's assets disproportionately. It is low-income groups that are affected by the reduction in their capacity to work and their opportunity to find employment offering secure sustainable livelihoods. Such impacts require us to rethink and reengineer social protection (IPCC, 2007).

Following, it can be said that neither a cross-disciplinary definition of vulnerability nor a core methodology towards its operationalisation has been the object of widespread agreement or pooled research efforts. As a consequence, we cannot talk of a community of researchers on vulnerability, in spite of the fact that many scholars have produced important insights initiating a move from the concept of vulnerability, mostly through their individual efforts (Barrientos, 2006).

A research agenda suggested by Chambers and Swift as early as 1989 (see next paragraph below, 'A Thematic Vulnerability Agenda') awaits contributions in order to produce a volume of evidence that would allow for a cross-country systematization of vulnerability dynamics. To get to that point, what is needed is to carry out research projects capable of providing substantial elements of comparison (and differentiation) among the specific vulnerability processes affecting the least and the most asset-poor groups. Additionally, research encompassing different regions within Africa, Asia and Latina America, as well as the East-European countries and, in general addressing a number of diverse categories, would be of great relevance for the advancement of social policy as related to development.

A Thematic Vulnerability Agenda*

1. Cumulative Vulnerability: In some communities, the onset of the crisis happens some time after the point in time at which the actual shock took place.
2. Differential Vulnerability: Similar communities with similar production patterns or exchange failures react differently to similar types of shocks.

3. Individual Vulnerability: As in the case of the above focus on communities, the household focus requires further conceptualisation, because it hides the differences existing in vulnerability amongst different members of the same household.
4. Expectations of Public Assistance: It is important to understand cultural and behavioural patterns when facing situations of extreme crisis, in order to explain and plan different types of relief actions.
5. Strategies to Preserve Assets: Linked to the above point, there exists in the entitlement approach another neglected area: the preservation of vital productive assets in spite of the negative consequences this may generate for survival in the short term.
6. Different Resilience and Recovery Capacity: Production exchange failures explain the dynamics of extreme crisis, such as famines, but do not provide the means to comprehend why some communities restore their production and exchange relationships more readily than others.
7. Assets' Tenancy: The strategy (livelihood, coping, survival) through which endowed assets are transformed into accumulated assets needs to be analysed.
8. Assets' Accumulation: The issue concerning the existence of at least two 'generations' of assets is addressed here. Policies that provide access to first generation assets, such as education and health, housing and durable goods, provide the social and economic infrastructure for accumulating assets. However, this has to be consolidated by policies facilitating access social rights, security, transparent governance, credit, gender equality and social protection, by means of assets of the second generation.
9. Transformation and exchange of Assets: It is not sufficient to have access to assets or to own them, to get and stay out of poverty. Individual agency has to be given the capacity and the opportunity to convert assets into functioning to create greater opportunities for well-being. To provide knowledge about what generates these conditions - also those for points (7) and (8) - for whom, under what specific social circumstances, environmental, economic and cultural contexts, and within which kind of habitat, is one of the challenges faced by asset-based studies of poverty dynamics and vulnerability.

* Points (1) to (9) adapted from Swift (1989) and Moser (2006).

The definitions of vulnerability presented below are noteworthy for a number of reasons. Definition number 1 refers to vulnerability as a characteristic of a system. It considers a system as the unit of analysis, and the primary element characterising vulnerability; the system's exposure to crisis, stresses and shocks. The first problem with this definition, which claims to be gathering the main elements from the social sciences, is its partiality. Individuals, groups or communities are not systems unless one assumes a biological similarity between natural organisms and human beings, although this does not seem to be the position of the authors.

Secondly, exposure to crisis, stresses and shocks are causes, effects or expressions of vulnerability but not categorically the same thing as vulnerability itself. This is firstly because the time span and the potential impact of three categorically different types of potentially impacting events cannot be placed on the same level. Simply as it stands, the definition fails to include important units of analysis because it comes from an environmental perspective that places too much emphasis on the ecological features of the object it studies.

The 'inadequate capacity to cope' part of the definition is its best feature. It significantly overlaps with the common meaning given to vulnerability, in that it opens a dialogue with the core concern at the origin of social vulnerability preoccupation with the issue.

Nonetheless, when coming to the part of the definition dealing with the consequences and the risk of slow or poor recovery, the definition comes across a new problem, namely, conceptual overlapping and confusion. Consequences, in fact, have to do with what can be termed impact. Impacts, in turn, cannot be considered anywhere as absolute. They depend on the capacity to withstand them by who (or what) faces them. This capacity is a function of some means of resistance (let us call it that for the time being) and, therefore, of what the literature on vulnerability defines as resilience. Thus we find here an overlap between the concept of impact (consequence) and resilience (the ability and the magnitude of recovery by a unit of analysis). The definition fails both to make the distinction and, most importantly, to point out what determines a worse or better capacity to withstand, react or cope with crisis, stresses and shocks.

Definition No. 1: vulnerability as a characteristic of a system.

According to De Sherbinin, Schiller and Pulsipher, "(v)ulnerability in the social sciences is typically identified in terms of three elements: system exposure to crisis, stresses and shocks; inadequate system capacity to cope: and consequences and attendant risks of slow (or poor) system recovery (De Sherbinin, Schiller and Pulsipher, 2007: 41).

Compared to the first definition, the second (No. 2, below) presents some important added value, but also new limitations. Beginning with the limitations, it fails to embrace those units of analysis that present a greater degree of complexity than persons or groups. What was criticised in definition number 1 can be criticised here on similar grounds: vulnerability can reasonably be a characteristic of cities, regions, nations and states. There is no reason why it should be confined to smaller units of analysis insofar as its main feature, according to the common meaning of the word vulnerability. To be easily wounded or exposed to risks, can apply to a person as well as to a huge region. What changes is the type of threat and the scale of the whole process. The challenge is to find a definition capable of being applied to both sets of situations, that is, across scales.

In spite of its limitations, this second definition makes some very important contributions. First of all, as early as in 1994, when the definition was first put forward (Blaikie et al., 1994), it explicitly highlighted the existing connection between the social and the environmental dimensions of vulnerability. The idea of a 'combination of factors' (see the original text) can be perhaps rephrased in order to express vulnerability as a function of the capacity of persons and groups to face risk exposure. This capacity has a number of dimensions, including the ability to anticipate, cope with, resist and recover from the impact that risk exposure may cause. In other words, the capacity to withstand the consequences of vulnerability is a function of the resilience of the unit of analysis and, from a social development perspective; this capacity is a function of assets.

The definition elaborated by Blaikie, Cannon, Piers and Wisner represents an advance in vulnerability research insofar as it identifies that there are characteristics which interact with critical events, and that this interaction can produce damage when the means of coping are scarce. There is a degree of overlap here with the previous definition of vulnerability, but here the idea of vulnerability is as a process; its impact a function of the magnitude of the hazard and the strengths of the coping means (assets).

The points to clarify are the fact that vulnerability does not work the same way for individuals and groups, and the fact that the authors leave aside what De Sherbinin and colleagues had noticed: that vulnerability applies also to complex units of analysis that can be defined as systems.

Definition No. 2: vulnerability as a characteristic of an individual or groups both as a unit of analysis and a process.

“By vulnerability we mean the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of natural hazard⁹ (an extreme natural event or process). It involves a combination of factors that determine the degree to which someone’s life, livelihood, property and other assets are put at risk by a discrete and identifiable event (or series or ‘cascade’ of such events) in nature and in society (Wiesner, et al., 2006: 11).

Definition number 3, by Pryer, strongly focuses on the relationship between vulnerability and poverty. It provides occasion to stress a point that has validity for the other definitions analysed here. Most definitions refer to the vulnerability of specific developmental dimensions, e.g. environmental, systemic, social, or to that of particular social groups, e.g. low-income urban poor, internally displaced people, etc. Pryer’s definition highlights another element that is absent from the previous two: the fact that vulnerability describes the resulting possibility of decline in well-being. This point has been revisited by authors studying vulnerability from a risk management (Holzmann and Jorgensen, 1999) or econometric perspective (Núñez and Espinosa, 2005), stressing the fact that vulnerability (analysis) embeds the potential to determine and even calculate the probability of a decline in well-being. As for Núñez and Espinosa, in Colombia this conceptual framework has been applied to one aspect of material welfare, namely, income decline.

Pryer’s definition demonstrates a limitation that has been noticed in other definitions too: it does not disentangle to a sufficient degree the different concepts it adopts, and thus it prevents others from re-testing her findings on the basis of the definition she adopts. In particular, it seems legitimate to pose the question concerning in what way

⁹ In Italics also in the original text.

insecurity and vulnerability could be differentiated? Why should insecurity be related to exposure to risk and why should vulnerability not be related to the same thing?

In conclusion, it is possible to remark that, despite the above limitations, this latter definition has great strength inasmuch as it relies on empirical findings identifying the fact that vulnerability is caused by triggering events. Such events are presented in this thesis as life events. It also identifies the concept of decline in well-being, which marks a clear conceptual cut with definition arguing that what is affected by vulnerability is income.

Definition No. 3: vulnerability as a result of a process in terms of well-being.

“Poverty is a static concept, but insecurity and vulnerability are dynamic; they describe the responses to change over time. Insecurity is exposure to risk; vulnerability the resulting possibility of decline in well-being. The event that triggered the decline is often related to a shock which can affect an individual (illness, unemployment or death) or a community or region, or even an entire country (natural disasters or macroeconomic crisis). (Pryer, 2003).

Moser’s definition (number 4, below), also does not include broader units of analysis such as ecological systems. This is mostly due to the fact that her study focuses on how critical social dynamics affect the urban poor.¹⁰ Within the social development perspective, Moser identifies three key features of vulnerability that should be retained by any attempt to define it on a more general basis: firstly, the very fact of studying it entails an effort towards the identification of the two dimensions of threats and resilience. Secondly, means of resilience are people’s assets and, thirdly, insecurity is a result of vulnerability and not strictly speaking a cause of it.¹¹ Of course it becomes a cause to the extent that insecurity corresponds to a situation whereas assets have already been eroded and depleted.

¹⁰ I am aware that this limitation applies to all the authors mentioned here, as it does to my own research, since most of the time our use of concepts is bound within the discipline to which we belong. Nonetheless, when we question ourselves about the broader validity of what we think and write, the issue of reflecting on the limitations of our concepts and assumptions becomes a central one. My critiques are inspired by this intention and are not meant in any way to discredit the work of outstanding academics.

¹¹ This offers the opportunity for a comparison with Pryer’s definition (op.cit.). Of course, there is some degree of circularity between security and vulnerability. However, leaving aside the psychological dimension, one can be vulnerable without experiencing assets insecurity, whereas it is impossible to experience insecurity without being at the same time vulnerable. An individual in a situation of insecurity but not vulnerable is protected by some other agent or factor and, therefore, not insecure.

Definition No. 4: vulnerability as a two sided process connecting causes and impacts as a function of assets.

“Analyzing vulnerability involves identifying not only the threat, but also the “resilience” in exploiting opportunities and in resisting or recovering from the negative effects of the changing environment. The means of resistance are the assets that individuals, households and communities can mobilize in the face of hardship. Thus vulnerability is closely linked to asset ownership. The more assets people have, the less vulnerable they are; and the greater the erosion of their assets, the greater their insecurity” (Moser, 1996: 2 and 1998:3; Moser and Holland 1997:2).

How could all these interesting insights from these four representative types of vulnerability definitions be summarised? In order to do this and propose a synthesis, there follows a selection of the most relevant aspects of the preceding analysis of their strengths and limitations.

1. Vulnerability is a multi-dimensional process; it may apply to social, environmental and political context, or be related to groups, communities and individual dynamics. It embeds a problem of scale that corresponds with a still unaccomplished research enterprise, that of the unification of dimensional diversity through a model capable of proposing a common conceptual core; a pool of shared methodological elements.
2. Vulnerability relates to specific characteristics of the unit of analysis. Taken as a whole, they determine one of the two key determinants of what we call resilience, the other being related to the interaction between the unit of analysis and other agents or factors external to the unit itself. The internal characteristics of a unit of analysis are:
 - a. The means of resistance, which we call assets when studying social vulnerability within social development. They can be further disaggregated into proper assets (what economists call “flows”, for instance income), resources and capitals, which are proper stocks. For the purpose of this research the recent definition put forward by Moser (2004) on the basis of a definition proposed by the Ford

Foundation (FF) seems to have much to offer.¹² It defines an asset as “a stock of financial, human, natural or social resources that can be acquired, developed, improved and transferred across generations. It generates flows or consumption, as well as additional stock.” (Ford Foundation, 2004: 6).

- b. The capacity exists to transform these means of resistance into entitlements (González de la Rocha and Grispun, 2001). You may have a house of your own, but if you cannot sell it quickly to monetise it, a crisis like that related to a job loss, may impact harshly upon you. The same applies to a good level of education: it does not guarantee one can quickly find a new job in case of being fired.
 - c. The ability to transform the means of resistance into effective shields or protection to counteract hazards is strongly related, in the case of both individuals and groups, to the psychological dimension.
3. Vulnerability is a function of the magnitude of the hazard. This is the main contribution of those disciplines originating from natural science, like engineering. It is conceptually straightforward, but extremely critical and complex in the case of real measurement, such as in research interested in natural hazards, climate change or informatics.
 4. Vulnerability is a function of external agents and/or factors. This is the second component that should be incorporated to operationalise the resilience of a given unit of analysis. At least within social development, *Hunger and Public Action* by Dréze and Sen (1989) is a case in point. It demonstrates how social protection and, in general, public policy, determines the access people may have to entitlements. This in turn can be conceptualised as a specific typology of assets. These public assets can be mobilised through political, legal and cultural mechanisms, such as claims and social reciprocal obligations. From an environmental and more systemic perspective, one could say that the vulnerability of a species is a function of

¹² I owe this definition, as well as having come across to the above-cited paper by the FF, to Moser, 2006, also cited in the same paragraph above.

the degree of conservation of its ecological niche and the surrounding ecosystem.

5. Any analysis of vulnerability needs to incorporate time as a key variable to describe how events or processes may have an apex in a certain point in time or happen along longer periods. Of the same token, time is central since often vulnerability may be invisible in one point in time because its impacts are produced over time and affect the ones with different intensity and in different moments across time according to a number of variables and parameters that the researcher has to determine from time to time and not assume as universally valid.

In order to get to a definition of vulnerability that could function as foundation for a theory of vulnerability, some interdisciplinary agreement among the academic community is required.

- i. First of all, we need to agree on the fact that the common meaning of vulnerability is scientifically limited because it is too descriptive. To be easily wounded or exposed to risk equally applies to street children, threatened animal of animal, the planet, the chronically ill, the poor, middle-income groups hit by recession, and so on and so forth.. Attempting to use a definition of vulnerability as commonly understood does not create any analytical grip or scientific added value. In other words, it only describes but does not explain.
- ii. Secondly, we need to agree on what is an asset, what a resource and what a capital. The words used to define these means of resistance have different meanings according to their use and context. A resource can be synonymous of a means of resistance. Therefore, an asset, a capital or a cultural obligation can all be described as resources. But a resource can be, perhaps more appropriately, an intangible asset.

- iii. Thirdly, we need to put to test the following working hypothesis: vulnerability can be ultimately calculated as a result of a complex equation that would embed a hazard, an internal means of resistance, an external means of resistance, and the ability to transform them. I personally doubt this can be achieved, at least if that equation has to be able to account for social processes. These are too complex to be quantified, especially when individuals are the unit of the analysis. However, if vulnerability is thought of as a characteristic of the unit of analysis, and providing a number of simplifications and assumptions are accepted (for instance the exclusion of the psychological dimension or the assumption of some kind of rationale for behaviour), then a value of vulnerability can be estimated. It has already been done countless times by engineers or economists, although it tends to provide descriptive information that never manages to account for the complexity of processes.
- iv. Fourthly, unless we are able to rectify the above equation, identifying all the variables and multiplication factors on the basis of extensive, cross-country, cross-disciplinary research, the study of vulnerability as a process is the best proxy we have to understand risk and to identify risk management opportunities. In doing so, whenever possible we should aim for precision and accuracy, and be guided by empirical findings rather than pre-conceived ideas on vulnerability.

The next section presents an analysis of selected aspects of the 1990s poverty debate. Their analysis, with some important references to previous debates, is a fundamental step in illustrating on what premises the use of the term vulnerability came to acquire greater relevance within the search for a better comprehension of the social processes underlying poverty.

1.2 The Poverty Debate of the 1990s and the Core Conceptual Justification of the Research

From the second half of the 1970s onwards, the history of thought on poverty can be read as an on-going process of epistemological shifts in the study of poverty itself. The latter plays a key role in creating the conditions for the very possibility of a vulnerability approach. In other words, without three core ideas that articulate the critical moments of this shift, which will be presented hereafter, there could hardly have been a vulnerability approach at all. Those three core ideas delivered what may metaphorically be defined as a series of conceptual blows to the foundations of a narrowly defined concept of poverty as physiological deprivation. Needless to say, this is one of the many possible readings of the history of poverty over the last three decades.

The first is the idea that the experience of deprivation is multi-dimensional and cannot be conceived of as being limited only to the realm of physical survival. This is to say that there also are other dimensions of human life with their related needs that have to be taken into account in explaining both deprivation and the concept we have socially constructed to define it, that is, *poverty* with all its complex facets. Among those dimensions, a primary role is played by social and psychological needs (Doyal and Gough, 1986). Another key role within this process, which leads to the overcoming of a mono-dimensional idea of poverty, is described in one of Sen's early works. He indicates the fact that any poverty measurement should reflect the possibility to describe not only the depth of poverty but be sensitive enough to redistributive changes within the income of the poor as well as between the poor and the non-poor (Sen, 1976). In doing this, he is also saying that any poverty measurement has to be conceptually meaningful and capable of informing us not only about the extent of material deprivation, but also regarding the implications the latter has in terms of inequalities. The former idea was powerfully conveyed within what in development studies has been known as the basic needs approach: a perspective on poverty that broadens the span of previous discourses regarding the number of dimensions that should be included in a normative conceptualisation of poverty. The latter bears a great relevance within Sen's work on poverty and entitlement (1981), as well as in his reflection on the many meanings that inequality may have according to the way it is conceptualised (Sen, 1992).

The second idea challenges the universal validity of any measurement and meaning of poverty. Initiated by Townsend (1954 and 1962) and discussed at length by Sen (1982¹³, 1985b and 1987) and Townsend (1985), the idea that poverty can be meaningfully determined only within a close inquiry into what are the standards empirically established by a given society at a certain point in time, does not just make a contribution to our appreciation of how relevant a sociological approach to the problem of poverty could have been in the post World War II Britain. Indeed, while it is a fact that the idea of the relativity of poverty will be taken on board by our contemporary approaches to poverty measurement on a worldwide scale (Blackwood & Lynch, 1994). It also provides a number of relevant elements that are part of a broader foundation of the vulnerability approach. In fact, looking backwards, while still using the historical present to underline how relevant are those deeds for contemporary poverty studies, the idea of the relativity of poverty brings within the debate on poverty a call for a solid analytical framework. In this sense it expresses concern with a broader problem, that is, how definitions enable scientific knowledge to advance beyond the issue of the measurement of social phenomena. In unveiling these implications, one can appreciate how ideas that can be considered as forerunners of a concern for vulnerability share with early reflections on vulnerability itself, a preoccupation with another scientific problem: that of the dynamic nature of poverty and its determinants.

The third idea is the concept that absolute deprivation is not only found within the material space given by the measurable domain of goods and commodities. It is also found in another fundamental domain of human life: the space of freedom and of human capabilities (Sen, 1985a). The task of breaking down human poverty into observable, measurable variables that can be assimilated to commodities with a relative monetary value, and therefore priced, is a harder one. It functions to reduce well-being to a measurable affair, as if it were itself a commodity. This latter idea corresponds by and large to the capability approach that, initially elaborated by Sen,¹⁴ brought back into the

¹³ Also re-published with the same title 'Poor, Relatively Speaking' in 1983 in the New Series of the *Oxford Economic Papers*, Vol. 35, N. 2: 153 – 169, July.

¹⁴ Sen's key contributions on issues, such as the relationship between the concepts of absolute poverty, coherence of its measurement, and inclusion of considerations about inequality, changed the

discussion on poverty a concern for the finality and motivation of policies aimed at overcoming it.

In this way, the causal structure embedded in the traditional models for poverty conceptualisation, which was dominated by a concern for its measurement at least until the mid seventies, was irreparably challenged. In response it started to change and to open up into three complementary strands, as Shaffer (2008) has recently synthesised with great clarity: a move from a physiological model of deprivation to a social one, a broadening in the number of dimensions and variables that have an impact on poverty determination and, finally, the inclusion of a focus on flows of individuals into and out of poverty, besides the study of changes in the stock of poverty.

1.2.1 From the Basic Needs to the Capabilities Approach: Relevant Elements for a Vulnerability Approach

Measurements and operational models are never neutral. They reflect philosophical and political convictions. In fact, the choice of a poverty measure and threshold can be understood as a combination of two types of exercises: a descriptive one and a normative one. Whereas the former must answer the question concerning, “what is the standard of living below which a person can be considered in poverty?” The latter implies the evaluation of ‘what is the threshold below which our society should not tolerate a person falling?’ These two interrogatives are closely related insofar as it is not possible to truly solve the first without having clearly established the second; the criterion on the basis of which deprivation has to be evaluated. However, it is not easy to reach an ethical consensus without a clear knowledge of how poverty works, which is where the first connection between the relevance of the study of vulnerability for the study of poverty is to be found.

Sen (1981) indicated two conceptual requirements for the measurement of poverty, identification and aggregation. On the basis of the first, the poor have to be identified

gravitational centre of the discussion, pushing it beyond the mere problem of the identification and measurement of poverty (Sen, 1976; 1982 and 1992).

within the population. On the basis of the second, a researcher will have to be able to consider different features of poverty to achieve a comprehensive measurement of it. Neither of the two is exhaustive nor sufficient. In fact, in order to establish whether a person's level of poverty can be considered below that of others requires verifying the distribution of the features that one considers important in defining poverty. Both requirements embed a discussion on the informational space that one may use to typify poverty. The choice of one or another space is what marks the most relevant difference between the approaches to poverty conceptualisation and measurement that marked the story and the debates of the epistemological shift mentioned in the introduction of the chapter:

1. Biological or subsistence
2. Basic Needs
3. Relative poverty
4. Capabilities

They will be analysed according to the parameters established above, trying to highlight when appropriate the connection with a vulnerability approach. The Capabilities approach will be analysed in more depth in sections 1.3 and 1.4.

1. The Biological/Subsistence Approach

The idea that poverty is often related with hunger may go overlooked nowadays, when we are so decisively seeking to operationalise the multi-dimensionality of poverty (Alkire, 2007). On the basis of a classical idea from economics, according to which income should correspond to the necessary means to recover from physical work and what is needed for reproduction, Rowntree (1902)¹⁵ established a primary and a secondary poverty line, indicating those who cannot provide themselves with the minimum requirements for physical survival. Ruggeri Laderchi (2000) has provided a step by step reconstruction of Rowntree's intellectual journey, showing the tensions and the contradictions between a quest for objectivity and the absence of a clear conceptual base from which to start measuring poverty.

¹⁵ Cited in Ruggeri Laderchi (2000).

Townsend (1993) has synthesised the major limitations of this approach, providing a critique that illustrates the lack of objectivity in the subsistence approach. He pointed out that:

1) To transform an abstract requirement in terms of nutrients, their prices and quantities, one has to confront the availability of food within a given society, through production and stock. The latter critique could be complemented with Sen's (1981) idea of entitlements and their decrease, according to political conditions and institutional choices affecting either access to food or food prices.

2) As much as social habits and other needs such as comfort, food is socialised and as such depends on cultural arrangements and the other specific variables of each single country.

3) The selection of a minimum diet is, correspond to an unappealing set of alimentary choices and the methodologies that adopt that model fail to recognise the fact that households have different patterns of real consumption. Conceptually, the biological approach overlooks the fact that to overcome hunger is a necessary dimension of what constitutes our quality of life as human beings, but not its sole component.

Besides, in operational terms, this approach has historically presented a strong tendency to equalise food provision with income or even salary availability. In the decade of the nineties, when the debate on the multidimensionality of poverty was getting at full-steam, Amis and Rakodi stressed that if "at the most theoretical level poverty is concerned with individuals' ability to subsist and to reproduce themselves; furthermore, it is determined by individuals' ability to command resources to achieve this." (Amis and Rakodi, 1994: 628). This is also an issue on which Sen has written in several occasions over the years (op.cit. 1981; 1999). To reiterate, converting an instrument (income) into a freedom (being free from hunger) it takes more than the simple availability of the instrument itself, for varied and complex reasons, such as those depending on gender, age and health status. Furthermore, poverty lines based on a biological approach are twice as inadequate because the markets for goods and labour are imperfect, and tend to be more so inasmuch as a society is unequal in terms of access to and distribution of its resources and a country is multi-cultural.

The biological core of a poverty approach that recalls the issues of subsistence and hunger cannot tough be easily dismissed as either irrelevant, or as an approach that belongs

to the past. Hunger represents an essential deprivation, and a negation of the very possibility of existence. It is not by chance that philosophers such as Hume, Locke and Kant included it in their reasoning on the *Ius Naturae*, the original rights of any human being. Gasper (2004) has made explicit the ethical implications that exist behind any process of starvation, because they inflict unnecessary damage on the weak and respond to economic and political process within society. More specifically, development that evades the interrogative of the goal of development is itself confusing its means (growth, progress welfare, etc.) with its ends (following Sen, 1999). Mitchell (2008) and Suarez Montoya (2008) write regarding diverse analytical domains that are nonetheless connected. The recent politics of the World Bank in dealing with the food crisis unleashed at the beginning of 2008, and the fact that Colombia is seeing its food security decreasing, have provided interesting evidence concerning the connection of the issue of subsistence and forms of core deprivation such as hunger with other dimensions of development.

Vulnerability is inextricably related to the core deprivation represented by hunger and failures in any type of basic capability. First of all, as there is core poverty, there is core vulnerability, both in analytical and policy terms. This has been brought to the fore by the studies carried out in research on chronic poverty, and by the work of the Chronic Poverty Research Centre (CPRC). The latter has reiterated the urgency of paying specific attention to this issue, based on both ethical and scientific grounds, such as the consideration that for the chronic poor “poverty is not only about having a low income: it is about multidimensional deprivation – hunger, malnutrition, dirty drinking water, illiteracy, having no access to health services, social isolation and exploitation.” (CPRC, 2005: v). Secondly, vulnerability is analytically bound to issues of core deprivation. This is because, since vulnerability depends on people’s resilience, and this is in turn a function of assets and the ability to command and transform them, a conceptual relationship can be built between any critical life events that affect a human, social, cultural or economic right and, consequently, the duty that states and governments have to protect those rights. In other words, vulnerability analysis tells us where, how and for whom a right is being made vulnerable.

2. The Basic Needs Approach

During the seventies, the Basic Needs (BN) approach gained terrain as a way of overcoming the uni-dimensionality of the biological approach. The International Labor Office (ILO) played an important role in opening a political room for the affirmation of what at that time was a greatly innovative approach. It underlined how, in the face of the unaccomplished task of guaranteeing development, human rights and employment, a primary task of the development project and of its agencies should be to prioritise gaining the minimum requirements such as food, shelter and adequate clothing, as well as potable water, sanitation, public transport, infrastructure and cultural centres (OIT, 1969). Although the first three, and eventually the first six, indicators have been identified with the BN approach, ILO stated in that same document that basic needs should be framed within the entire context of a nation's development (op.cit.).

Doyal and Gough explore the close relationship between the concept of basic needs and the elaboration of a human needs theory (Doyal and Gough, 1991). In fact, on the one hand, the BN approach contains a clear recognition of the right that every individual has to the social benefits that derive from access to basic satisfiers and elementary collective services. On the other hand, the authors argue that human needs are objective, differing from subjective desires and aspirations insofar as when they are not satisfied individuals may incur serious damage. The most fundamental harm is considered to be being unable to pursue what one considers to be good.

The main conceptual critique to this approach is that it is difficult to establish the criteria for the definition of need and their measurement. This is because in order to establish the degree to which a need is satisfied, a normative threshold will have to be ascertained, on the basis of standards that are deemed to satisfy everyone's needs. Besides, as Streeten (1984) pointed out, the approach does not take into account that there are many varied sources of well-being and satisfiers of needs, such as having free time to spend or political freedom. Such aspects of need are more related to "human flourishing" than "basic needs satisfaction". Gasper (1996) has disentangled a number of logical, philosophical and analytical issues related to the basic needs approach, and the relationship its discourse has with other development discourses that place human beings at the centre. Perhaps his commentaries to table 2 of the above-mentioned paper are the most

illuminating, since through them he explains how basic needs require different capabilities that in turn require different satisfiers, depending on the functioning that is assumed as the basis of the normative discourse. For instance, ‘avoidance of serious harm’ (functioning) leads to health and autonomy of agency in terms of capabilities (cf. Doyal and Gough, 1991), requiring food and water, secure environment, health care, etc., as satisfiers. If the categorical order changes and the functioning becomes ‘human liberation’, argues Gasper (1996), the whole architecture has to be modified. Of course Gasper draws here on Sen’s argument about the existence of different evaluative spaces (instrumental freedoms vs. Fundamental liberties) expressed in *Commodities and Capabilities* (Sen, 1985a).

As for the biological/subsistence approach, the fact that there are sound critiques to the BN approach and human needs theory, does not rule out their core validity and relevance for any discourse aiming to elaborate on the relationship between poverty, inequality, social justice and rights. The universal character of needs is a concept that the relativity of satisfiers cannot rule out on the grounds of one of the key arguments put forward by Doyal and Gough, according to which if we consider needs on the basis of individual utility, we are losing ground for any theory of justice rooted in the very idea of humanity (Doyal and Gough, 1991). As Gasper has pointed out within his long-term reflection on the ethical and philosophical connections of major approaches to poverty, industrialisation and individual utility, there are a “family” of ‘human’ discourses that share an essential ethical concern regarding core elements of humanity such as autonomy, dignity, rights, security and basic capabilities (Gasper, 2004). Such reflections have been highly influential in the formulation of an alternative paradigm to that based on ideas of GDP growth and industrialisation, According to the analysis conducted above, it can be concluded that the BN approach and even more the human needs theory, are definitely part of this extended family.

The relevance of the BN approach and the human needs theory for a vulnerability approach is found on two grounds. First of all, the BN approach can be legitimately included within the bunch of approaches that made explicit their intellectual and political concern for human well-being and social justice within development. This took place well before Sen elaborated his capability approach on the basis of the work of Rawls, Streeten,

Jolly and Huq, as signalled by Gasper in his recent working paper for the Institute of Social Studies (ISS) (Gasper 2007). Secondly, the five dimensions corresponding to the assets and relative indicators employed in vulnerability analysis, as well as in this research, overlap to a large extent with those identified by the BN approach: housing, health, income, education, public services such as clean drinking water, sanitation and electricity. Also the capability approach, when operationalising basic capabilities, tends to fall back on those indicators. So why do we study basic and human needs and try to build new approaches? What are we trying to add?

The first issue to be stressed concerns a problem regarding the plurality of spaces in which well-being can be evaluated, that both the basic needs approach and the human needs theory have not overcome. As Alkire has pointed out, “The capability approach notes that individual advantage can be assessed in at least four different spaces: well-being achievement, well-being freedom, agency achievement or agency freedom (...) Sen argues that we cannot simply choose to focus on one or another of these four possible spaces and ignore the rest.” (Alkire, 2005: 122). Furthermore, neither of the two was able to clearly state, as Sen (*op.cit.*, 1982 and 1999) did, that achievements and deprivations have an absolute character, while satisfiers are relative. This is a limitation the BN approach was unable to overcome. Human needs theory is constantly in search of normative, universally valid, indicators. This is the reason why Sen has never wanted to operationalise the capability approach.

The second issue concerns the difference between achievements and processes. The vulnerability approach is clearly interested in the dynamics through which deprivation is produced and deepened. It pretends neither to being normative nor universal, as it will be illustrated in sections 1.5 (particularly dedicated to the vulnerability debate), 1.6 and 1.7 as well as in chapters 4 and 5, which analyse the research results and their implications. The vulnerability approach is interested in producing knowledge about how and why people’s assets are eroded. In that sense, it is complementary to a concern for human needs, in terms of the recognition of their absolute value, and of the fact that the issue of rights has to be mainstreamed into policy, both to guarantee human needs and to prevent those critical life events that characterise vulnerability. Additionally, as will be argued in section 1.4, the vulnerability approach is complementary also regards of the capability approach. In other

words, a vulnerability approach poses other scientific questions and operates on a different epistemological ground to other approaches that are interested in well-being achievements and processes that determine people's deprivation in terms of the same well-being. I would deem it more policy oriented towards, and methodologically interested in, sociology rather than the philosophy of poverty.

3. Poverty as relative deprivation

Townsend was one of the first scholars who tried to rescue poverty discourses from the lack of conceptual rigour into which they had fallen due to emphasis on measurement, as inaugurated by the Booth and Rowntree tradition (cf. Townsend 1954). In his 'Poverty in Britain' he wrote:

"Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the type of diet, participation in the activities and they have the living conditions and the amenities which are customary, or at least widely encouraged or approved in the societies to which they belong. Their resources are so seriously below those commanded by the average family that they are in effect excluded from the ordinary living patterns, customs, and activities" (Townsend, 1979: 31).

The idea of poverty as relative deprivation entails the inclusion of social needs within the spectrum of human needs that have to be considered to conceptualise poverty. Within the idea that social needs evolve over time is embedded a conceptual elaboration shared by those scholars who, with Chambers (1989) produced early vulnerability studies. Since social needs evolve over time and are defined within a specific historical and geographical context, a better understanding of poverty does not only entail broadening the number of dimensions and indicators (which on its own would be just a mechanical exercise) but a dynamic conception of poverty itself. The matter at stake, in other words, is not just to relate income to a number of objective and verifiable indicators of material and social deprivation. The issue put forward by the relative approach to poverty challenges researchers to formulate models and find measures capable of analysing how that deprivation and its relationship with income changes over time and across different communities, in different physical and human geographies.

Although perhaps indirectly, historically speaking the relative conceptualisation of poverty has greatly influenced thinkers who have dedicated their efforts to understanding vulnerability. The internal dimension of vulnerability that Chambers (op.cit.) advocated assimilated the experience of defenceless and humiliation. This clearly correlates with a broader reflection on the contextual aspect of poverty. This is so in Adam Smith's example of the Victorian English person who cannot appear in public without shame if he or she does not possess a clean white shirt and a pair of leather shoes, so often recalled by Sen (cf. 1999) as well as in reflections on the relativity of poverty.

4. Poverty as Capability Failure

Since Sen's entitlement theory and capabilities approach have had an important conceptual influence upon this work, the following section will concentrate on selected theoretical issues, beginning with the debate on absolute and relative poverty, and then touching upon aspects of the relationship between the concepts of functioning and capabilities on the one hand, and that of well-being on the other.

After a long debate¹⁶ with Townsend who had argued that "(t)he vague concept of 'subsistence' is an inadequate and misleading criterion of poverty, partly because it does not have scientific objectivity sometimes claimed for it, but also because it is essentially a static concept." (Townsend, 1962: 224), Sen argued that "absolute deprivation in terms of a person's capabilities relates to relative deprivation in terms of commodities and resources" (Sen, 1982: 153). The way Sen achieves reconciliation between two apparently clashing positions is simply the reflection of genius. It is the idea of the existence of two different but complementary spaces - that of capabilities and freedom and that of commodities and welfare - which allows him to argue that poverty is a stable notion within the space of capabilities where deprivation is always absolute, yet a relative notion in the space of goods and commodities. However, the distinction between an absolute and a relative space is not so clear. In fact, what constitutes the core of the standard of living, are not goods and commodities but the real possibilities individual agency encounters for doing and being. These are always given within a set of socially desirable and technically feasible

¹⁶ As it was also mentioned at the beginning of the chapter.

capabilities. For example, in a post-nuclear war society the basic capability of living a long and healthy life would not have the almost universal recognition it has in contemporary society.

Capabilities relates to well-being in two main ways according to Sen (1985a and 1990):

a) The specific vector of functionings¹⁷ achieved by a person represents her¹⁸ well-being if the real possibility to achieve functioning is given within a framework of freedom of choice by an agent who autonomously defines her goals.

b) The achieved well-being, regardless of what functioning was actually chosen by a person, depends on the possibility and range of options that that person has had, as well as on the extent to which those opportunities have been taken advantage of in a situation free of economic, social and political exclusion.

According to these two points, poverty as capability failure can also be understood as the incapacity of an individual to achieve basic goals that he considers as important and valuable for their own sake. Here is found one of the two major connections between the capability and the vulnerability approaches. The latter analysed via the examination of the dynamics that spin around critical life events. What prevents agency from achieving functionings and instrumental liberties are explored as paramount in the process of achieving opportunities essential to guarantee the freedom to choose a life considered subjectively valuable.

The second theoretical part of Sen's contribution to a conceptual elaboration on vulnerability is related to entitlement theory. It is directly connected with the first of a three-tiered typology of capabilities failure, as illustrated by Sen himself throughout his writings. An individual can be considered poor in terms of capabilities failure if:

¹⁷ The income one is able to generate, the health status one is able to achieve, the degree of personal formation and education one is able to access, the type of physical protection one is able to attain for oneself and relatives, or the command one can achieve over food and other basic stuff for survival.

¹⁸ I keep Sen's original use of the pronoun "her" here to refer to a person.

i) He cannot achieve the basic functioning (being or doing) constitutive of life. He cannot function. This is the case of a person that for a critical life event becomes ill, loses all his sources of income generation, has to care for others in a way that impinges on his freedom of agency, or is displaced from his land, home and culture.

ii) He lacks a set of possible choices. In this case the individual is not free and this “unfreedom” is independent of the functioning he has achieved.

iii) He lacks freedom of choice in spite of having achieved basic functioning or is the victim of some form of social exclusion (Sen, 2000).

The next section re-examines the analysis of Moser's and Chambers' contributions to the institutional shift in thinking on poverty that took place during the nineties, with particular emphasis on UNDP and the WB.

1.2.2 The Inquiry into the Dynamics of Poverty at the Level of the Institutional Shift

While the paradigmatic shift just described concentrates on the ‘what’ and ‘where’ questions’, the roots of vulnerability, although closely linked to the above discussion, are more directly the product of a concern for ‘why’ and ‘how’ questions regarding poverty. This second paradigmatic shift is rooted in a reflection that took place in poverty studies from the late eighties onwards. It was to a great extent prompted by a change of a similar magnitude and significance to the first aforementioned one. However, this shift took place not in academia, but in major developmental agencies. It affected their conceptualisation of poverty and often transformed these same institutions from the executive agencies of a development project into think tanks dedicated to the definition of the strategic orientation of the latter, as can be seen in the case of the World Bank and the Inter-American Development Bank (IDB).

In terms of institutional discourses, changes in the conceptualisation of poverty described above may be analysed through looking at the history of the internal debate of some of the most representative development agencies. What is contended here is that the ideas put forward by Chambers and Moser and, by and large, by their research networks, played a steering role in this shift. They provided some of the most important elements in

founding the conceptual pillars of reformed institutional discourses. Hence, the concept of vulnerability and its interest for the dynamic of poverty and the search for answers to the ‘how’ and ‘why’ questions, came to occupy a central role after this second paradigmatic shift took place. This paradigmatic institutional shift is highly intelligible when analysing the main documents dealing with issues of poverty, as they were published by the United Nations Development Programme (UNDP) and the WB. Publication started in 1990 and afterwards continued in a number of reports spanning the whole decade. The first Human Development Report (HDR) by UNDP (1990) and the first WB’s WDR dedicated to poverty (World Bank, 1990) were respectively influenced by the work of Ul-Haq (1995), Sen (1999) and Lipton (1997). However, a second wave of poverty-related reflections by those same agencies, within which two fundamental pieces are the Human Development Report that dedicated an entire issue to the role that human development can play in eradicating poverty (UNDP, 1997) and the WB second poverty-centred WDR (2000) titled ‘Attacking Poverty’, reflect the influence of ideas promoted by Chambers and Moser.

On the one hand, chapter 1 of HDR 1997 placed a description of the importance of the sustainable livelihoods approach as a contribution to the comprehension of the multi-dimensionality of poverty and a definition of ill-being clearly related to the early literature on vulnerability as central to the debate. The participatory tradition of poverty analysis also played a fundamental part through the *Voices of the Poor* (Narayan et al., 2000) in WDR 2000. By the same token, Moser’s AVF plays an even more important role within the same WDR 2000, heavily informing as it does the position developed by the WB on the dynamic nature of poverty and the relevance of assets.

When illustrating its position regarding the dynamics of poverty in its ‘framework’ chapter, WDR 2000 presents a box (1.3) entitled ‘measuring vulnerability’. The latter is a paramount example of how the contribution of the social development tradition is, to a large extent, if not overlooked, at least minimalised throughout the whole report. This point had already been made shortly after the publication of WDR 2000 by Hubbard (2001), who edited a special issue of the *Journal of International Development* (JID). However, and mostly due to the focus on the analysis of the new WB poverty agenda, the issue delivers neither a specific critique of the implications of the WB omission regarding the academic

and policy relevance of the contribution of the social development tradition, nor places any particular stress on the relevance of Chambers' and Moser's work to the WB new flagship concepts of *opportunity*, *empowerment* and *security*.¹⁹ The aforementioned JID issue did underline both the positive and the negative aspects of the new conceptual perspective put forward by the WB. In particular, it mentions how the WB takes a politically relevant step ahead in recognising the centrality of previously overlooked concepts, such as the three highlighted in italics above. While prizing the inclusion of a more dynamic perspective on poverty and the capacity that the WB showed to re-appraise its own fundamental approach in the face of persisting poverty and growing inequalities, the JID issue also highlights the contradictions of WDR 2000. These are firstly embedded in a concern for security that still heavily relies on markets. Secondly, in the instrumental use of the concepts of equality and empowerment, these are seen as policy tools favouring economic growth. This argument is presented without placing any particular weight on the normative value they should have for society at large. The latter mirrors the same kind of mistake made by the WB when talking of capabilities. It mentions education and health, but omits to mention political freedom, as Alkire (2005) as poignantly pointed out. Thirdly, the critique is grounded in a number of analytical biases among which stem out those of a skewed focus on rural poverty to explain key dynamics that belong to urban poverty, as well as in the observation that policy solutions are too mechanical and do not contemplate key elements of the political economy of the countries analysed. When it comes to the conceptualisation of poverty, in which we are fundamentally interested, the critique focuses on the need for the WB to be able to provide a finer-grained and more disaggregated view of who the poor are, where they are and why they are poor, together with the need for a much better analysis of issues related to non-income poverty (Hubbard, op.cit).

In its final part, this section revisits Hubbard's critique to make a conclusive remark that illustrates, through textual analysis, which specific points made by Chambers and Moser the WDR did not fully acknowledge. WDR 2000 did acknowledge that vulnerability is a dynamic concept and that income and consumption variability have to be complemented by an analysis of the variability affecting other non-income dimensions of

¹⁹ This was not what the JID issue set out to achieve. It responded to a much broader goal, which was to offer a wider analysis of the relevance of WDR 2000 within the fields of poverty studies and development policy at large.

well-being. The architecture of the discourse places income at the centre from inception, and all other variables and related social dynamics occupy a secondary place in the new developmental design of the WB. They are presented either as complements, or as elements whose utility has to “pass the test” of a comparison with the allegedly established usefulness of an income-centred vulnerability analysis. WDR 2000 acknowledges three facts: a) that income or consumption measures give equal weight to upward and downward fluctuations, which are incomparable and irreducible differences from a vulnerability point of view; b) that the time dimension is not captured by these measures; and, c) the fact that many small and one large fluctuation in income may yield a coefficient that is equal to that of a situation with an equal number of moderate fluctuations.

Besides this point, without citing Moser, WDR 2000 uses in its argumentation many insights and a reiterated reference to a number of the key assets she had worked out in her AVF. By the same token, the report draws from a number of central coping strategies already presented by Chambers and his research group, as well as by Moser herself, again without citing any original sources. However, the report did cite as background research papers Sinha and Lipton (1999) as well as the classical reference paper of the WB on social risk management (Holzmann & Jorgensen, 1999). WDR 2000 does not cite the sources or key ideas or even cite the work of other scholars as an alternative, such as Bebbington (1999), Beall (2000), Carney (1998), Chambers (1989, *op. cit.*, and 1995), Ellis (1998), Murray (1999) and Rakodi (1999). These are but some of the most relevant papers from the rural/urban livelihoods literature published in the second half of the nineties and the beginning of this decade that acknowledged the relevance of vulnerability, and enriched its framework, besides producing a broad resonance in the development academic community (de Haan, 1999; Meikle, 2002).

The report lists and comments upon the relevance of physical assets as means to cope with income loss through their sale. It omits here the classical point made by Moser that physical assets, especially housing, are used by low-income groups as an income-generating tool. For example, through the rent of rooms, space or utilities. The present empirical research, as well as fieldwork carried out by other academics (Pryer, 2003), also show that the use of housing as an asset operates as a guarantee that generates prestige and

social recognition at the local level, thus enabling people to access credit or to strengthen local social networks offering mutual support. WDR 2000 mentions the importance of human capital and of education, while also stressing the importance of income diversification, and of local mutually beneficial networks, as fundamental resources for informal coping strategies. It also stresses the importance of social protection and access to credit in decreasing a household's vulnerability. However, all these points had already been made by Chambers and Moser before the year 2000, and the publication of WDR can be regarded as the unacknowledged institutionalisation of Moser's, Chambers's and the IDS's work within mainstream poverty studies.

1.3 The Influence of Amartya Sen's Thought on the Elaboration of a Vulnerability Approach

Outstanding insights from Moser (1998), Wiesner et al. (2006), Pelling (2003), Rakodi (2002) and Pryer (2003), suggesting that the vulnerability framework is still one of the few that can be operationalised and used in a conceptually and methodologically friendly manner to study how the poor cope with risk.

However, from a social policy perspective, the reasons why nowadays the vulnerability debate is an academically alive one that keeps all its policy potential, are not conceptually far from the central concern expressed by Moser a decade ago. To illustrate this, I will quote again here some lines of Moser's definition that I have already employed above for other purposes:

“Analyzing vulnerability – she wrote - involves identifying not only the threat, but also the “resilience” in exploiting opportunities and in resisting or recovering from the negative effects of the changing environment.” (Moser, 1998: 3).

That central concern has two sides. The first is represented by the ‘threats’, and the second by the ‘resilience’, as expressed through ideas regarding the exploitation of opportunities, and those of resistance and recovery from the negative effects of a changing

environment, Moser's quote presents a number of implications with regard to the role of agency within poverty reduction and, more broadly, development policies.²⁰

This provides the opportunity to illustrate an interesting point about the contemporary relevance of a vulnerability approach. It paves the way to explore the existence of links between vulnerability and some key actual debates such as those on capabilities, freedoms and well-being. All those links would indirectly allow research to inquire into the relationship between vulnerability and agency.

Moser's insights have been explored more with regard to the polarity represented by threats and resilience. However, vulnerability demonstrates an unexplored conceptual closeness to Sen's reflection on capabilities and freedoms too. In his preface to *Development as Freedom*, Sen (1999) describes the focus of his work as follows:²¹

"It concentrates on the roles and interconnections between certain crucial instrumental freedoms, including *economic opportunities*, *political freedoms*, *social facilities*, *transparency guarantees*, and *protective security*. Societal arrangements, involving many institutions (the state, the market, the legal system, political parties, the media, public interest groups and public discussion forums, among others) are investigated in terms of their contribution to enhancing and guaranteeing the substantive freedoms of individuals, seen as active agents of change rather than as passive recipients of dispensed benefits." (Sen, op. cit., 1999: xii-xiii).²²

What is that factor that restrains people's agency and prevents people from successfully achieving better functioning, as a fundamental step towards the achievement of more substantial or ultimate freedoms?

This intervening factor is represented by the dynamic of vulnerability, that is, the unfolding over time of one or more critical life events and their direct and indirect effects that produce as a final outcome a decrease in the effectiveness of people's agency. This takes place within a given societal arrangement, having as it does attendant limitations that

²⁰ This is an analytical reading of Moser's text that closely reflects Chambers' conceptualization of vulnerability as a dynamic or a process having two sides, an internal and an external one. The external is represented by shocks and stress and the internal by the capacity to resist.

²¹ The importance of what he says and the relevance it has for the vulnerability debate deserves a lengthy quote.

²² Original text in italics.

can seldom be overcome immediately, but rather imply the alienation or mortgaging of present and future assets. A process through which the interaction between critically affected agency and contextual elements (such as the market, for instance) can have tremendously reinforcing negative effects, unless other factors intervene in the process thereby changing the balance of the means of resistance (assets and the capacity and ability to convert them into entitlements), ultimately producing greater resilience and lesser vulnerability.

In order to strengthen this affirmation, the next section engages with a discussion of the relationship between vulnerability and the concepts of security and negative freedom (freedom from).

1.4. Vulnerability, Security and ‘Freedom From’

Sen’s works represents a tremendous contribution to our understanding of what are the positive freedoms needed by any development process understood as a process of “organised pursuit of human wellbeing”²³ (Gough, McGregor and Camfield, 2007: 3). However, we still need a better, more scientifically precise understanding of the processes that shape negative freedoms. That is, what prevents people from achieving instrumental liberties or, in other words, which social dynamics operate at the micro and meso-level under the heading of ‘critical life events’. These are events happening during the life time of a unit of analysis that, in the case of human beings, imply a loss of material and intangible assets and, in turn, security and autonomy. Security and autonomy are concepts that attempt to demonstrate a conceptual link with the capability approach, as will be shown in the following discussion, which can be considered both as a conceptual bridge and a research agenda; an exploration that tries to connect vulnerability to capabilities through the concept of security. Again, the key issue under scrutiny within a focus on the micro and meso-levels is what prevents people from achieving better capabilities.

In order to unravel that, it is useful to recall a recent distinction made by Geoff Wood (2007) between ‘freedom from’ and ‘freedom to’, which he puts forward when analysing the implications of including socio-economic security as a component of

²³ I respected in this section the way the authors spell ‘wellbeing’, compared to, for instance, Sen’s usage that privileges the spelling ‘well-being’.

wellbeing. In this case, wellbeing and capabilities are - hierarchically speaking - on the same categorical level as vulnerability and security. Although at a higher rung on the ladder.

Freedom from insecurity “is a freedom from all things that are perceived as potentially threatening to wellbeing, as well as those things that actually threaten wellbeing; thus freedom from future as well as present danger (Wood, 2007: 111).

Like vulnerability security also depends on assets and social entitlements. On the one hand, says Wood, it depends on the extent of personal resources that allow those more equipped to “manage their own ‘freedom from’ agenda independently of the state and its repertoire of statutory rights and entitlements” (Wood, 2007: *ibid.*). On the other hand, security also relates to what Sen defines as societal arrangements. In both cases, the scarceness of assets and capitals on which one can rely in the face of a critical life event, determines a lack of ‘freedom from’ the effects and impacts of these events. In turn, the latter connection between security and vulnerability provides the means to establish a connection between the vulnerability and the capability approach. In this regard, I will benefit again from quoting Wood’s remark that “the weakness of the ‘freedom from’ conditions the ‘freedom to’ possibilities.” (Wood, 2007: 113).

In other words, there is no human capability expansion (freedom to) without human security (freedom from). That is to say that there is no capability expansion without granting people agency, either through autonomous or dependent security guarantee; the means to protect, rebuild or recuperate assets and capitals from the impact of critical life events. This is what I named the vulnerability dynamics. Hence, there cannot be a full capability expansion in the presence of concomitant high levels of vulnerability. As a corollary, security (freedom from) is an indicator that reflects a high sensitivity to vulnerability dynamics. High vulnerability should indicate low security, that is, lower degrees of freedom from.

As can be seen, a relatively new reading of the vulnerability debate connects the concept of vulnerability itself with some of the most relevant contemporary development debates. In particular, it connects with those that refer to the capability approach, the human security perspective, the human development paradigm, and the livelihood-oriented new social policy proposal (Hall, 2004; CEPAL, 2006).

Academic reflection with regard to the connections between these debates has enriched much development debate from at least as far back as the eighties and nineties. The fact that it nowadays holds centre stage as an issue, owes much to the work of a number of scholars carried out over the last decade or so (Gasper, 2007; Moser, 2005; Ul-Haq, 1995).

Among the range of connections explored by scholars, the next section will focus on that between vulnerability and entitlements, for two reasons. Firstly, because the entitlements approach, as presented by Sen in chapter 5 of *Poverty and Famines* (Sen, 1981), represents the original elaboration²⁴ on the relationship between the ideas of assets as endowments and vulnerability. Secondly, it is an indirect reflection on vulnerability and security. The section analyses these links, tracing them back to the work of Moser and other authors from the early vulnerability studies group, such as Chambers and Swift.

1.4.1 Vulnerability and Entitlements: an Unnoticed Crossroads?

On the basis of the similarities between the concepts of assets and entitlements, the link between a vulnerability and entitlements approach had already been at least sketched by Moser and those who followed the leads initiated by the intuitions contained in her assets vulnerability framework (Moser, 1996).

Assets and entitlements both relate in a similar way to well-being. The processes that lead to their control and use both entail the inclusion of the importance of agency as a key variable in the conceptual frame. Assets are mobilised by the agency of individuals or households in a very similar way to that through which entitlements are exchanged in the market. Although Sen does not say it explicitly, the difference is in terms of categorical level: entitlements are based on endowments, that is, assets and resources. Therefore, if we allow for a broad use of the term 'assets', focusing more on the concept of exchange than on the definitional issue, the key concept is that of buffering, or the achievement of a decrease in vulnerability through attaining higher degrees of 'freedom from' viz security.

Both concepts, once framed within a vulnerability approach, have the potential to explain the dynamics of poverty. More broadly, they may contribute to further understanding dynamics that enhance or prevent the achievement of well-being.

²⁴ I owe this connection to a suggestion made by my Ph.D. supervisor Professor Beall.

Scarceness of assets tends to equate with unsustainable livelihoods, since a low level of access to entitlements tends to imply the impossibility of achieving strong capabilities sets, whereas in both cases there is a direct relationship with well-being.

Interestingly, critical life events show a clear link with lack of security and weakness of livelihoods sustainability. Does asset-security failure²⁵ represent a potentially new concept that might complement the capability approach with a contribution from the vulnerability approach? On the entitlements side, the capability approach has provided concepts such as capability failure, but not the negative concept characterising 'freedom from' something. It may well be that this is not a necessary piece of the jigsaw, and that the same concept of vulnerability may fit the empty space.

It is perhaps not the case that over the past decade the potential embedded within the vulnerability approach has already lead many to include the concept of vulnerability within debates such as that on the conceptualisation of poverty, or within the inspiration for new frameworks, such as the livelihoods approach.

Among these debates, excluding Swift's (1989) and Gasper's (1993) papers, an explicit analysis of the interesting relationship between vulnerability and Sen's (1981) entitlement approaches went overlooked. This was perhaps overshadowed by other priorities that placed more emphasis on the institutional side of the debate than on the actual "mechanics" and indicators of poverty dynamics.

The analytical link between vulnerability and entitlements can be explored, thereby moving from the continuation of Moser's previous quote, in which she attaches to it a very similar meaning to the concept of assets as Sen attaches to his concept of endowments:

"The means of resistance are the assets that individuals, households and communities can mobilize in the face of hardship. Thus vulnerability is closely linked to asset ownership. The more assets people have, the less vulnerable they are, and the greater the erosion of their assets, the greater their insecurity" (Moser, op. cit.:3).

²⁵ An asset-security failure would identify a situation where critical life events produce high impacts (high vulnerability) as a consequence of a low degree of 'freedom from' (low security).

In spite of this potential, over the last decade, the vulnerability framework partly lost autonomy and identity. It first develops into a component of a livelihood-centred agenda, and then re-emerges within a broader well-being agenda for social protection. This is the re-reading this research proposes of a process that is complex and diverse, stretching as it does back over time, with sometimes tenuous continuity.

This continuity over time illustrates that, within the development debate, one of the main conceptual links between vulnerability and poverty passes (or should pass) through a reflection on social protection, as understood in the light of insights provided by the livelihoods and capability frameworks. Vulnerability analysis is, in other words, an issue of how to bring those contributions into applied social policy. It is about how to gain space as a legitimate methodological approach, with specific methods and tools, that the vulnerability approach enters a debate with other conceptual or methodological positions and frameworks.

On the basis of recent research, there are arguments separating livelihoods from vulnerability analysis. These consider the latter a useful tool to be tested at city scale. The next section examines the scope of the process of forming a vulnerability agenda, with the aim of identifying the main contributions.

Moser's (1996) and Chambers' (1989) seminal contributions are a helpful starting point in building an argument for the relevance of studying vulnerability. This is primarily because they help to clarify how the debate on vulnerability itself makes the move away from a concern with two empirical problems marking a clear-cut difference from poverty studies. These are:

- a) The first problem is the way poverty works once looked at including time as a dimension. In fact, from an epistemological point of view, to look at coping in the face of shocks means to look at poverty over time, observing people's behaviour in different points in time. Combined with a multi-dimensional understanding of poverty, this is one of the key contributions of the vulnerability approach to the broader field of poverty studies that marks a clear-cut difference with the monetary one.
- b) The second is the way that understandings of poverty change when the perception the poor themselves have of it is considered, this being quite different from the views of researchers or other experts. This perspective shows how the picture of

poverty we can construct for policy purposes can be dramatically changed from that resulting from the view of experts and development practitioners, if the views of the poor are taken into account, and how important this is for policy design.

These two questions are also relevant in the face of the recent wave of debate²⁶ on poverty measurement (Maxwell, 2001; Ravallion, 2003), because they push the debate beyond concerns about how poverty and the numbers of poor can be measured optimally.

1.5 The Debate on Vulnerability: Initial Insights on Assets and Coping

A focus on capitals, assets and resources as the functional determinants of the capacity to cope with shocks, implies undertaking the task of disentangling the processes that enable or prevent low-income groups from controlling and using those capitals and assets. As Swift wrote, “Vulnerability is not simply another word for poverty. Poor people are usually among the most vulnerable but understanding vulnerability means disaggregating poverty.” (Swift, 1989: 8). This concern regarding vulnerability is shared by a later livelihoods approach that it also, to a large extent, inspires.

The initial contribution of the IDS group, from Chambers as much as from Swift, who writes the most conceptual article of the 1989 issue of the IDS bulletin on ‘vulnerability: how the poor cope?’, sets the ideal limits within which the discussion is to be bound. In his editorial introduction to the above-mentioned issue of the IDS Bulletin, ‘Vulnerability, Coping and Policy’, Chambers underlines that:

“*Vulnerable* and *vulnerability** are common terms in the lexicon of development, but their use is often vague (...) Some precision can be found in the use of ‘vulnerable groups’ where this refers to pregnant and lactating women, to children, or to disadvantaged communities

²⁶ There are at least two important waves of debates on poverty measurement. Other than those involving Sen and Townsend’s discussion on absolute vs. relative poverty, such debates correspond to the publication of the two World Development Reports of 1990 and 2000. The Bank dedicated these to poverty conceptualisation, measurement and policy perspectives (for discussion related to the first of the two WDR, see, among others, Ravallion, 1992; Blackwood & Lynch, 1994; and Greeley, 1994)

such as Scheduled Castes and Scheduled Tribes in India. More often, though, vulnerable is used simply as a synonym for poor” (Chambers, 1989:1).

*My italics

The first insight of early vulnerability studies was about the vague and imprecise utilisation of vulnerability.²⁷ It indicates a problem that is one of epistemological coherence and relates to the scientific definition of concepts. The IDS work had great importance at that time insofar as it provided greater visibility to a large number of – especially rural – studies on poverty run within communities.²⁸ Until then, the academic community had tended to emphasise either the cultural or the basic needs contents.

According to a new perspective, that of poverty studies, the re-elaboration of the concept of vulnerability as clearly differentiated from the common meaning attached to the word ‘vulnerable’, highlights concepts of coping and risk and, in doing so, opens a new stream of research.

There are other insights from the case-studies of the IDS group that can be condensed into six relevant points, as listed below from (1) to (6);²⁹ all of them being relevant problems for a number of reasons:

- a) They mark a difference in terms of the type of research questions posed in gathering a better understanding of poverty. That is, they all sensibly differ from the research questions provided by the monetary tradition of poverty studies, since they place people’s well-being at the centre of the

²⁷ The precise use of definitions, frameworks and measurements is a key issue in contemporary development analysis, especially in the face of the proliferation of competing intellectual frameworks. This has been pointed out by Beall (2000) and Bebbington (1999), who highlight the over-utilisation of terms such as empowerment, livelihoods, resilience and vulnerability, as a practice that dispossesses them of exact meaning, thereby turning them into a category of blanket words or portmanteau concepts.

²⁸ Representative of this literature are Chambers (1983) and Jodha (1988); that is, studies that develop a critical analytical perspective bringing in evidence about how the poor live, cope with and perceive poverty and deprivation.

²⁹ They are adapted from Swift's (1989) initial agenda for vulnerability.

reflection. They focus on endowments and concentrate their research efforts towards understanding the process of the functionings achievement for low-income groups, thus providing the basis for a conceptual link with Sen's capability approach.

- b) They inspire Moser's work on vulnerability and, to a large extent, can also provide inspirational insights for the livelihood approach. A key difference between that strand of research and Moser's (a difference very much applying to the present research too), is that those studies are concerned with rural poverty and do not provide evidence of how vulnerability works in urban areas, for the urban poor.
- c) They point to critical areas for empirical research, some of which are still under researched, either in terms of systematic analysis concerning the patterns of vulnerability of different groups, or in terms of coverage across a large number of developing countries; as recently pointed out by Barrientos (2006). They set an initial agenda for research providing enough evidence about regularities and differences in vulnerability, its explanation and translation into insights useful for policy.

1. Cumulative vulnerability: In some communities, the onset of the crisis happens some time after the point in time at which the actual shock took place.
2. Differential vulnerability: Similar communities with similar production patterns or exchange failures react differently to similar types of shocks.
3. Individual vulnerability: As the above focus on communities, also the household focus requires further conceptualisation because it hides the differences existing in vulnerability among different members of the same household.
4. Expectations towards public assistance: Swift points out that it is important to understand cultural and behavioural patterns in the face of situations of extreme crisis, in order to explain and plan different types of relief actions.
5. Assets preservation strategies: In connection with the above point, there is in the entitlement approach. Another area that is little explored, it concerns

the preservation of vital productive assets in spite the negative consequences this may generate for survival in the short term.

6. Different resilience and recovery capacity: Production exchange failures explain the dynamics of extreme crisis, such as famines, but do not provide elements to comprehend why some communities restore their production and exchange relationships more readily than others.

The case studies from IDS also identify a limited number of important variables that were revisited, firstly by Moser (1996), and then by scholars like Loughhead (2000) and Pryer (2003). The latter was herself a member of that first group of researchers at IDS. The role of the head of household as bread-winner, the importance of health as a determinant of economic and livelihood crises, the active attitude of low-income groups and the role of agency in mobilising to engage with risk or to confront its impacts, are all factors playing roles in the onset of collapse in people's consumption capacity, to a similar degree as in the magnitude of impacts over assets and resources.

However, the main critique of these first insights is that they provide scant, only qualitatively comparable empirical evidence. However, they are intuitive and their core merit lies in their indication that assets (used as a synonymous of resources) do play a functional role in determining differential vulnerabilities over time. They open paths, set agendas, but do not conclude the cycle of research with findings that could be extended to other situations and realities.

The next section discusses how Moser's work takes these insights much further, systematising them on the basis of extended empirical fieldwork, and thus laying the foundations for considering vulnerability analysis as a useful tool for policy.

1.5.1 Moser's Assets Vulnerability Framework

On the basis of a longitudinal study of four communities facing situations of economic crisis affecting their livelihoods on a number of non-income dimensions, Moser identifies five main types of assets. She describes these as those most frequently and typically related to different types of vulnerability (see table 1.1 below).

Two aspects have to be highlighted before analysing her work. Firstly, the relevance of her findings for the debates on poverty, vulnerability, livelihoods and social protection can be found on a number of grounds. The first part of this section illuminates this, pointing out where her work is trail-blazing in its contribution, and why. Second, Moser's work represents the initial conceptual foundation of this work. The second part of this section is dedicated to building on her assets vulnerability framework, specifically concentrating on the task of setting a conceptual and methodological agenda for the present research.

Moser's contribution can be said to be so central to the above mentioned debates because:

- i. It overcomes (albeit it does not solve the problem of) a limitation of the capability approach, that is, the operationalisation of capability-related indicators. This problem partly originated from the fact that such attempts have almost always been made from a deductive perspective (Nussbaum, 2001). This has proven a controversial task, because researchers have found themselves in a sort of logical *cul-de-sac* when trying to universalise the concept of capabilities in terms of factual, measurable and tangible indicators. The idea of capability belonging to a discourse (or in other words having a logic), is borne out by the notion of something (freedom) being universally valid in a space that belongs to the ends of human beings and their lives (well-being or 'the good life', as on Aristotle). In fact, the task of operationalising the capabilities approach necessarily implies either stepping down to the level of basic indicators; meaning the level of very basic needs common to all human beings, or introducing a high degree of arbitrariness in measurement. This is because higher level needs other than shelter, alimentation and a few others (such as care), are not easily extended across cultures and societies.
- ii. Coming from an inductive approach, much closer to that proposed by the epistemological insights of grounded theory, Moser approximates the idea

of the existence of fundamental capitals (which she calls capacities), at least for the operationalisation of a socio-economic understanding of the process of livelihoods construction. That would allow, she proposes, for the development of conceptual frameworks incorporating the concepts of risk, crisis and social protection. In this sense her work is foundational for the field.

- iii. Results come from a longitudinal study carried out in different geographical locations and social contexts, validating indicators and findings through triangulation (Yin, 1991).
- iv. The five main types of vulnerability described are entry points for critical situations faced by poor households. They are confirmed by many of the findings of the present research, both in its 1998 and 2006 stages (see chapter 5). These findings are also supported by those of Pryer's research in Dhaka (Pryer, 2003), and by the publication of the "Voices of the Poor" study (Narayan et al., 1999). However, in the latter case the unit of analysis was the community.

Table 1.1- Moser's definition of types of vulnerability

Type of vulnerability*	Outcome
Labour	Loss of income; provide adequate non-traditional skills training appropriate to the community
Human capital	Inability to maintain investment levels in education and preventive health care; inability to provide safe, clean water
Housing and infrastructure	Inability to use housing as a productive asset
Household relations	Increased domestic violence; lack of adequate childcare; lack of caregivers for the elderly; split households
Social capital	Decline in the attendance of CBOs, particularly by women, or in activity of CBOs; increase in young gangs; increase in crime and homicide; lack of physical mobility, especially at night and for women; decline in night school attendance.

*For Moser the types of vulnerability correspond to the difficulties or crisis people encounter with the five types of assets listed in the column.

There are two aspects in Moser's work, both related to the methodological aspects, which are an interesting starting point for the specific goal of further operationalising vulnerability analysis. Considering the indicators of increasing/decreasing vulnerability presented by Moser (table 1.2, below), they might belong to a number of different categories depending on the life cycle of the household. In other words, they are not

necessarily either impacts of vulnerability or causes of it. The category under which they fall seems somehow uncertain.³⁰

Households might have mentioned the same item, let us say after Moser's first indicator of the same table 1.2, "Loss of permanent job", under any of the four following categories:

- a) Life event
- b) Cause
- c) Consequence
- d) Strategy

One may lose a permanent job (event), say because of an illness or a firing (cause); that is, the most straightforward case in which the indicator is nothing but a critical life event, pointing to the fact that the household underwent a critical spell.

However, the problem is that one may also refer to the loss of that same job as a consequence of tensions at work (event), caused by a health condition that prevented one from doing a fare share of work as usual (cause).

By the same token, the loss of a permanent job can be the cause of another life event such as the worsening of an health condition (due to the lack of money to pay for medicines); or even be a strategy, when for instance the job is voluntarily left due to a requirement within the household, such as the care of someone weak or ill. In other words, vulnerability analysis may present the researcher with various degrees of complexity, which are embedded in the very nature of the vulnerability dynamic.

In order to be translated into insights for policy that can be utilised at the specific household and individual level, what is required is a further step from Moser's grids, and a

³⁰ This section takes advantage of the feedback provided for this conceptual argument by the fieldwork realised in 1998 and 2006 in Bogotá. My lack of first hand knowledge of Moser's fieldwork research tools, meaning formats, interviews and other research materials, might induce me to infer at some point that she did or did not think of certain options. This is not meant in any case as an undervaluation of her contribution.

broad systematisation of a general situation to some kind of more precise classification, modelling, and typology construction. It is important to underline that the present research did not manage to unravel this problem! What the research did is to provide some insights and pointers in the above mentioned direction. In its 1998 first stage, it did this with the mapping of typical patterns of cause-event-consequence and strategy and, in 2006, with the attempt to inquire into different typical patterns according to the differing profiles of low-income groups.

On the whole, if tackling vulnerability means to make of anti-poverty policy a preventive tool, capable of protecting assets and strengthening livelihoods, the knowledge we generate as researchers should aspire to reach a level of precision detailed enough to inform the allocation of often scarce resources. That is, it should be as useful for targeting and shaping a broader approach to poverty dynamics, because the macro-perspective on livelihoods and capabilities cannot be separated from the micro-perspective.

Social policy-oriented knowledge has to be able to uncover what can be metaphorically pictured as two half open black boxes, representing a challenge for applied poverty reduction social protection policies (at least, with a good degree of approximation, as far as Colombia is concerned): the first black box being the specific patterns of vulnerability presented by different low-income groups, and the second being the differential vulnerability of individuals within households.

Table 1.2- Moser's Asset Vulnerability Matrix³¹

Type of vulnerability	Indicator of increasing vulnerability	Indicator of decreasing vulnerability
Individual		
Labor	<ul style="list-style-type: none"> • Loss of permanent job • Decline in secure wage employment • Acquisition of physical disability 	<ul style="list-style-type: none"> • Increase in household members working, especially women • Increase in home-based enterprises • Increase in job held by individual workers
Human capital	<ul style="list-style-type: none"> • Decline in access to or quality of social or economic infrastructure • Decline in school attendance or increase in the dropout rate • Decline in health clinic attendance 	<ul style="list-style-type: none"> • Substitution of private for public services, such as water pumps, private health care, and private education
Household		
Housing	<ul style="list-style-type: none"> • Increased perception of threat of eviction • Deterioration in housing stock • High level of overcrowding 	<ul style="list-style-type: none"> • Resolution of tenure insecurity • Use of plot for intergenerational "nesting"
Household relations	<ul style="list-style-type: none"> • Erosion of household as a social unit due to change in structure, marital breakdown, or split households • Household extension that reduces the ratio of earners to non-earners – especially the addition of "hidden" female household heads • Inability of women to balance multiple responsibilities and community participation • Older daughters undertaking childcare • Elderly lacking caregiver • Increase in domestic violence 	<ul style="list-style-type: none"> • Household extension that increases the ratio of earners to nonearners • Sharing of childcare, cooking and space • Reduction in domestic violence
Community		
Social capital	<ul style="list-style-type: none"> • Increasing personal insecurity in public places • Decline in interhousehold reciprocity • Erosion of community level organization 	<ul style="list-style-type: none"> • Community-based solutions to crime • Interhousehold reciprocity • Active community-based organizations

Source: Moser, 1996: 25.

One of the most interesting debates originating from within the asset vulnerability framework can be condensed by the following question: What is the role of social capital within vulnerability analysis? At the community level, Moser uses it as an important variable, developing around it indicators of increasing and decreasing vulnerability. As much as the present research is positively inspired by her work on determinants of vulnerability such as labour, health and education, on social capital there is much disagreement both on the conceptual use Moser makes of it, and regarding the potential usefulness of the concept. The continuation of this section revisits the main theme of the debate on social capital within development studies, to open a dialogue with Moser's use of it in her asset vulnerability framework.

The development of the debate on the concept of social capital has many levels. The potential usefulness of the concept is generally accepted because social dynamics are not only explained through structures, economic factors or interactions between agents and institutional organisations in the formal arena (Harris & De Rienzo, 1997; Putzel, 1997;

³¹ The original American English spelling in this table has been left as it appears in the original.

Moser, op. cit., 1998 and Fine, 1999). Putzel (1997), in particular, has recognised the importance of focusing on informal institutions to gather a more complete and realistic picture of how democracy could consolidate them and through that social processes of participation in developing countries.

However, all these authors recognise a number of limitations to the legitimate use of the concept. Problems related to summing up individual social capital as collective social capital (Fine, 2001) are incurred by Moser. Following Putnam's (1993) original study of modern Italy, where he defined social capital as a feature of social organisation, such as networks and trusts, Moser transposes the idea that networks of civic engagement lead to more effective government. This functions on the level of inter-household interaction and strife in facing a crisis. However, as much as individual interaction cannot necessarily be summed up at a supra-individual level of collective action,³² methodologically speaking, the problem of the good nature of social capital (Pelling, 2003) is an open issue. Moser does not tackle this issue, assuming a positive "vector". Organised criminality is a case in point of the existence of other kinds of more negative vectors.

Care has to be used in dismissing the argument of social capital in its totality, that is, not to throw the baby out of the window with the bath water. In fact, the idea of inquiring about the role of informal institutions³³ within social development is a necessary step in reaching a more complete vulnerability approach. This is what Moser tries to do when she takes the concept from the heights of the discussion about democracy, down to level of social development, in her analysis of the four communities she researched.

The present research on Bogotá corroborates that there are variables related to solidarity, trust and mutual help in place, and that these intangible variables seem to broadly explain different behaviours or different degrees of households' resilience. This is to say, there clearly are networks and relations of trust that dynamically relate to the

³² This is because psychological and personal factors make individual utility a very biased unit of measurement in this case, even more than in other cases such as the utilitarian perspective on poverty measurement (Sen, 1976).

³³ The term 'institutions' is used here, after the more sociological perspective that includes the family, kinship and other interpersonal arrangements encompassed by that concept.

strengths of existing networks between immediate neighbours, or among larger groups of people living close by.

Moser stressed mutual solidarity as a key factor within households' coping strategies when facing crisis. However, to argue that solidarity reflects something that can be called 'social capital' is still debatable, for a number of relevant methodological grounds.

In particular, different households may well be in remarkably similar conditions as far as the socio-economic indicators are concerned, however they may at times present diametrically opposed outcomes in the face of similar critical life events. This is an element provoking reflection along the lines indicated by Putzel when he proposes his critique of Putnam's adhesion to a 'path dependence'³⁴ perspective.

This argument can be coupled with the more general argument put forward in this chapter, calling for a need to make vulnerability analysis a more precise tool. Therefore, it applies to social capital as much as to all the strategies found by Moser (see tables 1.3 and 1.4) as common traits of the vulnerability dynamics of all the communities' studies. These are the broad trends, but it is as still unclear for social capital as for labour or other assets and resources, when and for whom those strategies apply. Can they be considered a fact across countries, or should we rather rely on the insights arising from complex factors and assume a more post-modern, sceptical view about the possibility of finding regularities inspiring new policies?

As far as social capital is concerned, this research will not include it in the assets used to operationalise vulnerability, on the basis that the methodological critiques mentioned in this section are stronger than the "inclusion" argument. This is done in

³⁴ Path dependence is a concept Putzel employs from the neo-institutional thinking of North (1981, cited by Putzel, 1997). Putzel intends with 'path dependence', the idea of strong successful capitalist development coupled with democratic consolidation, that is, a way of using the Western model of democracy consolidation. This, looking at Putzel's critique from another angle, corresponds to making use of an ontological source to explain reality. In other words, Putnam is telling us that things are the way they are because they have been so in the past. He takes that being the reason for things to continue that way in the future. He is ultimately performing a negation of scientific thinking, because he rules out the possibility of confuting the fact the social capital explains the inexplicable. Fine (2001) has basically argued the same thing when historically deconstructing the concept and political use of social capital by the World Bank.

recognition of the general validity of Moser’s choice for the inclusion of social capital, with the caveat that it seems to be an analytical tool used to connect findings after her fieldwork had been carried out. She did not appear to set out to study social capital as such, but she found it on her way or, at least, she found elements that prompted a reflection on solidarity and trust.

Table 1.3- Household strategies for reducing spending in Moser’s research communities

	Food substitutions	Changes in eating habits	Changes in buying habits	Non-food items targeted for cuts ³⁵
All Communities ³⁶	<ul style="list-style-type: none"> • Vegetables for meat • Am for children (water from boiled rice) rather than milk • Generic brands rather than quality processed food • Water for milk in morning drinks • Eggs for meat • Low-quality substitutes 	<ul style="list-style-type: none"> • Switching to main meals consisting only of vegetables and nshima • Cutting down from 3 to 2 meals a day • Cutting down on the number of meals – first with supper, then breakfast – or eating less at midday to allow for the evening meal 	<ul style="list-style-type: none"> • Skipping afternoon snack and purchases of cooked food • Purchasing small quantities • Cutting purchases of cooked and fast food • Reducing food allowance for children in school and working adults • Using cheaper cuts of meat • Shopping in discount food stores • Freezing and processing foods • Buying less food in bulk 	<ul style="list-style-type: none"> • Medicine • Education • Transportation • Clothing • Gifts • Recreation • House repairs • Electro domestics

Source: Moser, 1996: 30.

Table 1.4 presents Moser's systematisation of households’ strategies for mobilising assets in response to changes in economic circumstances. She underlines that income trend data “cannot capture the diversity of the responses of the poor to changes in incomes, prices, and basic services”, which points to the critical issue of how to rebuild or preserve assets was still very much alive in 2006 (Moser, 2005). In particular though, Moser uncovers an issue that will be central to the elaboration of the methodology and empirical fieldwork of this thesis. She highlights the fact that the crisis has many entry points, most of which are related to non-income variables, and that these “doors” communicate with each other.

³⁵ My adaptation of this column

³⁶ My aggregation. In the original Moser presents the four communities in four separate lines.

Table 1.4- Household strategies for mobilising assets in response to changes in economic circumstances according to Moser's findings

Type of Asset	Household's response
Labor	<ul style="list-style-type: none"> • Increase the number of women working, mainly in the informal sector • Allocate a disproportionate share of women's time to meet increasing responsibilities • Allocate more time to obtaining services in response to the declining quality of the infrastructure • Increase reliance on child labor
Housing	<ul style="list-style-type: none"> • Diversify income through home-based enterprises and renting out • Adopt intergenerational plot densification strategies to accommodate children's households
Social and economic infrastructure	<ul style="list-style-type: none"> • Substitute private for public goods and services
Household relations	<ul style="list-style-type: none"> • Increase reliance on extended family support networks • Increase labor migration and remittances
Social capital	<ul style="list-style-type: none"> • Increase reliance on informal credit arrangements • Increase informal support networks among households • Increase community-level activity

Source: Moser, 1996: 31.

After Moser's work on vulnerability, development agencies rushed to appropriate this new area of insights, and to incorporate themes from renewing risk-centred agendas, emphasising issues of risk (indeed), insurance and efficiency in social spending, while complementing this operation through the improvement of their social departments and units thank to the contracting of many researchers that had been previously working in academic centres of excellence.

The work presented in this thesis takes up the debate from there, with the agenda of providing greater details about the dynamics of vulnerability on empirical grounds. The above-mentioned controversial change historically corresponds to the emergence of the livelihood approach. The next section presents a short review of other contributions to the creation of a vulnerability approach. The one that follows analyses the livelihoods approach; its features and implications for vulnerability analysis.

1.5.2 Vulnerability, Disasters and Social Capital: Another Contribution to the Creation of Vulnerability Analysis

In *Rising from the Ashes*, Woodrow and Anderson (1989) overlap with Chambers' argument and people-centred approach. They illustrate how vulnerabilities are defined as "the long term factors that affect the ability of a community to respond to events which make it susceptible to calamities." (Woodrow and Anderson, 1989: 10). As such, vulnerabilities are a function of the capacity and ability to cope and react to events.

Woodrow and Anderson's work inaugurates a tradition of studies on vulnerability, disasters and risk that is worth re-examining because it touches upon points that scholars coming from previously described traditions do not consider central.

Another important work within the disaster stream of research is that of Mark Pelling. In his research in Guyana he employs the concept of vulnerability to explain how people become the victims of natural hazards, directly inspired by the Pressure and Release (PAR) model put forward by Blaikie et al. (1994) and Wiesner et al. (2006)³⁷ that individuated four main pressures on households: access to secure housing, adequate health care/education, household economic resources and community based organization.

Many of Pelling's findings fall to a great extent within the range of the assets and coping strategies found and analysed by Moser (1998).³⁸ In particular, access to secure housing is found to be of the assets that potentially prevent high exposure to the risk of vulnerability to floods. The interesting point here is not that the security of that housing itself is a source of security, being floods the hazard in question, but the relationship Pelling found between housing security on the one hand, and a number of socio-economic factors on the other. These include, housing tenure coupled with the legal status of the settlement and the provision of public services, such as drainage and sewage. Access to safe drinking water and more stable and higher sources of income generation, also worked in Pelling's four case studies as positive factors in reducing vulnerability.³⁹

A number of papers, among which are those by Evans (1989) and Pryer presented above; and also Pryer's (2003) recent research in Dhaka,⁴⁰ present many connections with the above insights. For instance, they illustrate the role of the cost of health care in restricting livelihood opportunities for low-income groups generally, but even more so in the cases of those with very little or no assets at all.

Pelling's original contribution is his reflection on the role of social capital and participation in Guyana (Pelling, 1998). He presents findings on the adaptive potential of communities and risk in Santo Domingo (Pelling, 2002), providing an overview of the relationship between urbanisation, livelihoods and risk in his *The Vulnerability of Cities* (Pelling, 2003). In this latter work, he examines the existing grounds upon which "to integrate local actors in efforts to build resilience in the face of unknown future environmental risk." (Pelling, 2002: 73). With respect to vulnerability, his work becomes a reflection regarding the potential of social capital and community-based action as an entry

³⁷ For a recent follow up and further development of this debates after Blaikie, Cannon, Wiesner, Piers and Pelling, see Bankoff, Frerks, & Hilhorst (2004).

³⁸ As it will be illustrated later, they also overlap with those presented in chapter five and six in the present work.

³⁹ This approach, also known as a school of thought under the name of urban ecology, marks an historical shift form away from the perspectives of engineering and architecture-oriented urban studies concentrating on the built environment and its technical specifications analysis, according to the previously underestimated relationship between environmental hazard and socio-economic determinants of poverty. The urban ecology school points out that these factors intertwined with each other to produce an interlocking impact for low-income groups. The ill-health factor plays a great role in affecting the body as a productive asset, and indirectly curtails already precarious sources of income generation (Hardoy, Cairncross and Satterthwaite, 1990; Harpham and Stephens, 1991; Phillips and Verhasselt, 1994; Satterthwaite, 1993 and 1995).

⁴⁰ This chapter dedicates a whole section to the analysis of the contribution of this work.

point for policy intervention [this clearly echoes insights put forward by DFID (1999) in the livelihood sheets].

In Santo Domingo, Pelling operationalises social capital along four dimensions: informal social support; local community group membership; participation in elections; and responses to Hurricane Georges. The concluding remarks of his contribution are based on an analysis of his insights. There is a clear tension in Pelling's (2003) conclusions between the potential for adaptation within communities themselves, and the fragility of related indicators of social capital in the absence of strong supporting public action. This echoes Sen y Dréze's work on *Hunger and Public Action* (1989). repeatedly expresses this concern throughout his recent work, writing that “[f]indings suggest that in cities where vulnerability is high, even when manifest adaptations are inadequate to the scale of risk, underlying adaptive potential is likely to be strong”, but [s]structural constraints on the unleashing of adaptive potential varied across the case studies according to political regime form and historical development trajectories” (Pelling, op.cit., 2003.: 173).

A closer examination of his findings from Santo Domingo, through a selection of his most statistically significant social capital indicators, will shed a clearer light on the point above. Bridging social capital is clearly present, with 91% of interviewed members of households being ones who ‘spoke to a neighbour today’. 66% were one's who ‘cleaned the street with neighbours’. However, how strongly this social capital should be considered is not clear for two reasons. All indicators reported in the text are not matched by indications of a clear threshold by which to assess one a percentage as more acceptable than another. However, even without debating on grounds of measurement, other indicators, like those above, seem weak both in terms of the internal validity of what they pretend to measure, and as far as their relationship with an adaptive potential of communities to disasters is concerned. For Example, take as indicator ‘if your home was damaged, did you find refuge with: a neighbour (50%), family (30%) or a church (11%)’. By the same token, the fact that 46% of people are members of a church can be interpreted in a similar way. Even when accompanied by a number of similar indicators, they are too much subject to the interpretation of the researcher, and therefore potentially biased.

Thus, Pelling's work develops a very coherent analysis in terms of relating vulnerability to broader process and structures, and one that does not depend solely on grounds of the definition and measurement of vulnerability. His approach tries to broaden the original vulnerability frameworks, based on the analysis of assets under the direct command of individuals and households. These are also often directly and objectively measurable (cf Chambers, Blaikie and Moser), or that at least offer a great potential to be so. Pelling's main contribution connects to his emphasis on social and political capitals as a key field of inquiry. In this regard, Pelling's strength is best understood through the examination of a large number of case studies that indicate sensitive issues in terms of opportunities and barriers to building adaptive potential in the face of diverse urban vulnerability contexts. Among such issues, two deserve mention here:

- (i) The role of social organisations for vulnerability reduction: The roles of locally established CBOs or NGOs are considered by Pelling (2003) as playing key collective parts in vulnerability reduction. External actors should not only know of these activities, but should build partnerships with these organisations in order to gain 'soft' access to existing communities' processes and hierarchies. This is important because the results of present research in Bogotá indicate institutional weaknesses of both public and non-governmental organisations when coming to terms with the dynamic of vulnerability affecting households.
- (ii) The role of gender- consciousness: Considering that women are often the most active members in informal and formal community organisations, Pelling suggests that women's participation and leadership has to be fostered on the grounds of programmes sustainability. This is very relevant to orient the debate on vulnerability and gender because, as in Bogotá, results showed that gender is relevant when analysing who loses more when the impacts of vulnerability are considered.

In spite of these positive insights, the main indication that this research on Bogotá incorporates from Pelling's work, is the need to scrutinise the utility of social capital as an element for inclusion in any vulnerability framework. One of Pelling's conclusions is that "the contribution of local stocks of social capital to the building of resilience or human development more generally can be ambiguous (Pelling, 2002: 73).

The fragility of local social capital in many settings, including the southern localities of Bogotá, and the difficulty of using it to establish processes capable of a) fostering adaptive potential and b) being able to endure the challenge of time and post-emergency mobilisation, seems to indicate one clear thing. Any framework for vulnerability reduction that has the aim of informing concrete applied and specifically targeted actions at the micro-social level to protect individuals and household from capitals and assets depletion, will encounter heavy conceptual and methodological obstacles when going beyond individuals and household or families as the main unit of analysis.

The stream of research on vulnerability and disasters is a good entry point to the livelihoods debate because it more formally broadens the conceptual model. It indicates the need to frame vulnerability analysis within a broader understanding. This is the core point for which the sustainable livelihoods approach is relevant and was therefore proposed by Chambers and Conway (1992).

1.6. Livelihoods, Assets and Capital: Implications for Vulnerability Analysis

The livelihood debate requires a closer look at research on vulnerability for two reasons. The first has to do with the politics of social policy and development. The livelihood approach displaces Moser's assets vulnerability framework from the central stage it had come to occupy for a short spell within the poverty and policy debates of the early nineties.⁴¹ The second reason concerns the contribution that research on vulnerability

⁴¹ The story of this process has been well reconstructed by Solesbury (2003).

makes to the understanding of poverty dynamics; one of the concerns fundamental to vulnerability analysis.

The argument of this section is that, whereas the livelihood approach develops a stronger and more in-depth understanding of the relationship existing between poverty, institutions and broader social, economic and natural processes generating risk, it is less useful on methodological grounds than a focus on vulnerability analysis. This is due to its ambitious complexity, embraced within too reductive a framework, and ill-supported by methodological elaboration. To show the relevance of this argument, this section concentrates on two core questions:

- a. What are the differences between the vulnerability analysis and the livelihoods framework?
- b. What does a livelihood perspective add to vulnerability analysis?

To begin with Chambers', "livelihood refers to the means of gaining a living, including livelihood capabilities, tangible assets and intangible assets. Employment can provide a livelihood but most livelihoods of the poor are based on multiple activities and sources of food, income and security." (Chambers, 1995: 174).

As Ellis adds, livelihood is more than income because it encompasses the social institutions, gender relations and property rights required to support and to sustain a given standard of living (Ellis, 1998). It also entails a number of factors that are provided by public actions carried out by institutions in the areas of basic and social services (Dréze & Sen, 1989; Blackwood and Lynch, 1994).

Thus, in defining livelihood one encounters a good degree of overlap between perspectives on livelihood and vulnerability (see table 1.5), since both are interested in non-income dimensions. On one hand, emphasis is placed on how to build up and preserve the means for a living and, on the other hand, what people do in order to protect those means is stressed.

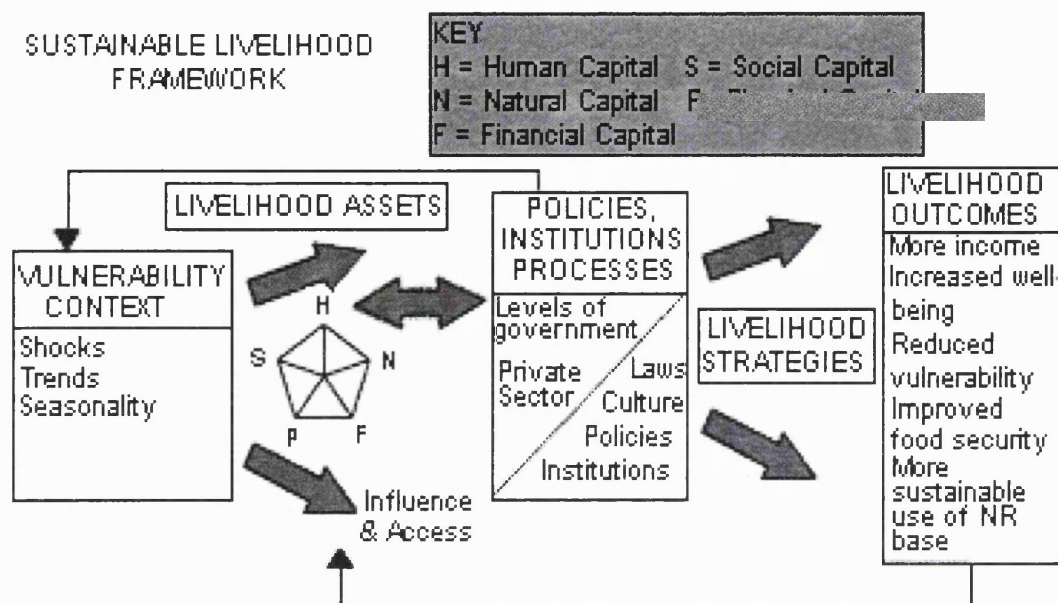
Table 1.5 - A chronological systematisation of the vulnerability - livelihoods literature

Time Period / Years	Research focus	Authors	Observations
1970s – 1980s	Participative rural studies	Chambers – Conway - Jodha - Swift	Provide the initial insights about the inadequacy of income-centres approaches to fully understand poverty
1987	Sustainable development	Bruntland Commission – United Nations	First definition of sustainable livelihood
1980s	Early vulnerability studies	Chambers, Swift Pryer, Taal -	Lay down the original boundaries of vulnerability research
1991	Sustainable Rural Livelihoods	Chambers - Conway	Initiates the reflection on the relationship between vulnerability dynamic and a wider social context
1990s	Assets Vulnerability Framework	Moser	Provides the first systematisation of vulnerability from a social development perspective. First time application of vulnerability analysis to urban poverty
1990s	Late vulnerability studies	Pryer	Provide applied methodologies for the study of vulnerability and its application to policy
1999	Livelihood approach to development	DFID	An attempt to reconceptualise poverty on the basis of the dynamic approach developed by Early Vulnerability Studies and Moser. A political challenge to vulnerability analysis
2000s	Late livelihoods studies	Rakodi – Pryer	Applied vulnerability analysis within a broader livelihood focus.

The issue of diversification, in which households are observed engaging in a increasingly complex portfolio of activities over time, in order to generate income under the umbrella of securing a livelihood, is an area of overlap, whose key contribution is discussed by Ellis (1998). Ellis additionally highlights how sectors are not compartmentalised as much as people’s lives. Development itself is only separable analytically from life.

There are two elements that emerge from the model represented in figure 1 (reproduced below) in the document: the vulnerability context and the assets pentagon.

Figure 1 The Sustainable Livelihood Framework



Source DFID (op. cit. , 1999)

The topics portrayed in the above document are the broad entry points for the whole framework. They revisit Chambers' idea of external and internal dimensions of vulnerability, indicating that no effective policy can be drafted without a sound understanding of the factors affecting "people's asset status and the options that are open to them in pursuit of beneficial livelihood outcomes" (DFID,1999: 16). According to the proposed model, the process of generating a livelihood is framed within a broader human security approach. This is not made explicit, but the importance of its results is quite evident when one focuses on the negative connotation of the term 'vulnerability context', as much as on the fact that the security aspect is one of the most analysed within the literature on livelihoods.

DFID's guidance sheets stress the importance of achieving a good understanding of how structures (levels of government and private sector) and processes (laws, policies, culture and institutions) shape the vulnerability context; how they condition people's access to assets (tangible and intangible) and claims. On one hand there can be seen here clear echoes of the late nineties debate regarding the importance of good governance in determining a favourable environment for poverty alleviation and livelihoods sustainability (Beall, 2000, Satterthwaite, 2000). On the other hand, the implication of the relationship

between locally based processes, structures and policies has not been sufficiently highlighted so far. This leads to a forth point to reflect upon regarding the role and the characteristics of the time variable, both within and for development in general, and livelihoods in this specific case.

In conclusion to this section, it can be seen that livelihood and the vulnerability approach closely overlap. Livelihood takes a closer look at the broader processes, while the vulnerability approach concentrates on the asset pentagon, or any other approximation of variables that can be measured taking the individual and the household as units of analysis. This is where its potential relevance for rescuing a livelihood perspective within social protection policies eventually lies.

The next section takes the literature review into the analysis of the Social Risk Management approach and of the trends in poverty reduction and social protection in developing countries.

1.7 The Shifting Policy Agenda of the Nineties and the Social Risk Management Paradigm

Since the early 1990s, academic debate has had to respond to new insights from mainstream thinking in economics development (World Bank, 2000) and new research findings (Narayan et al., 2000; Pryer, 2003), as promoted extensively on a worldwide scale. This, together with the parallel and legitimate coming to the fore of the rights-based approaches on poverty (Ul-Haq, 1995; Sen, 1990 and op. cit., 1999; Hausermann, 1998; Wood, 2001; CEPAL, 2002; Hunt, Osmani and Novak, 2004) has revived the political dimension of the debate on vulnerability and poverty.

This debate is also very much alive in Latin America and Colombia. It has a specific geographic relevance for the development of vulnerability analysis for social policy in the South. In fact, after WB's World WDR 2000/1, following the introduction of the Social Risk Management framework (SRM) by Holzmann and Jorgensen (1999), the debate on vulnerability has gone well beyond the technical discussion of the 1990s and the respective merits of a static versus a dynamic approach to the understanding of poverty.

As Moser (2005) has recently commented, over the last decade social policy in the South has been characterised by a progressive shift from residual and incremental policies,⁴² towards social protection programmes that confront problems of security (World Bank, 2001). Additionally, as a development of the previously mentioned interest for the relationship between poverty and rights, they also address problems relating to social rights (CEPAL, 2006). Moser highlights this historical shift⁴³ regarding her renewed discussion of how the importance of assets for achieving a wider social protection approach is directly relevant for the vulnerability debate. Therefore, it also provides an argument via which to broaden the rationale of this research, opening it to dialogue with the other two debates mentioned above: that on livelihoods, assets and capitals; and that on the social risk management approach and its implications for social protection.

The SRM approach presents a narrow focus on social protection, very much based on an income-centred view of poverty that is replicated within the more specific social protection debate. What the WDR 1990 did when tackling the poverty issue over a decade ago, is to set the boundaries of a conceptual discourse initially full of broad propositions, sharply contrasting with a narrow policy solution based almost exclusively on safety nets.

This same approach also monopolises the idea of risk, ignoring both the poverty debate of the 1990s, as Moser (2001) commented, but also the key contribution from the livelihood debate; particularly focused on the issue of diversification of income and livelihoods' sources, but here very important for the argument it proposes regarding risk. This is Ellis's (1998) argument, supported by an extensive revision of the literature that cogently illustrates how poor groups' strategies are not at all risk averse. They are demonstratively very risk-oriented when the conditions for undertaking activities that involve risk are based on other more secure and solid bases for livelihoods.

⁴² A focus that was politically imposed within the development debate by the WDR 1990 mentioned above.

⁴³ Whether this is truly a shift in Latin America, with its long-standing tradition of thinking from the perspective of a non-US "ally" such as ECLAC (Harrison, 1988), and the role played by the dependency school (Frank, 1969), is theme for an interesting debate. Also, a related matter to be considered is that the sociological literature of the continent has often highlighted how that same Latin-American tradition of socio-economic reflection is to a large extent under-cut by an urge to respond to people on a number of social issues and, more broadly, development (Briceño-León & Sonntag, 2001).

It is a really problematic issue that, like the WDR, the SRM overlook the sources of empirical evidence that provide argument illustrating the relevance of non-income dimensions of poverty and vulnerability. SRM is based on biased assumptions founded on perceptions as explicitly and publicly declared by Holzmann (2001). These perceptions are that the “poor are typically most exposed to diverse risks” and that “their high vulnerability makes them risk averse and thus unable or unwilling to engage in higher risk/higher return activities.” (Holzmann, op. cit. : 4). Among other biases, these have in common that they rule out the causes of a social phenomenon and of its contextual determinants, inasmuch as the analysis of the SRM makes the move towards the acknowledgment of a broad set of impacts towards, which is the same as saying that ‘the poor are poor’.

Those SRM baseline arguments contain a quite suspicious echo of recommendations made by elementary modernisation theory. For instance, if you want to develop you have to act as the white, western, civilised... risk prone male. However, more specifically, they reflect a shallow understanding of what the poor do for survival in real life when viewed alongside a tradition of case studies spanning two decades, which presents rather strong evidence about the complexities of poverty. As such, the power this SRM paradigm is gaining in many developing countries, such as Colombia, has to be considered as a danger for the design of balanced, sound and robust social policy. This is due to the way the process is nowadays being carried out, its foundations resting as they do on cultural and scientific biases.

Viewed in this perspective, vulnerability analysis – it is argued here – acquires greater status to make a legitimate contribution to the contemporary political debate concerning the level of operative decisions about people’s livelihoods, choices, well-being and freedoms. It is also on these grounds that the thesis finds conceptual relevance.

The following sections engage with the discussion of the four debates mentioned above, aiming to disentangle the crucial issues implied by them for the research question.

1.7.1 The Poverty Alleviation and Reduction Debates of the 1990s: Why is Vulnerability Relevant?

The question used to introduce the rationale of the research: 'why study vulnerability and not poverty?', can be unpacked by means of more specific questions. For example, 'In which way do they differ and relate to each other in terms of the object they study?' And, 'What is uncovered when talking of vulnerability that stays hidden when talking about poverty?' Among the many possible threads and entry points that could be used to approach those questions, three are particularly relevant where the research question is considered:

1. The relative vacuum of empirical and policy-oriented research on vulnerability and, more broadly, the dynamics of poverty.
2. The multi-dimensionality of poverty and the relevance of non-income dimensions to its understanding.
3. The dynamic character of poverty as a process closely linked to assets ownership, access to resources and services, and power in terms of control over the same assets and resources, but also in terms of voice and rights.

All three share the feature of taking the discussion onto a terrain where both poverty and social protection issues converge. This is why they are particularly relevant for the research question, although other entry points could also be interesting and relevant. As such, they are discussed in the following section.

The vacuum of empirical and policy-oriented research on vulnerability and, more broadly, on the dynamics of poverty, dates back from at least the beginning of the nineties. This is when the WB (1990) launched its first WDR entirely dedicated to poverty, formulating an overall poverty reduction strategy: the so-called New Poverty Agenda (NPA). That strategy, often referred to as a two-and-a-half-tiered strategy, has been highly criticised on a number of grounds.

Later known as the Washington Consensus, it indicated a strategic policy, indicating the right way towards poverty reduction, as one articulated across a) intensive

labour programmes for the poor, b) the provision of basic social services with emphasis in the critical areas of primary health and education, and c) appropriate and well-targeted safety nets to protect from extreme shocks.

Most frequently mentioned critiques have pointed to a number of particularly critical points within the Bank approach. Among them are the use of the one-dollar-a-day poverty line (Satterthwaite, 2002), the lack of contemplation of inequality and distribution (Hubbard, 2001; Mosley, 2001) as crucial issues for a debate on poverty, as well as the adoption of “soft” indicators to magnify achievements towards poverty reduction. When the collective progress of a society as a whole is the focus of reflection, indicators such as infant mortality or primary school enrolment, albeit utterly important in the space of individual lives, are deemed not to mark a difference in terms of human development or social exclusion (Maxwell, 2001).

The relevant point for the research question addressed here is that, as early as 1990, the WB was already fully aware of what were and, by and large still are, the most important points that should be considered in analysing poverty from a dynamic perspective. It was also well aware of the importance of evidence from case studies on the relevance of vulnerability analysis for this purpose.

In fact, in the second chapter of the above mentioned WDR 1990, the Bank poses the question: ‘What do we know about the poor?’ It adds that “policies targeted directly to the poor can hardly succeed unless governments know who the poor are and how they respond to policies and to their environment” (World Bank, *op.cit*, 1990: 29).

In the same chapter of the WDR, a number of important issues that clearly indicate how Moser’s work and, possibly, Chambers’ IDS bulletin on vulnerability⁴⁴ had influenced the drafting of the report, are discussed. Points such as the central role played by asset ownership in enhancing income opportunities for the poor are explicitly mentioned,

⁴⁴ Moser work is explicitly cited further on in the same report (box. 7.1., in chapter 7) and her findings on the impact of adjustment on poor households in Guayaquil. Furthermore, in 1990, it is likely the authors of the WDR had read Moser's work on ‘Confronting crisis’ (Moser, 1996). It was brought to fruition with the support of the same World Bank, as was Chambers’ editorial, and the case studies of the group of researchers from IDS, which were published in 1989 in the same IDS bulletin (Chambers, 1989).

stating⁴⁵ how deceptive a static picture of the income of the poor can be in understanding poverty.⁴⁶ By the same token, WDR 1990 does mention the ‘capacity to respond’ to the crisis as an overwhelmingly important factor. Access to income-earning opportunities in the face of poverty alleviation is acknowledged, together with the recognition that the poor are not passive in the face of change, but capable of adapting to it.

WDR presents a broader conceptualisation of poverty compared to that of the 1970s and 1980s, but it never misses the occasion to refer to overall economic growth and income as central milestones of its reflection on what is needed to solve the problem of poverty. Thus, it never stands back from the neo-liberal orthodoxy dominating the landscape of politically correct thinking within the institution at that time. Hence, this is a starting point from which to affirm that WDR 1990 marked the start of a knowledge gap between conceptual framework and empirical-based work on vulnerability.

A final remark is that the conceptual awareness by the Bank of key issues related to poverty dynamics could well have served the purpose of developing vulnerability analysis over the following decade.

This inclusion of the vulnerability debate in policy formulation did not indeed happen, as is acknowledged by a key paper by Rakodi. Published almost a decade later, it reads: “Recent analysis of poverty and well-being have broadened their focus from money-metric measures of income and consumption to livelihood strategies, in order to enhance understanding of the causes of poverty, the processes of increased well-being or impoverishment, household responses to opportunities, shocks and stresses, and the outcomes of policy intervention” (Rakodi, 1999: 315).

⁴⁵ At page 34 of the report.

⁴⁶ A paragraph that, by the way, is quite a landmark within the social policy debate on poverty in developing countries, it being where the historical phrase: “some people move in and out of poverty” can be found.

1.7.2 The Multi-Dimensionality of Poverty: Its Relevance for an Approach to Vulnerability Analysis

As Sen had already noted in his introduction to *Poverty and Famines* (Sen, 1981), the problem of constructing an overall picture of poverty goes well beyond the problem of identifying the poor.⁴⁷ The problem of the causation of poverty, beyond the always “too vague and open-ended” attempt to grasp its ‘ultimate’ causes, he argues, merits exploring because of the evidence of the multiple dimensions of deprivation.

In order to evaluate people’s achievements in terms of quality of life (Sen, 1999), instrumental liberties cannot be turned into freedoms or placed as ultimate goals. This, specifies Sen, is the case with income, whereas “inadequate income is a strong predisposing condition for impoverished life” (Sen, op. cit.: 87), but neither a necessary nor a sufficient one. In fact, re-visiting one of Sen’s examples, the incapacity to overcome the metaphorical watershed of income in the understanding of poverty poses dilemmas. For example, deciding who is better off between an income-rich but chronically-ill person and an income-poor but healthy one. The entitlement approach (Sen, 1981, op. cit.) shows that to know whether one has the freedom to avoid hunger, being informed about the means to buy good quality food is not enough. Firstly, whether the person could access the food purchased, and if they were healthy enough to consume it, would need to be ascertained.

When a researcher is analysing assets, access to and control over resources, he or she is analysing the “instrumental relation between low income and low capability that varies between different communities and even between different families and individuals”, as Sen has specified (op.cit, 1999: 87). He makes the point based on Moser (1996), and upon which there is great agreement. This is why it is necessary to consider the capability approach when trying to define the span of vulnerability analysis, and to figure out up to what point it can contribute to the debate.

Vulnerability analysis fits within Sen’s capability approach insofar as it also implies an agreement with the former about the shift from means (such as income) to ends as the focus of poverty research. This is viewed as a necessary step towards a better

⁴⁷ The discussion on the identification-aggregation is discussed in Chapter 2 of the book.

understanding of the nature and causes of poverty and deprivation. As with the capability approach, vulnerability analysis can contribute to breaking the monopoly of instrumental and technical inquiries regarding poverty (issues of measurement and poverty lines), placing the freedom people have or have not to live the lives they have reason to value centre stage for the academic community.

Within the space of freedom, there is also another link. This is the one between vulnerability and social exclusion. The latter has long since given reason for debate regards of its applicability and validity as a concept for poverty dynamics in the South (Rodgers et al., 1995). Sen (2000) has added, on social exclusion, that the relational dimension is a key factor to be considered in understanding the achievement of a person in terms of living standards within a determined social group.⁴⁸

One of the dimensions of poverty is in fact that of being socially excluded within a determined social order: firstly as a function of the endowment; secondly, of the entitlements one may or may not have; and thirdly, of the institutional setting within which those two first factors are found. This latter dimension makes of the issue of poverty also a problem of governance (Beall, 2000).

Where vulnerability analysis fits into this construction becomes an issue. The position maintained by the present work is that vulnerability analysis can show its best utility in the space of functionings; that is, where critical life events and losses may influence in improving our understanding of people's beings and doings. This point is revisited within this research when formulating the concept of critical life event (chapter 3), and testing different typologies of such events (chapter 5). Beyond depriving households of assets and resources, life events also restrict people's choices and capabilities. This is clearly evident when analysing such things as indebtedness, cuts in consumption, losses, and limitations due to violence, amongst some of the most relevant types of life events and impacts.

⁴⁸ While initially originated within his long-standing debate with Townsend on absolute and relative poverty (Sen, 1976, 1982 and 1985; Townsend, 1962 and 1985), this later reflection by Sen has also some implications for the vulnerability debate: it provides the conceptual link to support a working hypothesis on the existence of a close contact point between vulnerability and capability analysis.

Vulnerability is both a process and a condition that, through the impact generated by critical life events, deprives people of key instruments by means of which to achieve, strengthen and preserve their capabilities. A person who is vulnerable has less freedom to live the life he or she has reason to value. The empirical work realized within this research project in Bogotá offers elements through which to further investigate such a working hypothesis.

This section should finally point out that, as far as the conceptual debate is concerned, Sen's entitlements and capability approaches lay the groundwork for the elaboration of important streams of research and new conceptual frameworks. Among them, the asset vulnerability framework and the livelihood approach occupy a place of primary relevance for this research. They are the object of the following discussion.

1.7.3 The Vulnerability Debate: Assets and Coping in the Face of Shocks and Risks

As anticipated in the introductory remarks to this chapter, the vulnerability debate is primarily borne out of a core concern with how the poor cope in the face of critical situations. It is indeed not the case that Moser's assets vulnerability framework (Moser, 1998), responds to a mainly policy-oriented preoccupation.

“Analyzing vulnerability – she writes - involves identifying not only the threat, but also the “resilience” in exploiting opportunities and in resisting or recovering from the negative effects of the changing environment.” (Moser, 1998:3)

From that central concern, the debate opens up to potentially embrace a number of complementary themes inasmuch as Moser steps up to illustrate the potential embedded within the vulnerability approach to take the discussion to a higher level of abstraction. From this standpoint, it can engage in debates such as that regarding the conceptualisation of poverty, and inspire new frameworks, such as that of the livelihoods approach.

Among these debates, the relationship between vulnerability and Sen's entitlement approach (see previous section) has been overlooked. That connection becomes quite clear when reading the continuation of Moser's previous quote, in which she attaches to the concept of assets very similar meaning to that which Sen has attached to his concept of endowments:

"The means of resistance are the assets that individuals, households and communities can mobilize in the face of hardship. Thus vulnerability is closely linked to asset ownership. The more assets people have, the less vulnerable they are, and the greater the erosion of their assets, the greater their insecurity" (Moser, *op. cit.*:3).

The vulnerability framework develops as a livelihood-centred agenda for social protection. This is the reading this research favours of a process that is complex and diverse, stretching back over time to recreate lost connections.

One of the main conceptual links between vulnerability and poverty within the development debate should negotiate with a reflection on a social protection in light of the insights provided by the livelihood and capability frameworks. Vulnerability analysis is, in other words, an issue of how to bring in the above mentioned contributions within applied social policy. It is regarding how to gain a space as a legitimate methodological approach with specific methods and tools, that the vulnerability approach enters a debate with other conceptual or methodological positions and frameworks.

The next section's scope is to delineate the process of formulating a vulnerability agenda, with the aim of identifying the main contributions and gaps.

1.7.4 The World Bank Social Risk Management Approach and a Shifting Policy Agenda

As Hall and Midgley (2004) have recently highlighted, an increasingly important debate focuses on how social security can be expanded in developing countries and, particularly, how can it work to reduce poverty.

The boundaries of this debate overlap with many other development debates inasmuch as its roots can be traced to a number of debates that have articulated the social policy agenda over the last two decades.

First of all, the discussion on the social impact of structural adjustment programmes (Cornia, 1987) on worsening child health and development indicators, which contributed towards the definition of a “lost decade” for the continent, was highlighted by a number of case studies reviewing the eighties in Latin America, such as that of Raczynski (1987).

The point here is, of course, not to recall a very well researched debate, but just to point out that *Adjustment with a Human Face* is the first overwhelmingly impacting call for an urgent need for public action to preserve people’s achievements in terms of basic needs indicators, in the face of opening markets, the changing rules of the game in the economy, and changes in the balance between that and the state as a regulating agent.

Evaluations of structural adjustment and poverty published in the 1990s, such as Stewart’s (1995), have concurred with Cornia’s initial input that adjustment was associated with an increase in poverty in Latin America (and in Sub-Saharan Africa). This was at least the case where governments did not put in place policies that protected the poor from the harshest consequences of adjustment, as Ahumada (1996) indicates happened in Colombia.

Globalisation and the breaking of the geographical frontiers of risk, as first spotted by Beck (1992), causes reflection on the impact volatile markets can have on the lives of thousands of people; particularly those who are unprotected (Salama, 2003). It impacts people’s access to opportunities and social citizenship (CEPAL, 2002). The analytical point here is that this literature adds another important element to the broader debate. It highlights the fact that in the face of widening development gaps (UNDP, 1999); the issues of social security and social protection have been evolving in a problem concerning human security and governance on a global scale (Tomas, 2000).

Within this broader debate, the discussion on social protection is particularly relevant for research on vulnerability, because one of the foundational reasons for the very existence of vulnerability is the absence or limited effectiveness and span of social protection (Sen, 1981). Furthermore, last but not least, the discussion is also relevant for the debate on chronic poverty (Hulme and Shepherd, 2003; Mitlin, 2003; Du Toit, 2004; Barrientos, Hulme and Shepherd, 2005) and the implications of risk for human security. In fact, greater exposure, due to increasing market volatility and cross-country transmission of shocks and impacts, has deepened exclusions and reverted trends. This places the problem that a growing number of people are dispossessed and excluded from minimal levels of living standards, in a position of greater relevance to political agenda.

These debates underlie a discussion concerning how to tackle the issue of social protection, vulnerability and risk. As indicated in the opening of the section revisiting input by Hall and Midgley (op.cit, 2004), on the one hand there is an on-going process that can be pictured as one pole of the broad social policy and protection debates. This side or strand of the debate is in favour of changing the boundaries of social security for development, towards broader borderlines capable of taking into account a concern for livelihoods. On the other hand, there is the nowadays almost paradigmatic social risk management (SRM) approach, particularly relevant here because it was adopted early on in this century by the WB as her “bet” in the social protection arena. These contrasting positions are vying for position as the most appropriate tool to enlarge people’s opportunities to secure sustainable livelihoods.

A working hypothesis of this research is that what the WB and the SRM tell about vulnerability, risk and social protection is only scantily backed by empirical research, such as in the case of the *Voices of the Poor* (Narayan et. al, 1999; Narayan et al., 2000; Narayan & Walton, 2000). This analytical gap has to be contrasted against the tradition of empirical work initiated by Moser (op. cit., 1996). The latter can be regarded as an interrupted research trajectory in need of examination in order to fill gaps in research. These include, as recently pointed out by Barrientos (2006), the relationship between vulnerability and poverty, and also the widening of perspectives, because what is at stake goes beyond the technical debates on poverty measurement.

Finally, Moser's (2005) recent commentary about a progressive shift from residual and incremental policies towards social protection programmes that address problems of security in the South (World Bank, 2001), indicates the political relevance of the social protection debate. Particularly, its relationship with the discussion on social rights (CEPAL, 2006), which is a central debate in Latin America and in Colombia, where the new Ministry for Social Protection was set up in 2003 and policies are actually being shaped.

Thus, recent policy debates significantly contribute to broaden the perspective of this thesis from that which it had in its inception in 1997. At that time, it was more specifically related to debates on poverty conceptualisation and measurement. In spite of that still being an important concern, the social protection debate, particularly of the end of the 1990s, compels a broadening of perspective to include a reflection that takes into account where the vulnerability debate is actually located.

This space where the vulnerability debate metaphorically dwells, has nowadays a broader political and policy horizon. Although still concerned with the income vs. non-income dimensions of poverty debate, it involves a discussion about the contribution of an assets and capabilities approach to the comprehension of poverty dynamics; going beyond the boundaries of purely academic discussion.

Due to its explicitly declared aspiration to play the role of a recognised paradigm, and to the effort undertaken by the WB to position itself in developing countries⁴⁹ as the compelling framework for policy formulation, the SRM approach proposed by Holzmann and Jorgensen (1999) becomes the necessary entry point for the analysis developed in this section.

1.7.5 The Social Risk Management Approach: Analysis and Critique

While omitting a thorough analysis of non-income centred perspectives from the poverty debate of the 1990s (Hubbard, 2001; Moser, 2001), the SRM approach justifies its

⁴⁹ As it happened in Colombia with the World Bank mission of 2001.

reason for this on the basis of differences in achievement by social groups facing risk. That is, it acknowledges that, as a consequence of globalisation causing an age of greater risks, some achieve greater opportunities and gains while others are faced with greater difficulties and less opportunities. The latter groups eventually become prone to a greater vulnerability, with more frequent negative impacts. The management of risk becomes hence the rationale for proposing a new social protection approach.

However, the SRM affirms “that Social Protection (SP) consists of public intervention to assist individuals, households and communities in better managing income risk” (Holzmann & Jorgensen, *op. cit.* : 4). This is where the problem of an enduringly narrow, income-centred approach can be seen, and the differences with vulnerability analysis and a livelihood perspective in social policy are strongly evident.

Using Sen’s idea of different spaces for debating well-being, when we move away from the income-centred space to which SRM predominantly limits the span of its argument, there are other spaces. For instance, the space of freedom, as in the already discussed capability approach, wherein we can find other equally valid but more comprehensive definitions of social protection. The latter can be defined, for instance, as all interventions from public, private, voluntary organisations and social networks, to support communities, households and individuals in their efforts to prevent, manage, and overcome the levels of vulnerability, risk and deprivation that are deemed socially unacceptable within a given society. This definition recalls Barrientos’s (2006) reflection, in turn inspired by Sen’s argument that the means for achieving liberties vary from one society to another. This happens over time, however it is a collective agreement within any society that establishes what the specific functioning must be in order to fulfill a normative and universal principle; the freedom people must have to choose the life they have reason to value (Sen, 1999).

Beyond this critique regarding the philosophical underpinnings of definitions, the SRM approach has been criticised on a number of grounds. While acknowledging the differentiation between poverty as a static concept and vulnerability as a dynamic, and that

between insecurity as exposure to risk and vulnerability as the resulting possibility of a decline in well-being, Moser (2001), has articulated her critique on three grounds.

Firstly, she levies a critique that reaches the core of the methodological validity of SRM policy proposal. It concerns the difference between idiosyncratic and covariant risk. That is the bottom layer argument on the grounds of which Holzmann and Jorgensen built the whole social protection argument, especially in terms of their operative policy suggestions. On this issue Moser (2001) has highlighted that:

- a. Most covariant risks are also idiosyncratic.
- b. Both categories are not invariably internally consistent. For instance, in the case of risks related to health, environment and nature, which can obviously overlap.
- c. The typology of risk proposed focuses mostly on rural insights from Asia and Africa, paying little attention to urban poverty.

The relevance of this critique seems not to have been acknowledged by the WB in full. In fact, Moser's critique elegantly points out the extremely critical fact that the SRM is based on speculations. A certain lacking of empirical rigour was used in order to place itself in the condition of stating what the authors actually did affirm:

That "the concept (of social risk management) is universal (i.e., time-space-independent) in that it brings a series of different interventions under one framework which can be applied both to all countries and over time." (Holzmann & Jorgensen, op. cit.:5).

Two other points from Moser's seminal paper need to be mentioned. One is the lack of consistency between the typology of risk proposed and the risk management framework, as in the case of domestic violence, that – she indicates. This is included within the category of idiosyncratic risks, but has no corresponding strategy in the framework suggesting how to manage it. The second point is that the SRM does not take into account the way low-income groups manage risk.

The authors conceive of “(v)ulnerability as the risk of economic units to fall below the poverty line” (Holzmann & Jorgensen, op. cit. : 6). However, once again the focus on income or consumption models leading to safety nets-centred policy recommendations can be debated on a number of grounds (Barrientos, op. cit., 2006), as will be discussed below.

The SRM conceptual framework affirms that vulnerability can affect anyone, but is greater for the poor since any drop of income deficit can push them into destitution. The main critique to this conceptualisation is that the first proposition (viz. ‘vulnerability can affect anyone’) mixes up the concept of risk with that of vulnerability. The counter argument is that everyone is certainly exposed to risks, but the impact they generate is a function of different levels of vulnerability. These are themselves a function of people's endowments, assets, access to institutional programmes and, eventually capabilities. The SRM rules out this argument because it is blind to it insofar as it discusses issues related to social protection in the space of welfare and individual utility, and does not go beyond.

The second proposition (viz. ‘income drops push poor people into destitution’) can also be criticised. Firstly, because the proposition emerged from an income-centred approaches poverty measurement. It considers poverty as a mere fact, as remembered by Ruggeri Laderchi (2000); something out there as it was for Booth or Rowentree. At the most, for the SRM approach, poverty is an effect. However, this does not discuss the whys of poverty beyond the tautological affirmation that the poorer are the most exposed to drops in their income; undeniable from a perspective that sees poverty as lack of income! Secondly, because it is an affirmation that has by no means any rational justification in that since being exposed to risk is presented as a good thing, it should be an aspiration for the poor!

To return to Ellis’s insights on the analysis of diversification and livelihoods (op. cit., 1998), it is arguable that the poor are risk averse. However, more importantly, it is arguable that risk is a good condition in life unless the discussion of what endowments each individual has to face, and what are the implications this has in terms of equality and redistribution are entered into. As all previous studies on vulnerability indicate, for a

banker or high class person, to invest and face risk can even be fun, but for a destitute person it can be a nightmare. This underlines the importance of security.

Barrientos, Hulme and Shepherd's (2005) analytical distinction between narrow and broad visions of social protection is a useful analytical distinction that can be expanded to say that the SRM is really thinking in a space that only apparently goes beyond a concern for income and efficiency. In reality it does not extend beyond those levels.

As indicated by a number of authors such as Kanbur (2001), Hall and Midgley (op.cit., 2004), Kanji and Barrientos (2002), debates pivot on the way social protection policies are going to be given a voice within the broader debate on social policy as an instrument for the transformation of relations. These in turn entail a debate on inequality and distribution of access and resources, both throughout and within societies (Townsend & Gordon, 2002).

As Cornia (2004) recently pointed out, the rise in inequality has coincided with the rise of the Washington Consensus regarding the necessity of reducing the barriers to international transactions, liberalising international capital flows, and setting up a strong control regime on patents.

The Post-Washington Consensus, highly evidenced in the contents of WDR 2000 and the SRM approach, does not overcome this critical issue. While it acknowledges the importance of protecting health and education (what it calls human capital), it does so without entering the debate on the different access people have to these capitals and assets, It restrains the intervention to narrowly aimed safety nets, the limited span of which are in the shadow of the rhetoric promise that conditional subsidies (like in Chile or Colombia, assigning some 15 USD per month to families to keep children from low-income households in school) can be a means of overturning the impacts of poverty. On the contrary as Fine has poignantly pointed out in his detailed analysis of the shift from the Washington to the Post-Washington Consensus, with the introduction of the concept of social capital (Fine 2001), the WB has tended to use the latter as a substitutive tool for overcoming social unrest, impacts and strife. Although redistribution cannot be proposed

as a solution, one way out of the dilemma is to push people into providing the solutions themselves.

This thesis provides insights that contribute elements against an over-simplification of poverty dynamics. In its following chapter this work tries to contribute at the disentangling of the most relevant vulnerability patterns for low-income groups in Bogotá. The work argues for a re-evaluation of the importance of vulnerability analysis as a contribution to the “rescue” of critical empirical work on poverty dynamics, under a livelihood and capability inspired framework, in order to inform future social protection policies.

1.8 Poverty and Vulnerability in Colombia: Key Debates 1980-2000

This section presents the main elements that inform the debate on poverty in Colombia. In a second moment it also introduces key aspects of more recent debates on social protection in Bogotá that enter in a dialogue with the research question directly posed by this theses. From these two complementary entry points comes the title of the section that is a synthesis of two aspects it deals with. The section follows a chronological order and highlights in a succession a selected number of key question that are deemed as the most relevant for academic and policy makers along the period that spans from the end of the seventies to the first half of the present decade.

The debate on poverty in Colombia is a rich one with competing streams of thought but perhaps, compared to other Latin-American countries such as Brazil, Chile or Argentina, a relatively limited number of active scholars or at least a reduced number of publications; which is a reflection of a country that produces a high volume of reflection and applied social policy but does not formalise it into more formal published formats besides the internal literature of institutions based on reports and working documents, thus less than one would expect given the intellectual potential of Colombian scholarship. As reminded by Ramírez Robledo and Rodríguez Bravo (2002), before the 1950s poverty and social policies in Colombia were matters directly managed by the Catholic Church, a

responsibility officially established in 1830 and reiterated by the Constitution of 1886, this until the State recuperated its control over this area on the basis of important social changes occurring with modernisation and the early processes of industrialisation in the country. During the military dictatorship of the Pinilla (1953-1958) concern for the so-called popular classes brought about the creation of a special bank to foster productive projects of social interest the *Banco Popular*; but under the idea that in order to protect employment the interest of capital have to be protected first and develop astride of any interference with patriotic goals and policies (op.cit.). The 1960s saw a mainly rural country where the issue of the agrarian reform was a key concern for the State. With the contribution of the economist Lauchlin Currie, a Canadian arrived in Colombia in 1949, the government tried to launch the *Operación Colombia*, a reform plan that ended up boosting rural-urban migration and the transformation of what was considered a backward society into one the was looking with hope at the lures of the economic development based on urbanisation, technological innovation and industrialisation. In 1968 president Lleras promoted a reform of the Constitution which allowed monetary resources for health and education to be transferred from the central level to the municipalities. As also remembered by Fresneda et al. (1996) at the end of the 1970s life expectancy had risen from 48 years where it was in 1950 to 58 and infant mortality for children below one year of age had dropped from 12% to 7%.

Before the 1980s the debate on poverty is not strictly speaking a development debate but can be inferred either from the debate on development economics or from a thematic agenda substantially set by the social sciences, among which again economics plays a central role, and law and sociology important roles before others discipline such anthropology that was almost inexistent before the 1970s in Colombia. This has at least two reasons. The first one is that much reflection on social and economic issues in Latin America has felt the importance and perhaps the urge of providing a response to the great problem of justice and inequality that have ridden the continent since the Spaniards, as it has well underlined Briceño-León when talking for instance of the *sociología del pueblo*⁵⁰ in his account on the origins of Latin-American sociology (Briceño-León and Sonntag, 1998). The second is that the direct influence of international development agencies

⁵⁰ Sociology of the people.

outside the macro-economic and financial fields became more pressing around the mid-nineties; it is not a case that the first structured poverty study by the World Bank on Colombia is from 1994 (World Bank, op.cit., 1994).

During the eighties the key question regards social issues in Colombia focuses on the issue of marginality. This is a classic of poverty studies in Latin America at the time of a clash between modernization and dependency theories, that was made such by a work of Perlman (1976), a longitudinal studies on the real constraints influencing life patterns of poor people in the *favelas* in Río de Janeiro showing all the limitation of an approach arguing about the existence of a culture of poverty (Lewis, 1959). Thus the question, also clearly influence by the importance that urbanisation and industrialisation processes were having at that time with processes of intense rural – urban migration can be framed as “what is to be done with marginality”. The debates thus concentrates on social spending, again with a strong economics imprint, but also critical political issues at stake in a country where Marxist-Leninist and Maoist ideologies had inspired the two main guerrillas groups of the *Fuerzas Armadas Revolucionarias de Colombia* (FARC) and of the *Ejercito de Liberación Nacional* (ELN). The problem the scholars working on marginality faced was how to enter low-income slums ridden with violence due to recent process of migration and the struggle of communities for basic needs satisfaction and public services. A context made more critical by a right-wing conservative tradition that was inherited by the presidencies of Carlos Lleras Restrepo (1966-1970) and, after him, Misael Pastrana (1970-1974) and made even worse by the dictatorships that ravaged the continent in that decade with human rights violation, political repression and social obscurantism; of which in Colombia the presidency of Turbay (1978-1982) with left-wing and trade union exponents tortured in the dungeons of the former building of the security department, the *Departamento Administrativo de Seguridad* (DAS) in a sad remembering only overturn by the world-wide known episode of the Palace of Justice of 1986.

With the presidency by Virgilio Barco (1986-1990) for the first time the problem of poverty enters the political context from the main door and becomes the object of the *Plan de Desarrollo* of the four years period with the ‘Plan for the Eradication of Absolute Poverty’, which was part of a broader process started in 1982 with the formulation of the

National Plan for Rehabilitation. Although it did not succeed to achieve the high goal of poverty eradication, since it was among other things partly hindered by lack of funds and bad planning, it did create the *Instituto Colombiano de Bienestar Familiar (ICBF)*, which provided the first kinder gardens for low-income children in the country and a number of programmes related to the nutrition, physical development and protection of youth, from birth to the age of adulthood. As indicated by Rodríguez (1991), these innovations correspond to a turning point in the conceptualisation of poverty in Colombia because for the first time patronising policies are put aside and instead of looking at the external manifestation of poverty, State-oriented social policy begins to analyse the bottom-layer causes of it. The interaction between the National Plan for Rehabilitation and the Plan for the Eradication of Absolute Poverty meant that an economic strategy fundamentally based on growth and support for capital were integrated by other purposes among which, the increase in the capacity to control physical assets by low-income groups, the granting of social assets such as health and education, the improvement of wages and salaries, greater facilities for commerce and a clear emphasis on the strengthening of participative democracy. From 1988 basic needs poverty started to decrease from 59% in that year to 53.8% in 1991 and 51.4% in 1997 (World Bank, 2002). The key question at this historical turning point has changed from that on marginality to a new one that is concerned with “how can the poor be identified?”

The influence of the Basic Needs approach is very much felt in Colombia and all throughout the eighties the echo of international debates keeps gaining space within the national reflection on poverty. A great effort was put in trying to achieve an Integrated Method of Poverty Measurement called *Médeción Integrada de la Pobreza (MIP)* where scholars tried to combine elements of the basic needs measurement with those from the income-based poverty line. Although this literature may sound at times a sort of search for a philosophical stone, in reality there was a great political concern behind it because to demonstrate that poverty was deep and rooted meant a greater possibility for social change and justice, which is the rationale that supports the intellectual strife for a better measurement during the decade of the eighties and beginning of the nineties.

The World Bank 1990 *World Development Report* (World Bank, op.cit., 1990) and the first *Human Development Report* by UNDP (UNDP, op.cit., 1990), overlap with a shift in macroeconomic policy in Colombia and with another turning point in the debate. The above-mentioned report, as already discussed in this chapter, meant a new international consensus based on a two-pronged strategy promoting intensive growth on the one hand, with the intensive use of cheap workforce, heavy investments in infrastructure and the opening up of the economies and, on the other hand, a complement based on the improvement of the access to social services for the poor, that is, what was soon known as safety nets. In Colombia the presidency of Gaviria (1990-1994) applied almost literally the international guidelines of the powerful international partner through a catastrophic opening up of the economy the effects of which fell quite heavily on a great mass of little educated workforce progressively also eroding the privileges of the middle class with the dismantling of subsidies and social services, putting in this way a sort of final point to the aspiration for universal provision of social services in the country.

Corredor (1999) is one of the first voices to call for a revision of how poverty was being conceptualised, indicating the basic absence of conceptualisation versus a great emphasis in measurement and counting; a reasoning running on a very similar plane to that of Ruggeri Laderchi (op.cit., 2000) on an international level. Social policy in Colombia she signals out seems to face an apparently trivial but in reality fundamental obstacle consisting in the use of indicators that are used without any degree of clarity about what they should measure. Therefore, most of the time poverty is reduced to the mere lack of material goods to which is assigned some type of category in order to directly measure deprivation under that respect. Corredor suggests that the capability and rights approach offer important elements for a foundation of a conceptualisation of poverty, where she of course directly refers to Sen and his capability approach. Poverty she says is a situation by which a person is not in a condition to satisfy vital needs not only in terms of physical survival but also in terms of social inclusion, identity, political participation, a sense of belonging, and access to information. The lack of comprehension of this complexity by policies based on safety nets – she adds – is what that has prevented the country from overcoming poverty.

Thus, during the nineties the key question concerning poverty progressively becomes a question on the ultimate goal of development, culminating that process through which the national reflection on poverty cannot be distinguished anymore from what goes on in the international arena of the debate. If anything, the local debates loses out in originality but sharpens its capacity to shape the political agenda through the greater availability of data and the institutional strengthening of the statistical national department (DANE). The last decade is characterised by an important research on inequality and human development on which the studies carried out by the *Centro de Investigaciones sobre Desarrollo* (CID) of the National University and the *Misión Social* from the National Planning Department have produced the best insights that are largely seized in the next chapter analysing the social, economic and poverty trends in the country and in Bogotá.

2. Bogotá within the Country Context: Poverty⁵¹ Trends and Social Indicators

This chapter presents changes in demographic and socio-economic indicators over the period 1985-2005, emphasising official data collected in the years closest to two fieldwork periods undertaken during 1997-1998 and 2006. This data is from the 1993 and 2005 National Censuses and, for some demographic data that provides information chronologically closer to 1997, from the 1995 National Demographic Survey of PROFAMILIA.

The purpose of the chapter is to contextualise the groups studied within the general trends followed by the most relevant indicators of the Colombian capital. Under this overarching objective there are two more specific objectives: firstly, to highlight critical aspects of the economic crisis that hit the country in 1999 using demographic and socio-economic data and, secondly, to compare data from the post crisis period postdating 2000. The year 1999 is notorious in Colombia as “The year of the crisis” since it was then when the social impact of the latter was felt on the economy, employment stability, consumption patterns, prices and within the banking system. This forcing both the media and academia to concentrate analytical efforts on understanding its causes and researching a range of possible escapes. However, according to leading Colombian economists such as Garay (2002), the inception of the crisis dates back to at least 1996.

This chapter presents indicators that, besides accomplishing a descriptive function, also provide relevant insights for vulnerability analysis from a perspective that is not merely technical. It also sets out from its inception to frame data by the changes in social policy and broader political events that have taken place in the country. This is the case with those indicators related to the dynamics of employment and income generation. They are key to understanding vulnerability and can be analysed alone, looking at the fact that a number of them recorded levels prior to the crisis that have not yet been re-established. They can also be analysed as three follow up studies realised by the *Centro de*

⁵¹ According to the argumentation in the conceptual chapter, this work takes a clear stand on the concept of poverty as multi-dimensional. However, in this chapter, where the focus is on contextual data analysis, the use of the word ‘poverty’ has to be conceptually understood according to the definition given by those Colombian institutions, research centres or agencies that have measured it. Poverty is usually conceived as income poverty, the most noteworthy exceptions being the basic needs and the quality of life approaches that have had important operational applications in the country from the 1980s.

Investigación sobre Desarrollo (CID)⁵² between 2003 and 2005 strongly indicate, within the process of transformation towards greater insecurity and informality in the economy; a process also previously indicated by Gugler (1996) as a constant in many urbanising developing countries.

2.1. Demographic Structure and Trends

According to the last Census, carried out in 2005, Bogotá's population reached 6.840.116 inhabitants that year (DANE, 2005⁵³). A peculiar trait of the city is that, whether just physically observing the city and its social life or analysing data on the socio-economic and spatial distribution of wealth, infrastructure and services, its inequality is striking. Social inequalities are spatially concentrated and the stark contrasts between deprivation and great concentrations of wealth are visible to any person who takes a south to north trip on one of the new *Transmilenio* transport system's bright-red Volvo buses.

If such a traveller paid attention to variables such as the quality of housing, the changing luxury in the level of merchandise exposed in the shopping malls, the type of clothes people wear and the cars they drive, he would certainly see at least three different cities. From south to north this person would witness a radical change in the landscape, beginning with the "city of the poor", and continuing in the centre with the "city of commerce, government buildings and pollution", where high skyscrapers are found beside the small marginal settlements that climb the steep slopes of the mountains, called the *cerros*. In this central city that seems to confuse people with architecture, our traveller would observe the colonial and republican architecture of *La Candelaria* in contrast to the renewed buildings of the many governmental and political decision-making agencies. In addition to this, cultural centres, such as the *García Márquez*, theatres, cinemas and hundreds of bars and cafés animate the city's cultural life, all jostling for position in colourful juxtaposition to thousands of street vendors and taxis, business people, emerald traders, university students and white-collar workers. Heading further north, our traveller

⁵² CID is a leading national centre of research on economic development at the National University of Colombia in Bogotá (UNAL).

⁵³ <http://www.dane.gov.co/censo/> , specific indicators on Bogotá are available for download at http://www.dane.gov.co/index.php?option=com_content&task=category§ionid=16&id=496&Itemid=996 (last consulted 13th April 2009)

would find himself in the “city of privilege”, with its exclusive housing invariably protected by private security guards. He would pass by well-paved tree-lined avenues; luxury commercial centres built after the North-American model, and would see a disproportionate number of expensive 4-wheel-drive Toyotas and Chevrolets. He would note repetitively the ubiquitous private guards protecting not only buildings, but all other symbols of wealth such as banks, sport circles, parks, restaurants and wealthy persons.

Over the last three decades, demographic trends depict a city in a tough process of constantly decreasing growth (table 2.1). Annual growth rates for one hundred inhabitants plummeted from 3.21 in 1985-1990 to 1.65 in 2000-2005⁵⁴. Women represent 51.9% of the total population; while men 48.1%. Although women are historically more numerous than men, a comparison of the 1995 data from PROFAMILIA with data from the 2005 National Census shows that their proportion has decreased in the last decade, at the start of which they accounted for 52.3% of the total population. The dependency ratio per thousand has also decreased from 664.13 to 521.16, as has the child to woman ratio, which has also gone down from 0.379 in 1995 to 0.297 in 2005.

Table 2.1 - Demographic Indicators Bogotá D.C. 1985 – 2005

Year	Population			Ratios of interest			Median age
	Total	Men	Women	Dependency (per thousand)	Child – woman (per woman)	Men to Women Ratio (for 100 women)	
1985	4.225.649	1.999.538	2.226.111	664.13	0.500	89.82	21,91
1990	4.947.890	2.351.993	2.595.897	632.50	0.417	90.60	23,18
1995	5.699.655	2.717.697	2.981.958	577.76	0.379	91.14	24,23
2000	6.302.881	3.016.761	3.286.120	521.16	0.332	91.80	25,62
2005	6.840.116	3.285.708	3.554.408	483.94	0.297	92.44	27,55

⁵⁴ The data refers to geometric change. The exponential rate was 3.16 for the period 1985-1990. It also decreased to 1.64 for the period 2000-2005.

Bogotá's demographic trends are historically more intertwined with those of the country as a whole than those recorded in other Colombian cities. When looking at the history of the growth of Bogotá, rural-urban migration is an outstanding factor that has constantly played an important role; Bogotá has been the destination of both economic (DANE, 2000 and 2003; Galvis, 2002) and internally displaced people, due to the armed conflict (Flórez, 2003). However, over the last three decades natural city growth has come to play an increasingly leading role. Nowadays, it is the principal factor explaining the ongoing powerful expansion of the city, both in terms of its density and in terms of the occupation of *sabana de*⁵⁵ Bogotá, its fertile area (Gouëset, 1998).

Bogotá's processes of social change and related dynamics cannot be fully understood without such reference to a broader picture, due to the centrality of the city in terms of economic, social and cultural development. Colombia is an uneven country in many respects, geographically, in its ethnic composition, in its distribution of income and resources; the concentration of power. This constitution, which verges on displaying a structural asymmetry, both between places and within people, Bogotá both attracts and is at the cutting edge of the changes and transitions that have occurred over the last fifty years.

The improvement in mortality trends is the first noteworthy aspect to consider within a process of demographic and epidemiologic transition. Although, as has been the case in other developing countries and cities (Rossi-Espagnet, 1984; Harpham & Stephens, 1991), it is uneven and asymmetric both at the national and the city level, it presents on average clear trends towards a decrease in mortality followed by significant improvements in morbidity. Eventually, it indicates a decrease in fertility rates, as it can historically be seen to have done in other developing countries where demography and social variables form foundation for the comprehension of changes in epidemiological patterns and the different pace in the health transition of various social groups (Feachem et al., 1992). National life expectancy was 50 years in Colombia in the 1950s, whereas the 2005 census set it at 72.3 (DANE 2007). There still is a pronounced difference between genders though, with female life expectancy improving, from 73.9 at the time of the above-mentioned census of 1993 to 77.6 in 2005, while male life expectancy increased from 66.3 to 69.8 over the same period. The gender gap in mortality had been reduced at the end of

⁵⁵ Plain in Spanish.

the 1980s, when male mortality was 4.5 times that of females. However, male mortality rose again to 6.3 in 1993 (Rincón Mesa, 2003: 32). Analysts coincide in indicating the retrenchment of conflict and accidents as the main causes. Similar patterns are also found in Bogotá, where the difference between male and female mortality has not improved much over the last 10 years. The high mortality rate in the age group 22-45 is an important factor helping framing one result of the research: the high number of households that present life events related to violent episodes, such as assaults, often fatal (Rivera, 2003). The relevance of violence in the analysis of the poverty context lays in the fact that it heavily affects productivity and income-generation capacity.

Infant mortality is the other broad factor that contributes to the demographic transition in Colombia, with Bogotá well-ahead of national averages. From almost 130 deaths per 1000 live births at the beginning of the 1950s, Colombia reached the level of 35.0 in 1993, 21.0 in 2000 and 19.0 in 2005.⁵⁶ A comparison of national data with those on infant mortality in Bogotá shows the difference between the national average and Bogotá, since the capital had already decreased to 30 deaths per 1000 live births in 1993, and achieved a rate of 19 per 1000 in the period 1995-2005. Maternity programmes, immunization, vectors control and an improvement in household hygiene are the main factors explaining the change (PNDH, 2003).

Fertility is the third important factor contributing to the demographic transition. Fertility rates started to slow down in Colombia towards the end of the 1960s. They decreased to 3 from an average of 7 children per women towards the end of the century, and reached 2.4 in 2005 (Rincón Mesa, op.cit. 2003; PROFAMILIA, 2005). Birth rates have showed a real decrease over the past twenty years: from 25.66 per 1000 between 1985-1990, to 20.96 during 1995-2000, and down to 18.30 in 2000-2005⁵⁷; a trend which is projected to increase over the next five years (DANE, op.cit. 2005).

Finally, besides the variables that determine the demographic transition, migration is another important factor exerting an influence on population dynamics and, in turn, interacting with demographic trends. In Bogotá, as could be expected, migration

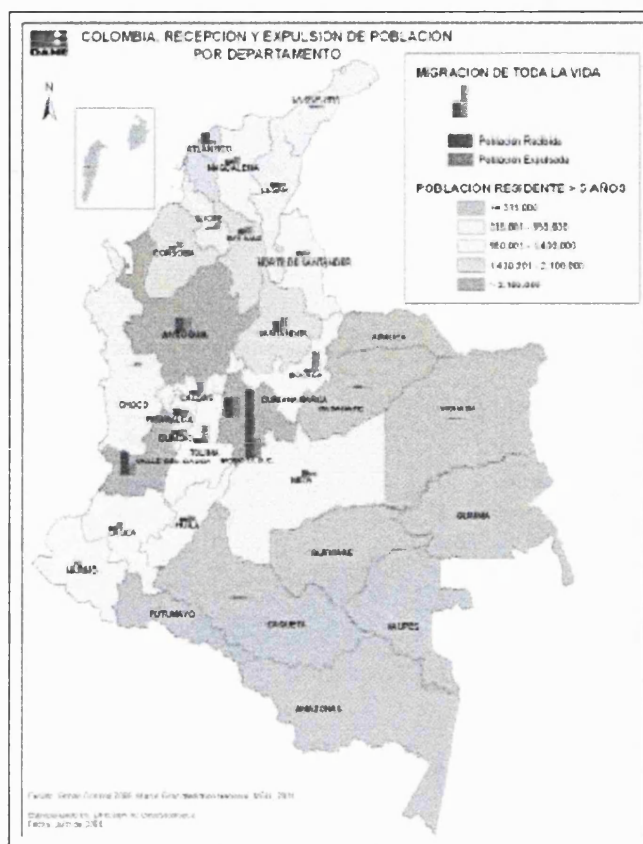
⁵⁶ Data is also available from the PROFAMILIA website at <http://www.profamilia.org.co/encuestas/02consulta/01capitulos.htm> (last visited 13th April 2009)

⁵⁷ In 2001 the Commerce Chamber of Bogotá collected data from the Andean Community showing that Bogotá was roughly 6 percent points below other continental capitals, with Caracas (Venezuela) and Lima (Peru) with 24.9 birth per thousand, Quito (Ecuador) 25.6 and La Paz (Bolivia) 33.2 (CCB, 2001).

historically plays an important role. At the national level, according to the 1993 Census, some 7 million people were born in a different region from that of their residence, meaning a 21.7% overall migration within the total population. Bogotá has historically received people on the basis of four main migratory streams, geographically originating in the regions of Cundinamarca, Boyacá, Tolima and Santander. An impressive 45% of its total population were non-native residents, according to that same cut year of 1993 (DANE, op.cit. 2003). According to the 2005 Census (DANE, 2005), Bogotá is the Colombian city that receives the higher number of immigrants: 24.2% from Cundinamarca, 20.7% from Boyacá, 12.8% from Tolima and 8.6% from Santander; thus, maintaining the tendency from past censuses of a city receiving migrants mostly from regions better connected to the capital. In terms of the speed of this impressive growth, which is relevant for the strain it places on institutional capacity to provide public services, food security, environmental services and completion for property and use of land, the city presents a growth rate of 4.7 in between the two censuses of 1985 and 1993, whereas between 1993 and 2005 the same rate went down to 2.7.

Map 1 reflects the trends described above. Complementing the information provided by the map with that from the Census public data base (DANE, op.cit.), the broad picture is that of a country with an intense migration pattern within which, over the last few years, 24% of the population changed its residence (756.000 people, of whom 40% were below 20 years of age). Among this group, 6.3% changed residence for security reasons, the vast majority being economic migrants. This is in spite of the fact that the absolute and cumulative numbers of internally-displaced people is huge. Regardless of the differentiation between economic migrants and internally-displaced people, the above data contributes to illustrating the type of strain and competition for income generation opportunities that low-income groups have been facing for decades. The process of economic restructuring has exacerbated loss of security and labour quality. These analytical connections will be discussed and a more detailed description presented in the following sections of this chapter.

MAP 1 – COLOMBIA’S INTERNAL MIGRATION BY DEPARTMENT – CENSUS OF 2005



Source: DANE, 2005.

2.2. Urbanization Trends

Complementing this thesis's previous emphasis on population variables that focused on Bogotá as a whole, this section further expands analysis of the demographic changes that have taken place over the last decades.

With 75% of its population residing in cities and smaller urban settlements,⁵⁸ Colombia has been a prevalently urbanized country since 2005.⁵⁹ Research on urban social dynamics tends to concentrate on urban violence, the relationship between poverty and

⁵⁸ The DANE definition of Urban Population in Colombia identifies the 'Urban Cask', called *cabecera*, for each single municipality. Its geographic boundaries are ultimately defined by the local administration, the remnant territory located within the administrative boundaries of the municipality, but outside the *cabecera*, being defined as 'The Rest'.

⁵⁹ Interestingly, a complex set of factors determinate a sort of diffuse auto-perception of Colombia by Colombians as a rural country. These find possible explanation on cultural and historical grounds. On the one hand, there are the recent and not too recent migration flows towards primary and secondary cities and, on the other, the fact that both the armed conflict and the economic history, tradition based on agriculture, cattle and mining are all linked both to a rural reality and imagination.

violence (Boltvinik, 1991), the process of migration (Rivera, *op.cit.* 2003), the provision of public services and transportation (Ardila, 2006), access to housing and land (Jaramillo, 1982 and Lulle, 2000) or decentralisation and urban institutions (García and Zamudio, 1997 and Prada, 2001). In spite of the numerous studies on health (Peñalosa Ramos, 2004; SSB, 1997a, 1997b and 2002), research directly focused on the issues of urban social development, livelihood and urban poverty (Gilbert and Gugler, 1992) dynamics has so far been rather neglected.

As Gouëset (*op.cit.*, 1998) pointed out in his vibrant and lively synthesis of debate on the urbanization of Colombia over the last 30 years,⁶⁰ the debate on the normality or anomaly of the Colombia-Bogotá case has occupied centre stage for almost two decades. In the 1970s, for instance, Gilbert (1974) was pointing out the peculiarity of the Colombian case regarding the urbanisation process of its main city, Bogotá. It was argued that Bogotá did not occupy a clearly dominant position amongst the other cities. In this respect Colombia did not follow the pattern found in most Latin American countries, where up to 50% of the whole urban population tended to be concentrated in the capital, contributing to significant differences between it and secondary cities.

Gouëset recalls how, in the 1970s, the urbanisation process of Colombia was considered normal by urban studies of the time. However, nowadays it tends to be considered as rather anomalous. The same scholar provides a synthesis of the most important statistical elements:

1. The process of urban concentration took place in Colombia at roughly the same time as in other Latin American countries, starting in the 1930s.
2. Colombia's primary urban system is comprised of four cities, Bogotá, Medellín, Cali and Barranquilla, within which 29% of the whole population are concentrated. This is approximately the same percentage of the population that is found concentrated in the capital city of other Latin American countries (Gouëset, *op.cit.*).
3. Columbia's largest city, Bogotá, did not contain a large concentration of the population for a long time: 14% according to the 1985 census, 16.6% in 1993 and 18.7% in

⁶⁰ Data on this page are from the cited work of Gouëset.

2005.⁶¹ Bogotá's growth followed a slower pace than that of Medellín, Cali and Barranquilla, but its growth burgeoned at a much faster pace than that of this other Colombian cities during the years 1905 to 1951. Recent trends show that the primacy of Bogotá is actually increasing and the gap between Bogotá and the other three main cities is widening, albeit relatively slowly.

The relevance of this debate for a research on the dynamics of poverty is better understood within the more recent approach to the city, which views it as a knot within an urban-regional network. In fact, when compared to the urban-rural debate of the 1970s, which mostly focused on geographical changes in terms of population movements and structural changes related to the process of industrialisation, the debate of the last two decades has been progressively informed by more complex notions, such as those arising from the opposition between the concepts of space and territory, the emergence of new geographies and the analysis of their social construction (Fals Borda, 2000). At the same time, the relevance of an integrated approach to the relationship between cities and their regions has been highlighted when thinking of them in terms of the type of human security that people can find in them (UNCRD, 2005). Additionally, when rediscovering the relevance of local regional economies in the production of well-being within processes that seldom escape confrontation with the issue of the asymmetries produced by globalisation in terms of access to resources and productive opportunities (Krugman, 1998; Storper, 2000 and Scott and Storper, 2003).

As illustrated in table 2.2, reporting data from a recent comparative study (Cuervo⁶² et al. 2002: 336, Dane, op cit., 2005), and the importance of the metropolitan area of Bogotá is constantly increasing, even if the pace has slowed down over the last two decades. This is relevant in terms of the pressure this places on scarce resources and the competition for them. Such pressure takes place in a socio-economic context that is not only monetized, as Wratten (1985) underlined in her seminal paper, but also strongly marked by the impact of neo-liberal policies that have come to the fore over the last ten to fifteen years (Garay, 2002). This process of increasing primacy within a growingly

⁶¹ This 1993 data is not reported by Gouëset, but directly taken from the statistics of the National Statistic Department (DANE). All data from the 1993 census already processed by interested parties is available to the general public for purchase on CD-Rom.

⁶² The data from Cuervo 2002 have been up-dated with more recent ones from the census of 2005.

competitive environment, is relevant to contextualise issues of institutional and policy analysis that will be dealt with in chapter 5, which presents the implication of the results for policy.

Table 2.2 - Urbanisation trends in Colombia and Bogotá 1973 – 2005

	1973	1985	1993	2005
Colombia	24.862	30.062	37.422	42.090
Urban population (millions)	13.652	19.644	25.489	31.556
Urban population (%)	59.7%	65.3%	69.1%	75,0%
Urban Network: primacy				
Bogotá's rank	1	1	1	1
Bogotá's Capital District population (millions)	4.861	4.236	5.484	6.778
Total Population of the Metropolitan Area of Bogotá *	3.1.21	4.685	6.218	7.887
Metropolitan Area of Bogotá / Total Population of Colombia	13.7%	15.6%	16.6%	18,7%
Metropolitan Area of Bogotá / Total Urban Population of Colombia	24.9%	23.9%	24.1%	25,0%
Metropolitan Area of Bogotá / Total Population of N.2 raking Metropolitan Area (Medellín)	1.93	2,21	2,48	3,60

* The Metropolitan Area includes the Capital District, conformed by 19 urban localities and 1 (Sumapaz) rural locality, plus 17 municipalities located on the outskirts of the city.

Source: DANE 2005– Population census statistics (adjusted)

The magnitude of changes in the human and urban geography of Bogotá and its metropolitan area are only proportional to the number of associated and problematic social dynamics that place the city's institutional capacity for providing adequate and timely answers under particular strain. Central amongst these issues is the problem of how to create and guarantee conditions supporting the achievement of a sustainable livelihood for the population. The recently published Human Development Report (HDR) on Bogotá, titled "Bogotá: A Bet for Colombia"⁶³ (PNUD, 2008) points out the challenges that a city transforming into a metropolis faces in aiming to achieve higher and more widespread goals in human development. The report also indicates that the priorities of the elected mayor over the last ten years have contributed to the recent history of institutional and tributary reforms, civic education and law enforcement, and most recently, great

⁶³ Original title in Spanish: *Bogotá, Una apuesta para Colombia*.

developments in infrastructure, public space and transportation. Until the last two administrations, social development was marginalised as a secondary issue within planning priorities. Even under the administration of Luis Eduardo Garzón, which was celebrated for its focus on food security and achievements in poverty reduction and human development (PNUD, op.cit.), Bogotá remains an incredible laboratory for those researching welfare regimes and the systematic arrangements that can foster livelihood security and people's well-being (Gough and Wood, 2004). As underlined by Dávila in a recent study based on interviews with the last four mayors of Bogotá, "(t)hey see themselves as outsiders struggling against local political machineries. With one exception, they do not seem to see the poor as their natural interlocutors on whom they can rely for unswerving political support and to whom most of their energy should be directed" (Dávila, 2009: 1).

At the political and policy-making levels, the encounter between the two main research perspectives in urban studies in Colombia, that of the urban architecture with its focus on space and urban processes, and that of socio-economic / policy-oriented analysis with its interest on service provision and institutional evaluation, can be metaphorically described as a union still not fully celebrated by marriage. This poses a seemingly underrated governance problem for Bogotá, in the present as much as for the next decade. Bogotá has been celebrated as an example of good governance, to the point that committees from other Latin American cities have been visiting the city in recent years, to observe and learn from Bogotá's most evident changes. Examples of these changes include the tremendous decrease in the rate of homicides (down from 80 per 100,000 in 1994 to 18 in 2006)⁶⁴ the process of gang disarmament, the construction of a modern transport system (*Transmilenio*) and important intervention on the rehabilitation of urban space.

Powerful political pressure from the bottom up lead to the appointment for the first time in history of a left wing mayor. He was literally nominated by a city where more than 50% of its population are below the poverty line, their opportunities severely limited by socially exclusion according to the more specific understanding of this in the relational and political sense, as recently given by Sen (op. cit., 2000).

⁶⁴ Data from the National Police website <http://oasportal.policia.gov.co/portal/page/portal/HOME/Home> (last visited 25th October 2008)

As Davila (2004) has recently pointed out, the achievements of Bogotá over the last decade have contributed to a long-standing history of progressive transformation. His recent work precisely disentangles the many historical, political and institutional paths that have led to the transformation of Bogotá. There are two underpinning factors that deserve more attention. The first is that contemporary evaluation of social change in development, or to use the old-fashioned word progress, on the basis of broad indicators such as water and electricity provision, maternal mortality, infant mortality rates or enrolment in education, is misleading. These indicators are descriptive and uninformative of the profoundly complex situation people have to face in order to secure a livelihood. The second is the fact that official statistics are often unreliable. As Satterthwaite (2001) has rightly pointed out, the international literature that provides the main source of feedback for these official data on water, sanitation, electricity and education, coverage is almost always estimated at roughly 100%. However, local studies using local data bases, and thus directly calculating the values of the indicators of coverage, show that real access to sanitation is in reality still available to no more than 85% of the population, or that real access to primary education (PNDH, 2005) is below 80%.

2.3. The Economic Role Of Bogotá⁶⁵ Within The Colombian Economy

Using data that includes 2006, this section presents an analysis of the principal economic and political trends, stressing those elements that allow for a comparison between Bogotá and broader trends at the national level. These include the worsening of the GDP per capita, and of poverty and inequality in terms of income distribution and access to opportunities. The period 1999-2000 was marked by a harsh economic crisis characterised by a pro-cyclical trend in public spending having important consequences for the formation of human capital (Gaviria, 2000). Against this national background Bogotá presents a contrasting picture.

Bogotá is not only the capital city of Colombia, but also its economic capital. It plays the role of main urban market in the country, as demonstrated by the fact that Bogotá produces 22% of the whole national GDP. In 2006, Bogotá's GDP reached the level of

⁶⁵ Data without a direct reference is from the web sites of the Chamber of Commerce of Bogotá (<http://camara.ccb.org.co/default1.asp>) and of the National Planning Department (www.dnp.gov.co).

5.20% of the national total.⁶⁶ Up to 38% of newly created jobs were concentrated in Bogotá in the third trimester of 2006, and it has a 30% share of the whole manufacturing national aggregated value. According to Cuervo (2002), its economic activity is mostly oriented towards the internal market, whereas its participation in international trade is quite low, that is, less than 3% of the total national volume. Being mostly a manufacturing economy, Bogotá has difficulties in gaining more room against other foreign competitors in terms of the volume of exports within a national economy that is mostly extractive (oil, iron, coal, emeralds and gold) and rural (coffee, banana and flowers). However, Bogotá's financial role is of absolute primacy in the country, since it is there that the majority of financial services are concentrated and the highest number of transactions enacted.

However, according to more a more recent elaboration by the Chamber of Commerce of Bogotá, in 2006 the city exported 30.8% of the national total,⁶⁷ presenting a similar trend over the last decade,⁶⁸ and being a major exporter of consumer goods. Additionally, the city's imports, which particularly concentrate on capital goods, account for 52.8% of the total volume of national imports, according to the same data source.

Bogotá's leading role within the Colombian economy, going beyond contrasting positions within local literature, this leading has to be framed, on the one hand, within the context of the economic crisis of the late nineties and, on the other, within the tension existing between the Capital and the Nation in terms of fiscal contribution and real possibility to invest in social spending. Recently, the *Contraloría General de la República*⁶⁹ (CGR) pointed out that Colombia lost the traditional economic stability from which it benefited during the eighties, when the country presented an average annual growth rate of 3.4%, in contrast to the negative growth of the economies of other countries in the region. In turn, during the nineties, GDP fell from 5.8% in 1995 to 0.6% in 1998,

⁶⁶ Data refers to the measurement performed by the Chamber of commerce of Bogotá during the third trimester of the year 2006: http://camara.ccb.org.co/documentos/2006_12_15_12_1_35_Tablero%20de%20Indicadores%20IV%202006.mht (last visited 24th October 2008)

⁶⁷ Including coffee exports from 2006 onwards in the data set.

⁶⁸ http://camara.ccb.org.co/documentos/2006_12_15_12_1_35_Tablero%20de%20Indicadores%20IV%202006.mht

⁶⁹ The *Contraloría General de la República* is the maximum fiscal authority in Colombia, the mission of which is to see that the public resources are well employed, as well as to contribute to the modernization of the State. This institution has published very important studies on a range of socio-economic problems in the country over the last fifteen years

becoming negative in 1999, at 4.05%. Over the period from 2000 to 2002, the country again registered a positive trend in its growth rates (4.95% - 1.57% and 4.05%), which was barely sufficient to recover 1.9% in terms of the gross product of 1998, showing a net loss in the capacity of the country to generate wealth over just a few years. The report textually adds that “meantime, the country witnessed the most acute loss of jobs of its entire modern history, with unemployment rates up to 20% in major cities and a consequent social ill-being due income losses and a decrease of the quality of life for vast sectors of the population.” (CGR, 2004: 37).

Against this background, and considering the complexity of the city, the second part of this chapter makes a strategic selection regarding the aspects to be analysed in more depth in order to characterise Bogotá’s poverty dynamics and low-income groups. In presenting this data, the analysis concentrates on the ‘vulnerability context’, an aspect considered relevant both by the literature on livelihoods (Amis, 2002; DFID, 1999) and by that on vulnerability, which in the Latin-American debate identifies the ‘vulnerability context’ with the ‘structure of opportunities’ (Filgueira, 2001). Income, health, education, housing and public services overlap with what the literature reviewed in chapter 1 has indicated to be the constitutive dimensions within the socio-economic context, and the indicators at the level of the unit of analysis (household here, but possibly the individual as well) of any vulnerability profile. These are the main assets that households have used according to the empirical evidence collected so far in vulnerability studies.

The main limitation of this selection of indicators is that it doesn't take account of the dimensions of individual and collective psychology, as well as those aspects of collective action that, looking at them in terms of a final product, have been called social capital. Whereas the latter has already been discussed in chapter 1, it is important to reiterate that both individual and collective psychologies are considered important. The decision to exclude them from this study is grounded in the limitation related to the academic formation of the author as a sociologist, and is also due to the complexity of operationalising them when the household is the chosen unit of analysis. Chapter 3, dedicated to the methodology of the research, analyses the above choices and their implications in more depth.

The first two sections of this part of the chapter present a conceptual mapping of poverty according to existing indicators, that is, the unmet basic needs index (2.4.) and the monetary poverty line (2.5.). Alongside the presentation of these data, the text makes at times explicit reference to the conceptual approaches to poverty conceptualization and measurement existing in Colombia, and to the debates that their implementation has given rise to in recent years. This also reflects and interacts with some of the issues surrounding the literature review and conceptual debates that were discussed in chapter 1. The final part of the chapter (sections 2.6. to 2.9.) presents an analysis of the health, education, housing and public services indicators and their trends over the last decade, in order to illustrate the status quo previous to the fieldwork period (1997-8). The evolution of these indicators, as demonstrated by very recent and up-to-date data from the period 2002-2006 are also included. The issue of inequality is considered as a constitutive inner dimension of poverty and, as in the first part of the chapter, the text seeks to constantly highlight it as a cross-cutting issue.

2.4. Poverty Trends In Bogotá According To The Unmet Basic Needs Index

The UBN index performs some tasks quite adequately, although it was replaced at the beginning of the 1990s by better methodologies for data collection, which provided the opportunity to estimate poverty lines through consumption. Firstly, it positively overlaps with other indicators to help define those geographical areas where the incidence of income poverty is greater and where other indicators of human development also present lower levels. Secondly, it is still useful insofar as it directly reflects the incidence of important dimensions of human deprivation through a number of indicators that can be directly linked to human needs and rights. Examples of these include the education of household heads and of children below 7 years of age as a proxy for education, sanitary conditions as a proxy for health, and overcrowding as a proxy for the capacity to generate an income to grant access to decent housing, etc. (DANE, 1998).

The data from table 2.3 present the distribution of UBN poverty in Bogotá from 1985 to 2003, showing two main trends. The first one concerns socio-spatial inequality: UBN poverty is much higher in the south⁷⁰ (the field work area) of the city than in the other areas.

In Colombia the methodology to calculate the UBN index is based on five indicators meant to provide an estimate of the level of poverty using households as the unit of analysis by evaluating different dimensions of deprivation:

1. *Households with inadequate housing quality*: In urban contexts, these are those with a non-paved floor or with walls made of precarious materials.
2. *Households without basic services*: For urban households the lack of water or sanitation is considered an unmet basic need.
3. *Households with critical overcrowding*: households where more than three people sleep in the same room, living and dining rooms as well as bedrooms being inhabited.
4. *Households with high economic dependency*: This indicator was chosen in Colombia because it approximates levels of income. Where more than three people depend for income on the employment of one member of the household that is considered as an unmet basic need.
5. *Households with children of a school age who do not attend a centre of formal education*: An unmet basic need is considered to be present if a child between 7 and 12 years of age, who is a relative of the head of household, is not attending school.

⁷⁰ The locality of San Cristóbal has been left in the centre since the table adopts a sub-division first used by the Health Department that is quite useful in terms of the spatial understanding of differences and polarizations. However, geographically speaking (see map 1 and the area in light red on the right hand side of the bottom of map 2), San Cristóbal belongs much more to the south than to the centre of the city. It definitely is a locality that, when social indicators and the quality of housing and infrastructure are considered, presents strong and clear homogeneities with other localities of the south.

Zone	Locality	UBN poverty			
		1985	1997	2001	2003
North	Usaquén	19.1	11,8	11,37	3,9
	Chapinero	8.5	6,3	5,94	1,6
	Engativá	16.1	8,8	8,11	3,8
	Suba	24.5	11,1	10,13	2,8
	Barrios Unidos	14.5	7,4	6,88	3,5
	Teusaquillo	4.5	4,2	4,16	0,2
	Subtotal**		9,54		
South-west	Bosa	33.4	19,3	17,14	9,7
	Kennedy	21.2	13,3	12,64	9,1
	Fontibón	20.4	12,5	11,73	6,8
	Puente Aranda	14.0	7,7		3,7
	Subtotal		13,55		
Centre	Santa Fe	34.6	18,4	16,33	12,8
	San Cristóbal	40.1	20	17,79	15,8
	Los Mártires	13.9	8,8	8,07	5,1
	Antonio Nariño	14.2	8,22	7,63	3
	La Candelaria	26.2	13,3	12	9
	Subtotal		16,68		
South	Usme	39.7	26,9	23,83	14,8
	Tunjuelito	28.1	14,2	12,78	9,3
	Rafael Uribe	25.5	16	14,26	8,3
	Ciudad Bolívar	56.2	29,2	26,07	16,2
	Sumapaz	Na	Na	Na	Na
	Subtotal		22,83		
	Bogotá	23.5	14,52		7,8

Sources: 1985 data are from the 1985 Census, while 1997 and 2001 data are from the projections made by Fresneda (2001) for the *Departamento Administrativo de Planeación Distrital* (District Planning Department) – DAPD, 2003 data are from the Encuesta de Calidad de Vida (ECV) 2003.

** Sub-totals available only for 1997.

The second trend shows that the localities with the highest level of UBN in 1985 remained the same in 1997 and 2001, although the incidence Of UBN dwindles quite consistently over time. However, as noted by Fresneda, “in spite of the general decrease in the percentages per locality, the population with UBN represented 4.1% of the whole population in 1998, while this proportion increases up to 5.8% in 2001” (Fresneda 1998: 45).⁷¹ It is important for precision to note that data for 1985 are calculated using the household as the unit of analysis, while data for 1997, 2001 and 2003 use individuals.

As indicated by Fresneda (2007), critics of the UBN index have underlined that it is a biased measure inasmuch as it places too much emphasis both on the material conditions of the urban infrastructure immediately surrounding people’s housing, and on the structural conditions of the streets and buildings where people happen to live. He argues with reason that behind the walls of a well-built house, poverty and deprivation, human rights violations and gendered violence, may be ravaging. In Colombia, it has furthermore been

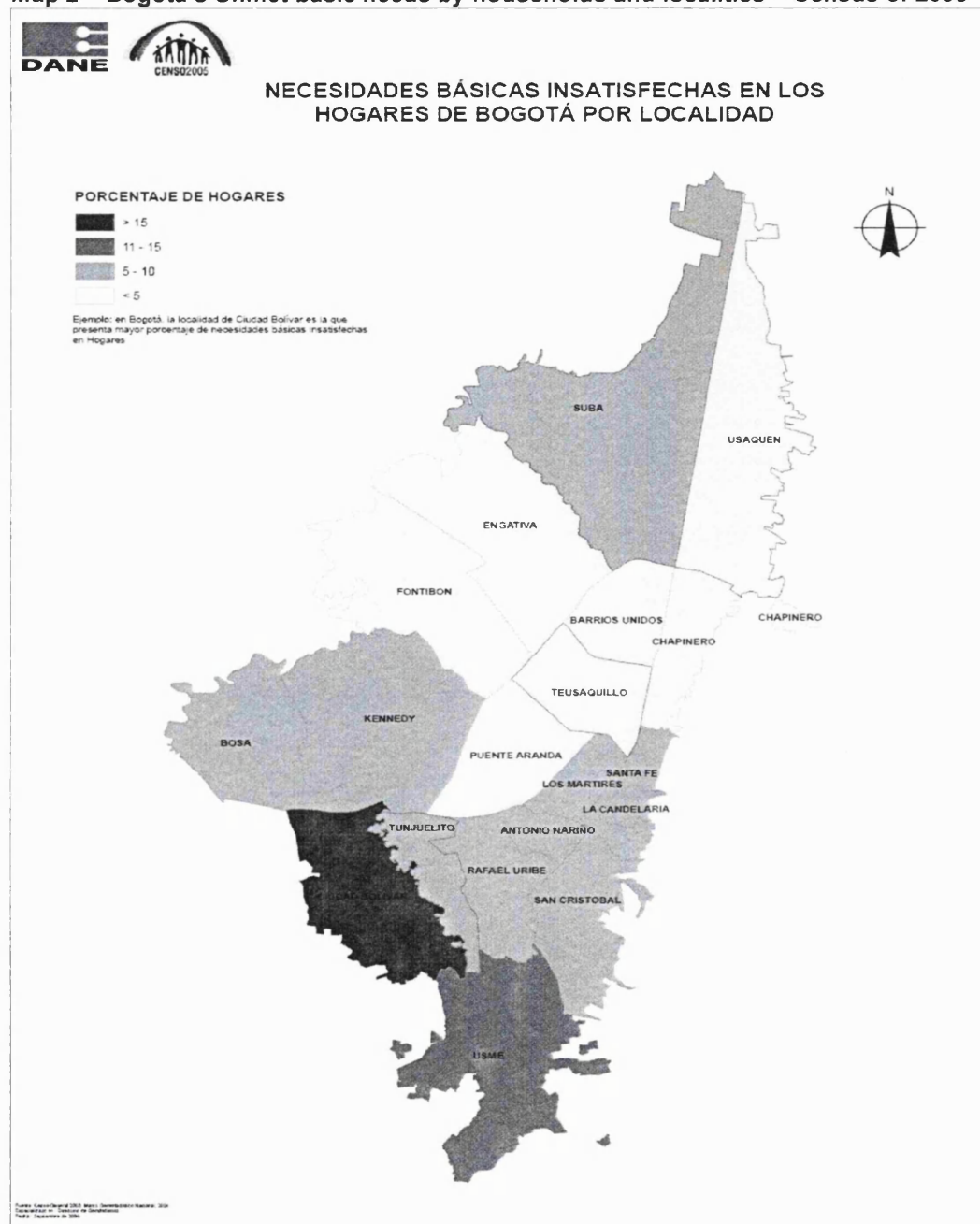
⁷¹ My translation from Spanish.

argued that those indicators relating to the aforementioned dimension, no longer indicate particular shortcomings, especially when compared to inequalities expressed by income distribution and even more so if compared to those expressed by access to social rights (Corredor, 2000).

The argument is as follows: since cities like Bogotá are almost entirely covered by public services, shortcomings in the provision of critical services, such as water and sanitation, have either already been overcome or no longer reveal stark differences between one settlement and the other. The conclusion is that the UBN index should be replaced by indicators capable of providing a better account of the profound inequalities that still ravage the city (CID, *op.cit.* 2004). This latter argument is clearly connected with the idea that poverty alleviation has to be disconnected from a mere question of basic although fundamental assets, such as food, shelter, education and health, and connected to broader questions such as those relating to social, economic and human rights (Gaspar, 2007; Moser, 2006, and Moser and Norton, 2001).

The ideas that underlay the search for valid indicators of basic needs should not be discarded as producing indicators of a second order. It cannot be denied that the UBN index may reflect too a narrow approach to poverty because needs are not only basic ones, and basic needs cannot be fulfilled without the fulfilment of higher needs (Max-Neef, 1991). However, it can still be argued that those same critics do not take into account the fact that harsh intra-urban differential persist, as do the physical conditions of the slums (Harpham et al., 1988; UN-Habitat, 2003), peri-urban areas (Allen & Dávila, 2006; Newman, 2006) and poverty, remaining powerful indicators of deprivation. It is interesting to note that UBN national indicator dropped from 35.8 in 1993 to 27.6 in 2005, while in Bogota it dropped from 17.28 to 9.2 over the same period. Map 2 also makes clearly visible that it is the south of Bogota, at the bottom of map itself, where the most disadvantaged localities are clustered, identified by dark red for the locality of Ciudad Bolívar and brown for those of Usme, San Cristóbal, Tunjuelito, Bosa and Rafael Uribe.

Map 2 – Bogotá's Unmet basic needs by households and localities – Census of 2005



Source: DANE, Census 2005.

2.5. Income Poverty and Inequality in Bogotá

This section presents data on income distribution trends, income inequalities and monetary poverty measures in Bogotá. What has been revealed through data from the UBN index is complemented here in the unfolding of a poignant story. A quote from an important analyst of the Colombian socio-economic context shows how poverty trends in Bogotá might have been described just a decade ago, and simultaneously points out how unpredictable poverty trends can be in. In his article on employment and poverty during economic restructuring in Bogotá, published in 1997, which took place as the fieldwork for this research was being carried out, Gilbert wrote:

“Bogotá is seemingly a positive example of what restructuring and sensible macro-economic policy can bring to Latin America. Despite liberalisation and a vast increase in the people seeking work, unemployment rates have fallen. Large numbers of new jobs have been created, principally in the informal sector. *There seems little real doubt that since 1970 poverty in Bogotá has become less common and less serious.*⁷²” (Gilbert, 1997: 1047).

In spite of the fact that, in the same article, Gilbert himself recognises that the degree of income inequality has not been reduced, the historical evolution of poverty indicators has shown that the picture depicted above was incorrect. It had omitted to take into account the fragility of the economy, and had overestimated the effects of liberalisation. The direction assumed by the economy and poverty dynamics in Colombia and in Bogotá from 1997 onwards was rather different, as is illustrated by the findings of sound studies carried out by some of the most recognised research centres, as will be discussed in the rest of this section.

The *Centro de Investigaciones sobre Desarrollo* (CID) has calculated that the GINI Index was at an already very high level in 1990, when it was estimated at 0.518. It rose to 0.556 in 1998 (at the time the first fieldwork for this research was carried out), when the harsher economic crisis of the last seventy years hit the country (CID, 2004).⁷³ The GINI index did not fall until 2003, five years after the crisis, when it was estimated at 0.521.

⁷² My italics.

⁷³ See section 2.3.

How small the minority that benefits from this income concentration is can be appreciated from the data presented in table 2.4, below, which presents the 2003 income distribution for the whole population in deciles. The lowest five deciles (from 1 to 5) account for roughly 3,876,304 inhabitants, which is more than the fifty percent of the whole population. Still, the same deciles only have access to 18% of the total income. The highest three deciles (from 8 to 10), which are those that concentrate the highest share of the city income, are earned by some 1.7 million inhabitants. These represent approximately twenty five percent of the population, who retain more than 67% of the total income. After the year 2000, the deeply negative impact of the economic crisis, and the substantial impotence of economic policy-making institutions in facing it, have given new voice and strength to alternative economic analyses that represent a significant contribution to the understanding of the relationships existing between economic policy, well-being, living standards and human development.

Table 2.4 – Bogotá: monthly incomes by household deciles (2003)

Deciles	Total Household	Inhabitants	Share of Total Income per Decile
1	197.479	830.223	1,4
2	204.065	831.935	2,9
3	188.528	738.560	3,6
4	200.178	751.198	4,6
5	200.531	724.388	5,8
6	199.250	648.014	6,6
7	191.524	605.206	8,0
8	198.261	624.406	11,3
9	198.218	589.156	16,2
10	197.509	491.261	39,7
Total	1.975.543	6.834.347	100

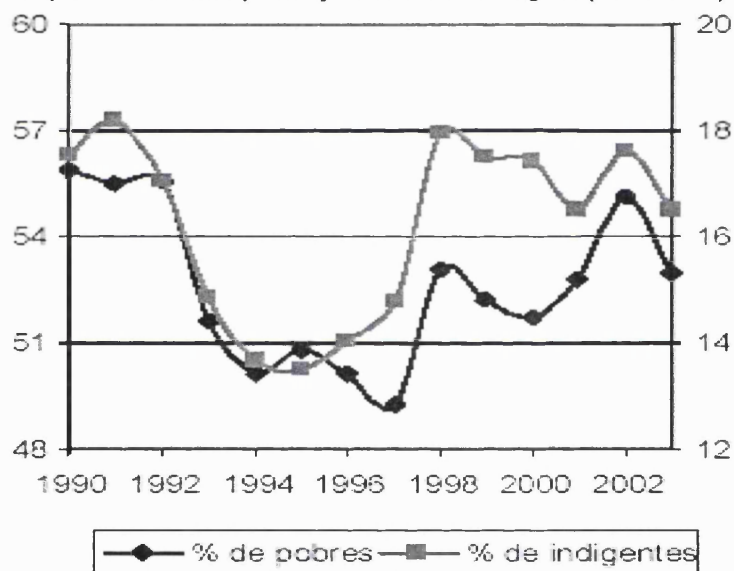
Source: *Dirección de Estudios Económicos* (Economic Study Direction) – *Secretaría de Hacienda del Distrito* (SHD), on the basis of the *Encuesta de Calidad de Vida* (Quality of Life Survey), 2003.

The evolution in the incidence of income poverty⁷⁴ over the period 1990-2003 presents two primary trends. During the period from 1990 to 1994, the incidence of

⁷⁴ Data are based on calculations made by CID (2004) on the basis of the National Household Survey carried out by the National Statistic Department (DANE). Poverty levels are calculated on the basis of

poverty decreased from 55.9% to 50% in 1994, maintaining this downward trend until 48.6% was recorded in 1997. In the period from 1998 to 2002, there was a sharp increase in the incidence of income poverty, starting with the deep economic crisis mentioned above. Over just one year, from 1997 to 1998, without any change in the method of measurement, the incidence of poverty for the groups considered in a situation of extreme poverty fell back to the levels recorded by the beginning of the nineties; close to 18% of the total population (right hand scale in graph 2.1). In next section, the likely possible causes of this U-turn compared to previously steady trends will be analysed, according to the main interpretation offered by secondary Colombian evidence; studies conducted to shed light on the issue.

Graph 2.1 - Income poverty incidence in Bogotá (1990-2003)



The scale on the left-hand side represents the percentage of the poor and that on the right-hand side the percentage of critically poor (*indigentes*).
Source: CID/DAPD (2004).

declared income. Sub-declarations and missed declarations are estimated according to the methodology indicated by CEPAL [ECLAC (1990)] and Martin (Martin et al., 1986), both cited in CID (2004).

2.6. Employment and Income Instability: the Direct Cause of the Worsening of Poverty Indicators

Employment and income are not only traditionally strictly linked variables, but also extremely sensitive to the interrelations between global and local economic, political and policy making dynamics. Because of their close relationship with income poverty, this section presents key data about the trends employment and income variables over more than a decade. As in the other sections of this chapter, the first fieldwork period of 1997 to 1998 are of great relevance because they represent a sort of watershed. In fact, it was then that the economic crisis hit the country and its harsh effect on poverty began to be felt.

Section 2.3 presented some general elements concerning the late 1990s' economic crisis in Colombia. It began to be strongly felt in 1998, although some authors disagree about its exact inception, placing it in 1997 or 1999. Despite these different interpretations, mostly related to the econometric models applied, it is interesting to start by considering some macro-economic data related to the social impact of this crisis.

Bogotá registered a GDP of COL \$ 4.690 m. in 2003 vs. Col \$ 4.675 m. in 1994 (SHB, 2004: 29), demonstrating the magnitude of the impact of the 1998 recession. Appreciation of this already critical picture can be further enhanced by consideration of the behaviour of the real per capital income of independent workers and capital income,⁷⁵ which fell by 44.2% between 1994 and 2003. This marked loss in real purchasing power helps contextualise a better understanding of the magnitude of the impact of the crisis. The quality of life and human development of all social groups was adversely affected, particularly those with low-incomes; those vulnerable due to their assets base and limited capacity to successfully face the crisis.

As pointed out by the special report on over ten years of human development (PNDH, op.cit. 2003), the 1990-2000 decade was marked by law N.50 of 1990, better known as the 'labour reform'. While trying to reduce the costs of hiring labour for (mostly) private enterprises, it had the effect of hindering the creation of new jobs and, particularly,

⁷⁵ These two are usually reported together in official statistics. In Colombia, the 'independent worker' category is an ambiguous one, since it includes both informal workers not salaried by either a public or private company and truly independent workers such as free lance professionals.

that of immobilising the labour intensive sectors that traditionally provide an albeit temporary escape for low-income groups from situations of crisis affecting their livelihoods. From table 2.5, it can be seen that, although the pace of the increase in both the unemployment and under-employment rates is not very different among the different groups, there are significant differences in terms of magnitude and potential social impacts. There is a positive association between unemployment and poverty over the years, although the group of non-poor is most affected, comparatively speaking. If one does not merely look at the overall percentage, but calculates the real magnitude of the increase,⁷⁶ the differences among the three groups become clearer. Over the whole 1990-2003 period, unemployment increased by 66.5%, 73.2% and 75.4% respectively for the extremely poor, the poor and the non-poor.

Table 2.5 - Unemployment and under-employment rates for non-poor, poor and extremely poor groups in Bogotá 1990-2003

Years	Unemployment rate				Under-employment rate			
	Total	Non-poor	Poor	Extremely Poor	Total	Non-poor	Poor	Extremely Poor
1990	10,1	6,5	13,8	21,8	15,2	11,7	19,3	23,2
1991	8,7	5,8	11,7	17,8	14,0	10,8	17,6	21,3
1992	8,3	5,4	11,6	19,2	13,6	10,9	16,7	19,2
1993	6,4	4,0	9,3	16,0	10,6	8,5	13,5	17,3
1994	7,0	4,8	10,1	18,2	14,0	9,9	15,1	18,2
1995	7,1	5,2	9,5	17,3	12,2	10,2	14,8	16,7
1996	9,3	6,0	13,8	25,5	15,0	12,3	19,0	19,7
1997	10,3	6,9	15,0	27,2	13,8	11,3	17,5	18,9
1998	14,3	9,0	20,5	31,6	18,6	14,1	24,5	29,2
1999	18,6	11,7	26,7	39,9	18,8	15,9	22,9	25,8
2000	20,4	13,9	28,3	39,8	18,0	14,9	22,4	26,5
2001	19,1	12,8	26,1	39,2	35,0	29,6	42,2	52,5
2002	18,6	12,5	24,8	36,3	41,8	34,5	50,6	61,4
2003	17,3	11,4	23,9	34,9	39,6	33,0	48,3	57,6

Source: DANE, National Household Survey Calculations: Centre for Development Research of the National University for unemployment data, and National Programme for Human Development of the National Planning Department for under-employment data.

As far as the poor and the extremely poor are concerned, between 1990 and 1993 unemployment and under-employment fell for all the groups considered. However, from 1994 there was a raise in unemployment and under-employment, which became sharper from 1996 to 2000, showing only a marginal decrease from 2001 onwards. Time-trends are

⁷⁶ Growth calculated according to $t+1 = (I_{t+1} - I_t) / I_t$.

also consistent with the poverty line data presented in the previous section. Both for vulnerability and livelihoods analyses, it is important to underline that under-employment for the poor in 1997-8 almost doubled 1990 levels; in 2003 it had moved well beyond that threshold. As for under-employment, the most striking data is that showing a tremendous increase starting as could be expected in 2000. Employment simultaneously began to register a mild decrease, showing that the partial economic recuperation implies, as analysts have pointed out, a society characterised (both at national and at Bogotá's level) by greater job insecurity. This is a key insight for indications the fieldwork analysis, in terms of the importance of the income generation factor within the dynamic of vulnerability for poor groups in the city. More informal and precarious jobs means less access to legal health provision, less security, and a diminished access to pension schemes.⁷⁷

A short caveat is needed before introducing the section on housing, which will be the first of four sections. The other three sections will be dedicated to analysis of indicators related to health, education and domiciliary services. The aim of these sections is not to perform an exhaustive analysis of trends and their states, but rather to analyse relevant aspects of the vulnerability context, dedicating a space to the analysis of a group of indicators that correspond to the main vulnerability-related assets. These will be examined from the macro perspective of the city. An important limitation of the existing socioeconomic data is their lack of articulation within the context of other variables. Children who abandon school are not monitored either in terms of their reasons or their educational trajectory after leaving the institution is concerned. By the same token, health complaints and critical life events have not been given systematic attention. In general, even leaving aside those issues that impinge on people's private lives, such as household dynamics, there is clearly a lack in understanding of the importance of the relationship existing between time sequences and social impacts; one of the core aspects of

⁷⁷ The pension system of the country, related to Law N.100 of 1993 (the same that reformed the Health System), was reformed by Law N.797 of 2003. It is characterised by a low level of coverage, meaning that the majority of the elderly population has no protection at all. In Bogotá, for instance, only 15% of women older than 55 and 27% of men older than 60 have some kind of age or disability pension. Inequality in terms of types of pension regime is another important issue. In spite of the existence of special schemes, only a minority have access to them even though many more are entitled. Roughly one fifth of the population of Bogotá over 60 who benefit from a pension scheme receive between one and two minimum legal salaries.

⁷⁸ *Popular Housing Fund*, an official fund set up by the Capital District authority in whose mission is to contribute to provide dignified housing to all Colombians according to article No. 51 of the National Constitution.

vulnerability analysis. The same critique applies for monetary poverty, at least in terms of the quality and usefulness of official data at the city level for the purpose of vulnerability analysis: socio-economic data collection focuses on 'how many' and 'where' questions, neglect in the core issues of 'how' and 'why' social processes occur, and what causes what.

2.7. Housing

Housing is generally evaluated using the housing deficit indicator. Housing deficit is but one way of looking at the issue and, possibly, an indicator that serves more the goal of disciplines such as economics, with its research questions concerning the demand and supply of what are defined as social goods, or that of engineering, a discipline mostly interested in the physical characteristics of housing. This is not to say that economists and engineers have no social sensibility, which would be a superficial proposition. Nevertheless, even the World Bank in the commentaries to its social indicators database, has underlined that data collection related to affordable housing is one of the areas that "requires better data and better policy-oriented analysis so that housing policy can be formulated in a more global comparative perspective and the accomplishments and lessons learned in one country can be drawn on by others. This comparative perspective can help countries chart their paths, formulate realistic development objectives, and measure their achievements over time and compare them with other countries in similar circumstances" (World Bank, 2005).

The WB, in the same document, presents an argument that shows similarities to that argued above regarding Bogotá. The WB argues that housing is increasingly viewed as a commodity with an exchange value, rather than as a product to be produced and allocated outside the marketplace. The complexity of the factors determining housing demand and supply are often to be found outside the domain of economics and engineering. They belong to the stream of thought that urbanism regards the processes through which habitats and settlements develop, as in a two-way relationship with regulatory, institutional and policy environments. On the other hand, as highlighted by the social development traditions, housing policies and outcomes in turn affect broader socioeconomic conditions. This is also remembered by the World Bank (op.cit.), examples being the infant mortality

rate, inflation, household saving, manufacturing wage and productivity levels, capital formation, and the government budget deficit. A good understanding of housing conditions thus requires an extensive set of indicators within a reasonable framework.

The data from the *Caja de Vivienda Popular*⁷⁸ (CVP) presented in table 2.6 are an example of an obvious truth: data built crossing two dimensions (socioeconomic level and housing deficit in this case) allow for a much richer reading of social dynamics and provide the basis for analyses of greater relevance for policy. This is of particular relevance to this study because it raises a number of critical issues regarding the existence of data, its quality and its availability across different institutions. These issues still need particular improvement in order to grant better quality social research in Colombia.

The greatest incidence in terms of qualitative housing deficit (lack of legal tenure and/or low physical quality of buildings) is found in the sector of the population classifying as socioeconomic levels 1 and 2.⁷⁹ Up to 62% of the population that presented a qualitative housing deficit in year 2000 in Bogotá, correspond to low-income groups whose earnings did not exceed 3 monthly minimum legal salaries⁸⁰; up to three times the value of Colombian Pesos (Col\$) 286.000, roughly corresponding to GBP (£)91.5 when applying the official exchange rate of January 2000. Housing subsidies historically played an important role in terms of social protection, as identified by Dréze and Sen (op.cit., 1989). They pointed out the importance of public action in protecting capitals and assets, and thus people's functioning and capabilities; a comment that clearly anticipates later reflection on the importance of pro-poor policies. As Moser pointed out in her study of four low-income

⁷⁸ *Popular Housing Fund*, an official fund set up by the Capital District authority in whose mission is to contribute to provide dignified housing to all Colombians according to article No. 51 of the National Constitution.

⁷⁹ According to the Presidential Decree No. 186 of 1989 (SSPD, 2009) previous advances in the establishment of differential tariffs for the payment of public services such as waste collection were formalized under the presidency of Virgilio Barco. The methodology through which urban areas are classified according to the quality of its housing and public infrastructure rests on the assumption that to a certain socioeconomic level of the building and the infrastructure of the immediate surroundings bears a direct correspondence with a given socioeconomic level of the population and a related capacity of payment. The index is calculated on the basis of the external characteristics of the building (materials of the walls and roof, for instance), availability of access roads to the neighbourhood as well as public transport, public services and other indicators that may be considered appropriate by the local authority. Urban areas are classified according to 6 levels or strata: (1) 'low-low'; (2) 'low'; (3) 'Medium-low'; (4) 'Medium'; (5) 'Medium-high' and (6) 'High'. Residents of levels 5 and 6 tend to subsidize those of levels 1 (30% of total cost is subsidised), 2 (10%) and 3 (5%), while level 4 pays the real cost of the service. Nowadays it applies to the following public domiciliary services: waste collection, sanitation, potable water and electricity, besides a number of other administrative taxes such as land value.

⁸⁰ A legally established amount for the minimum wage on the basis of which many other administrative and social calculation are developed in the country.

communities, from a social vulnerability perspective, the social function of housing goes well beyond that of shelter. It fully enters the productive sphere with its productive use of space for goods manufacture, the provision of services and the stock of goods for later sale (Moser, 1996). Literature analysing the history of housing in Bogotá, such as the study carried out by Gilbert (1997), indicates that the issue of access to good quality housing has had to constantly adapt itself to market forces and vested interest. This issue was also recently re-examined by Cristancho and León (2008), when analysing the transformation of the rural space in the north of the city and the political decisions taken by both the State and the local administration regarding land use.

Socioeconomic level	Income	Population		Housing Units		Households		Deficit	
		Thousands	%	Thousands	%	Thousands	%	Thousands	%
1	< 1	423	6.5	75.418	6.7	94.083	5.6	18.665	19.8
2	1 – 3	2.318	35.7	364.082	32.2	630.051	37.4	265.969	42.2
3	3 – 5	2.854	44.0	466.197	41.2	708.354	42.1	242.157	34.2
4	5 – 8	488	7.5	128.018	11.3	141.201	8.4	13.184	9.3
5	8 – 16	194	3.0	42.125	3.7	49.274	2.9	7.149	14.5
6	> 16	140	2.2	42.488	3.8	42.249	2.5	(240)	-0.6
Not resident		68	1.0	13.828	1.2	18.055	1.1	4.227	23.4
Total		6.485	100.0	1.132.156	100.0	1.683.267	100.0	551.112	32.7

Source: Caja de Vivienda Popular (2002)

Another aspect of great importance for vulnerability analysis is the legal status housing tenure. Most of the time, the legalisation of the settlement is a pre-condition for the attainment of a legal tenure for those on a low-income. Thus institutional issue are interlinked with the social processes of vulnerability, generation and play. In a number of cases, these play key roles in determining who successfully faces a critical life event and who does not. In fact, legal land tenure is a means through which households can claim their social rights. For example, rights to the provision of public services or those of collective rights, such as protection and security, political participation, and basic assets. It is upon the basis of these rights that various processes of accumulating a minimum level of wealth can be initiated.

Table 2.7 illustrates the geographical distribution of illegal settlements in Bogotá over a period spanning more than two decades. The localities where the first field work took place are in black, and those of the second in italics (Usaquén and San Cristóbal).

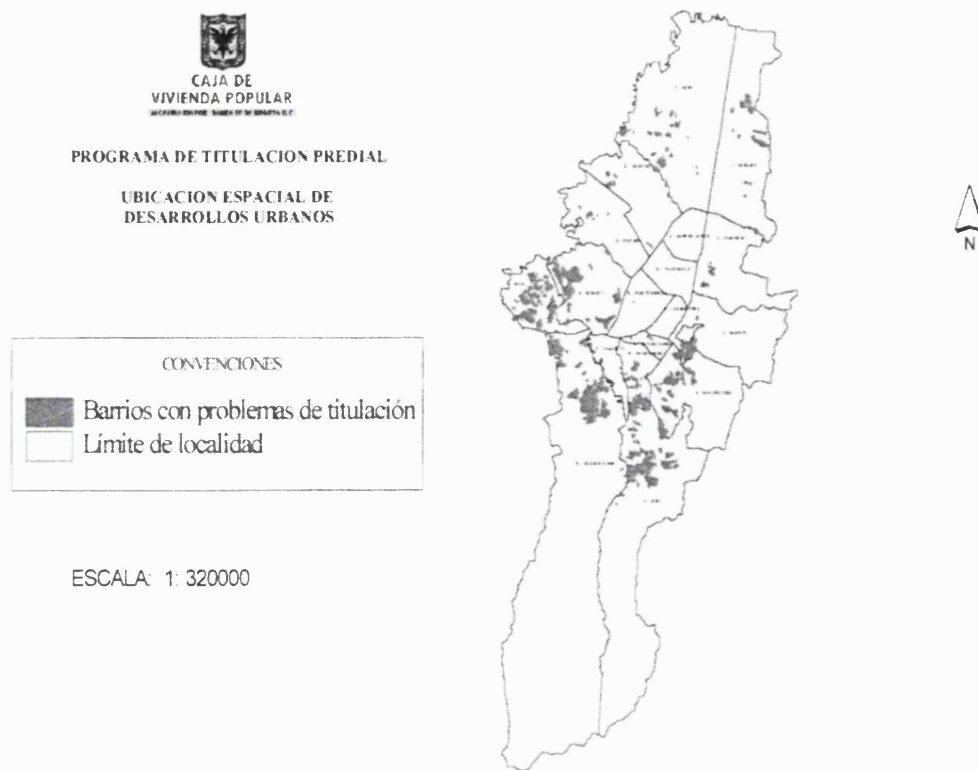
Table 2.7 – Geographical distribution of Illegal settlements in Bogotá by locality 1980 - 2000

Locality	1980		1990		2000	
	No. of settlements	%	No. of settlements	%	No. of settlements	%
<i>USAQUEN</i>	21	13,4%	36	9,6%	79	6,3%
CHAPINERO			2	0,5%	9	0,7%
SANTAFE					24	1,9%
SAN CRISTOBAL	33	21,0%	50	13,3%	105	8,4%
USME	8	5,1%	41	10,9%	150	12,0%
TUNJUELITO	2	1,3%	3	0,8%	5	0,4%
BOSA	21	13,4%	62	16,5%	240	19,2%
KENNEDY	10	6,4%	43	11,5%	119	9,5%
FONTIBON	16	10,2%	23	6,1%	45	3,6%
ENGATIVA	11	7,0%	14	3,7%	76	6,1%
SUBA	19	12,1%	47	12,5%	157	12,5%
BARRIOS UNIDOS			1	0,3%	2	0,2%
TEUSAQUILLO			3	0,8%	3	0,2%
LOS MARTIRES					1	0,1%
ANTONIO NARIÑO			3	0,8%	4	0,3%
PUENTE ARANDA	1	0,6%	2	0,5%	6	0,5%
RAFAEL URIBE	5	3,2%	19	5,1%	72	5,8%
CIUDAD BOLIVAR	10	6,4%	26	6,9%	155	12,4%
TOTAL	157	100,0%	375	100,0%	1252	100,0%

Source: Calculation by the University Externado of Colombia, on the basis of DAPD data.

On the one hand, over the years the number of illegal settlements has increased across Bogotá. However, on the other hand this change tends to be greater in those localities where the majority of residents are low-income households. Only the localities of the first fieldwork account for 810 illegal *barrios*; that is, 64% of the total of the illegal settlements of the capital. Map 3 provides a visual appreciation of the overlap between illegality of land and housing tenure and low-income settlements. The areas in red clearly overlap with the south and the south-west in their majority, that is, where low-income groups by income-based poverty line or UBN represent the majority of the population.

Map 3 - Illegal settlements in Bogotá in 2000



Illegality of tenure for thousands of households is an unsolved problem in Bogotá, illustrating the challenge that the administration faces in counteracting the factors that generate vulnerability, low quality of life and, ultimately, social exclusion. In fact, illegality of tenure implies a weakening of other key assets. Besides health, already mentioned as a key factor related to housing quality and the provision of public services, other variables that are referred to as social capital. These include the prestige or social status and use to access credit and opportunities a household may have, such as access to the formal banking system. Through these variables it can be seen how macro drivers such as housing tenure create the conditions for the harshest impacts of critical life events at the micro level.

2.8. Health

This section will describe the main structure of the health system in Colombia and its transformation over the last decade, including the important health care reform of 1993. This section focuses on considerations concerning the emphasis this thesis places on problems of access and, in this case, the uneven coverage of public service provision. In this regard, the health reform in Colombia is worth mentioning because it changed the conception of health care within social protection and social services provision, from one based on health care as a right, to another based on health care as a worthy purchase. This section illustrates to what degree and under which modalities health care is provided for low-income groups.

2.8.1. Health Care Reform in Colombia

Health is a key factor within the dynamic of vulnerability, as well as one of the most important determinants of the sustainability of livelihoods, through the role it plays in determining the viability of individual and social reproduction (Beall, 1995; Harpham, 2002). Within this dynamic, the Health System Reform (HSR) of 1993 has direct implications. The changes it implied impacted access to health by different social groups and, had implications for poverty reduction policies. It, therefore, deserves at least an analysis of its main aspects. Previous to the 1990s, the health system in Colombia was composed of different and disarticulated sub-systems: i) a network of public hospitals, financed by the National Ministry of Health (NMH) and targeted at the poorest and, ii) a sub-system of social security schemes in health, substantially oriented to providing services for a portion of those formally employed, but not to their family members.

The new health care system introduced by Law N.100 of 1993, is divided into two tiers, the *Régimen Contributivo* and the *Régimen Subsidiado*.⁸¹ Independent and salaried workers belong to the former, while people with limited earning capacity are placed in the latter, subsidised tier. The system has a third tier, which should have limited life span in

⁸¹ The *Régimen Contributivo* is principally financed by workers' contributions. These are in the order of 12% of their salary for those who fall in the 'independent' category. In the case of those formally employed, employers provide 8% of the whole amount, and employees 4%. Of this amount, 1% is transferred to the subsidised tier *Régimen Subsidiado*, to finance health care provision for those who have less ability to pay.

the case that all the population is included in one of the previous two. This third tier provides health care for those without any ability to pay, such as the extreme poor, displaced people, and the homeless. These are among those defined in Colombia as the 'most vulnerable groups'. The HSR has an in-built contradiction or, as analysts such as Jaramillo Pérez (1997) have pointed out, at the very least a strong tension between the aspiration to provide universal coverage, and the adoption of a health care provision model based both on individual insurance and ability to pay.

Besides the case of Bogotá, it is worth noting that the new system is developed on a parallel basis with the controversial process of decentralisation (Velázquez, 2000). Over the past two decades, decentralisation has become central to the comprehension of how the Colombian government undertook to strengthen its territorial institution and open up to popular participation in decision-making mechanisms in order to feedback public policy.

One of the main critiques levied at this process over the last decade, concerns the lack of historical perspective on the many regulatory frameworks produced at the national and local level. This shows lack of the necessary recognition of how the territory itself is a social and historical construction, shaped by processes of power and competition for resource control among different interest groups (Fals Borda, 2000). Specifically, the process of decentralisation has been criticised for having been implemented without previous action towards generating the necessary institutional strength and capacity at the local level to support it. This directly applies to the fact that the subsidised tier of the new health system, which should provide health care for the poor, depends for its administration and financing on what revenue local authorities manage to raise. This creates huge imbalances in terms of coverage among departments and social groups, relating to their levels of power and access to financial resources.

Strictly related both to the core argument of this thesis and to what has been said above about the HSR, is the fact that Law N.100 of 1993 allows everybody who has the ability to pay for it to subscribe to a private health insurance. Over the last decade, legislation has become increasingly stricter on the compulsory obligation for every citizen to be registered within, and pay its insurance quota in, either the *Régimen Contributivo* or *Régimen Subsidiado*, as the Colombian Health System was formerly described. However, in reality this produces distinct inequalities in terms of health care provision. Compulsory

legislation compels the wealthier to take up a health insurance plan with one of the health providers of the *Régimen Contributivo*. This functions to guarantee their contribution to the sustainability of the new health system. However, as a matter of fact, access to health care is divided into three different sub-systems: 1) the private high-cost and high-quality insurance system, generally known as *medicina pre-pagada* (pre-paid medicine), 2) the *Régimen Contributivo*, providing health care for the lower-middle and middle classes, and 3) the *Régimen Subsidiado*, providing access to health care for low-income or extremely poor groups.

Ten years after its operative start, the HSR has not yet achieved universal health coverage. In 2003 a remarkable 38% of the country's population was still not insured in either of the health care system's two tiers. Bogotá presents a higher percentage of insured population: 65.4% in 1997 and 77.6% in 2003.⁸² In spite of this numerical improvement in terms of percentages, real access and real service availability still remain conditioned. As Garay highlights, conditioning factors are resource availability and, more broadly, the very economic development of the country itself (Garay, 2002). In this regard, it is important to note the fact that Law N.100 of 1993 creates separation between those health services provided on an individual basis and those of collective interests in terms of responsibilities and, most importantly, of financial resources. All public health applied policies fall within this remit. For instance, immunization policies are considered of collective interest and, as such, a matter of public health, the efficient and effective provision of which depends ultimately on the behaviour of the economy and the state of public finances.

2.8.2. Health Insurance in Bogotá

It is also quite interesting to see that the patterns of coverage in health care insurance within the contributively tier, with its better health package, better quality and higher quantity of health centres and clinics, still tend to follow the same trends of socio-spatial differentiation. According to the HDB (2001), in year 2000 there were 1,515,283 people of the richer north of the city in the *Régimen Contributivo*, while the figure dropped

⁸² Data directly reported by the results of the *Encuesta de Calidad de Vida*, was calculated by the *Programa Nacional para el Desarrollo Humano* of the National Planning Department.

to 1,140,886 in the south-west and was no more than a mere 381,969 in the centre and 543,841 in the south.

Table 2.8 presents data collected by the Ministry of health in 2005. Overall coverage is assessed through the health social security system.⁸³ Overall health insurance covered 83.02% of the population, with a strong leaning towards those/ within the *Régimen Contributivo* (58.23%). Only 24.79% of the population was reached by the subsidised tier of the system (*Régimen Subsidiado*) in Bogotá. Between the months of December 1996 and December 2001, the capital district managed only to double the number of people within the subsidized tier, from 600,000 to 1.2 million. This was well behind the governmental target, reflecting the great difficulties the system has encountered since 1997 in attempting to include and provide access to deserving low-income groups.

When one considers that nominal insurance does not reflect the real capacity of people to use the service, the above data assumes a very negative value compared with the great demand for health services. Simply having a valid ID which has been acquired through possessing an appropriately low score, as achieved by households when surveyed by SISBEN,⁸⁴ does not necessarily grant effective access to health care services. As also the HDB (1997a y 1997b) recognises, in spite of the fact that people are required to pay fees for services that are low in absolute terms, the costs of services often cannot be met by households of the lowest socioeconomic strata 1, 2 and 3.

⁸³ This is how it is called in Colombia. Literally *Sistema General de Seguridad Social en Salud* (SGSSS), which can be literally translated as 'General System of Social Security in Health'.

⁸⁴ SISBEN is translatable as 'System of Identification of Beneficiaries of Social Programmes', in Spanish, '*Sistema de Identificación de Beneficiarios de Programas Sociales*'. It is a general targeting tool, theoretically created for a range of services, but in reality mostly applied within the health care sector as a selection mechanism. It is intended as a sort of gateway for the poor, according to a set of variables halfway between the UBN and the standard of living methodology of poverty evaluation, to enter the subsidised tier of the reformed health system. It is not the case that popular witnesses identify SISBEN with a health ID.

Table 2.8 - Population Covered by the Health System in Bogotá - 2005.

	2005	Percent of the total of inhabitants	Percent of the total of insured	Variation 2004-2005
Total Population of Bogotá	6.778.691	100%	N/A	N/A
Insured under the <i>Régimen Contributivo</i>	3.947.249	58,23%	70,14%	-3,50%
Insured under the <i>Régimen Subsidiado</i>	1.680.537	24,79%	29,86%	9,80%
Total of Insured to the SGSSS (Contributivo + Subsidiado)	5.627.786	83,02%	N/A	0,10%
Non insured	1.150.905	17%	N/A	10,60%

Source: Cámara de comercio de Bogotá

2.9. Education

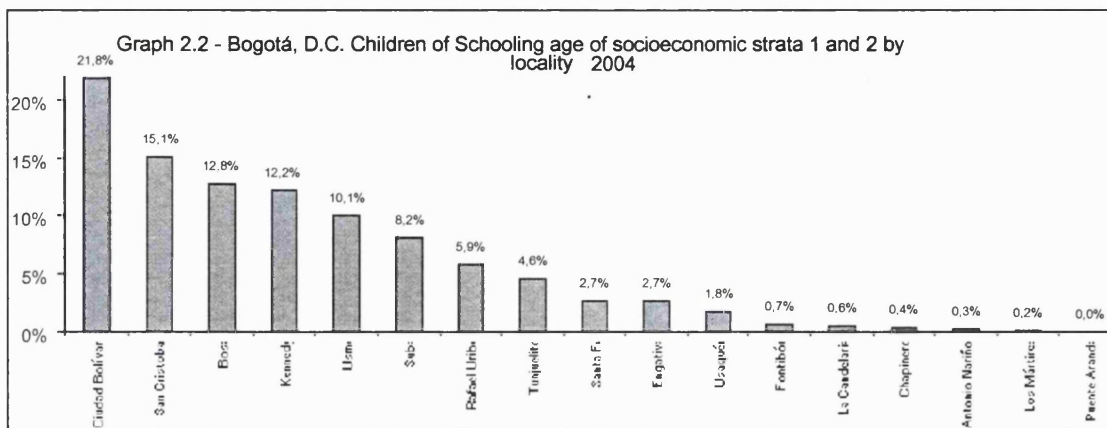
The education system is regulated by Law 115 of 1994, also known as the ‘General Law of Education’, whereby the system is organised into three levels:

- Pre-schooling years: three years before entering primary school.
- Basic education: from year 1 to year 9, where years 1 to 5 consist of primary school education, and years 6 to 9 basic secondary level.
- Higher secondary education⁸⁵ consists of two grades, years 10 and 11; pre-entry to the university or technical education.

In Colombia education is decentralised as per the Political Constitution of 1991, and via a web of legislative regulation the details of which are irrelevant for this analysis. Therefore, the capital district is directly responsible for funding and providing education to its population.

A high percentage of the country's children of schooling age (between 7 and 17 years-old) are concentrated in Bogotá; 48% of those with a right to attend primary school and 18% of those whose age is within the secondary school range (Sarmiento et al., 2001). Graph 2.2 illustrates that the majority of children of schooling age concentrate in the localities that are also the poorest in the city.

⁸⁵ In Colombia this is literally called medium (media) secondary school.



Source: Secretaría de educación del Distrito (2005).⁸⁶

In order to achieve universal coverage, the Education Department of Bogotá⁸⁷ (EDB) created 1,418,848 places during 2003.⁸⁸ Of these, 49% were in primary schools, 36.7% in basic secondary schools and 13.5% in higher secondary schools. This effort raised the gross enrolment rate to 105.7% for primary schools and to 103.5% for secondary schools. However, when school assistance is considered, the deficit for the capital district is still very high. An extremely remarkable figure of 41,000 of children from low-income groups does not attend school. The country is actually even worse off than what signalled by official data on quantitative coverage, since only primary schools can provide the required places to accommodate the population of children between 7 and 11 years-old, while in secondary schools 11 out of 100 cannot attend school because institutions are not equipped to provide access to them. The gross rate of schooling in the country is just 76%, a very different figure from that appearing in official reports such as those of international co-operation agencies.

In terms of net enrolment there are shortfalls both at the district level of Bogotá as well as at the national level. The net rate for primary schools is 86% both for the county and for Bogotá; while from the middle years of the secondary school curriculum rates go down to 63% and up to 78% in the last two years of the cycle. In Bogotá only 66.8% of

⁸⁶

http://www.sedbogota.edu.co/secretaria/export/SED/seducativo/compendio_estadistico/BoletinEstadisticasEducativasBogota1998-2004.xls#Cuadro 1.7.!A1.

⁸⁷ In Spanish: *Secretaría de Educación de Bogotá*.

⁸⁸ Data bases of the EDB were directly consulted by the author, as well as for all other data appearing in this section.

30% of the poorest populace attains a grade expected according to age, compared with 77% of 30% of the richest section of the population. A high number of poor households have to enrol their children in private institutions of doubtful quality due to lack of resources.

School desertion is also quite high in the city. The desertion rate went up from 3.9% to 4.4% between 1998 to 2000, as a consequence of the economic crisis. It went down to 3.1% in 2003 for public schools and 2.0% for private schools. However, especially among low-income households, a desertion that lasts for at least a year often means the loss of all previous educational capital accumulated and of the whole inversion made by the family on children education. This has a down turning effect on the poverty profile of households in terms of long-term livelihood sustainability.

The majority of both male and female children who left school did so due to of economic difficulties (44%)⁸⁹ that hit their households. Interestingly, this was the most important life event mentioned by interviewed households within the sample of this research and analyses in chapters 5 to 7. The second order reason (14.8%) relates to problems arising with the working environment of the breadwinner (an event also important among those interviewed within this research). A considerable amount, 12% of youths, also desert school because they say they dislike it or are not interested in it. The quality of education is also quite a worrying aspect when considering the future well-being of young children and their families in a competitive market. Only 7.3% of years 5 in primary schools achieve level D in ability tests. Level D corresponds to the achievement of a critical capacity to understand written texts and to relate what one writes to what one has previously read. This highlights connections and primary threads between issues and positions. In maths, only 6.0% in year 7 and 4.9% in year 9 achieved level D. Columbia as a whole is worse off with 4.8% and 1.8%, respectively.

⁸⁹ These data are from the *Encuesta de Calidad de Vida* 2003 (ECV 2003) that is the Quality of life Survey carried out by DANE every four years.

2.10. Domiciliary Services

According to data from October 2001, the solid waste collection service reported that among settlements of socioeconomic strata's 1, 2 and 3, 1,056,698 users received the service; 80% of the total of residential users (see table 2.9).

Socio-economic strata	Residential users	Percent participation of each strata
1	88.413	6.73%
2	419.717	31.96%
3	548571	41.77%
4	155.143	11.81%
5	56.587	4.31%
6	44.853	3.42%
Total	1.313.286	100%

Source: ECSA – UESP (2002)

As indicated by Satterthwaite (2000), most official data such as that in table 2.10, tends to indicate almost universal coverage by public domiciliary services.

Quintile	Aqueduct			Sewage			Electricity			Gas		
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
1	0,3%	1,6%	0,5%	4,2%	0,4%	0,4%	0,0%	0,0%	0,3%	34,8%	23,8%	26,0%
2	1,6%	0,6%	0,3%	1,5%	0,4%	0,6%	0,0%	0,4%	0,3%	28,1%	19,4%	21,6%
3	0,0%	0,6%	0,3%	1,9%	0,6%	0,3%	0,0%	0,0%	0,0%	24,4%	19,0%	22,0%
4	0,0%	0,0%	0,0%	0,2%	0,2%	0,2%	0,0%	0,0%	0,0%	24,6%	16,9%	19,8%
5	0,0%	0,2%	0,0%	0,0%	0,0%	0,3%	0,0%	0,0%	0,0%	28,1%	22,1%	29,9%

Source: Veeduría Distrital 2006

However, when measurements are carried out that include illegal settlements, the situation looks different. It appears that around 10% or more do not benefit from the

service and, in addition to this, those that do not benefit are concentrated in illegal settlements.

Table 2.11 - Domiciliary service provision over the whole city (legal and illegal settlements), percentage of households not reached and reached by the service

Access to service	Aqueduct	Drains	Waste collection	Electricity	Telephone	Gas
Not served	9,00%	14,70%	9,30%	1,60%	31,00%	30,30%
Served	91,00%	85,30%	90,70%	98,40%	69,00%	69,70%

Source: Veeduría Distrital 2006

Water and sanitation did not reach universal coverage in Bogotá at the time of the first fieldwork. Table 2.12 shows that, according to the data collected by the 1993 Census, due to population growth vs. a less effective capacity to provide the service, net rates of service provision fell slightly over the last decade. The topic of environmental risk is very relevant for understanding the dynamics of vulnerability. Inadequate solid waste disposal, for instance, affects water consumption through the proliferation of arthropods and rodents, as well as contaminating subterranean water, river and canals. In developing countries, air pollution is an under-explored area of concern, but still the effect of benzene, methane and other toxics plays a significant role in determining high exposure to respiratory diseases. Inadequate potable water and sanitation provision is the object of a whole branch of research within development studies. It has been proved beyond all reasonable doubt that these services bear a close causal relationship with health, particularly that of children who, particularly in poor settlements, may be frequently found playing in unsafe areas, exposing themselves to contact with many pollutants and toxic materials.

This chapter has laid the ground for an appreciation of the socio-spatial inequality that characterises Bogotá. It has linked this inequality to the broad socio-economic trends affecting the country, with special reference to its capital. The improvements of 1998 to 2006 cannot be defined as impressive, but rather are deceptive. These inequalities in opportunities, access and coverage provide the background against which the results of the data analysis on vulnerability are going to be illustrated in chapters 4 and 5.

Table 2.12 – Water, sanitation and waste collection services. Coverage by zone and locality in Bogotá – 1993

Zone	Locality	Potable Water	Sanitation	Waste collection
North	Usaquén	99,4	97,5	98,9
	Chapinero	98,7	95,8	97,7
	Engativá	99,9	95,30	96,9
	Suba	98,9	93,90	94,1
	Barrios Unidos	100,00	94,30	98,80
	Teusaquillo	99,20	96,60	99,70
	Subtotal	99,35	95,57	97,68
South-west	Bosa	98,80	96,10	99,20
	Kennedy	98,90	90,20	97,80
	Fontibón	98,60	92,80	97,50
	Puente Aranda	99,80	94,50	98,20
	Subtotal	99,03	93,40	98,18
Centre	Santa Fe	99,20	93,40	93,80
	San Cristóbal	96,40	85,00	90,90
	Los Mártires	99,40	94,20	98,10
	Antonio Nariño	99,70	96,70	97,30
	La Candelaria	100,00	100,00	96,60
	Subtotal	98,94	93,86	95,34
South	Usme	86,60	74,10	91,80
	Tunjuelito	99,40	93,60	96,20
	Rafael Uribe	98,70	88,40	95,50
	Ciudad Bolívar	96,30	76,70	88,00
	Sumapaz			
	Subtotal	95,25	83,20	92,88
	Bogotá	98,14	91,51	96,02

Source: DANE 1993 Census – Cited in HDB (2001)

3. Methodology

This chapter describes the main steps in the process of researching the operationalisation of vulnerability. The timeline that ideally runs through the research process articulates across three decisive points in time:

a) The first step is the construction of a model for the operationalisation of vulnerability that entails the formulation of the concept of 'life event' and the choice of the variables that allow operationalising the concept of vulnerability itself. This process will be described either as the construction of a 'vulnerability pattern' or, at times, as 'vulnerability mapping.' The latter term is used not because vulnerability was geographically mapped, but because the main statistical tool employed in the analysis - multiple correspondence analysis - produces factorial maps which can be used to construct conceptual maps.

b) The second step was the fieldwork period (1997-1998) during which data for the construction of vulnerability patterns was gathered.

c) The final step was the exploration of the associations and when possible causal relationships linking vulnerability patterns with other variables, among which assets play a key role.

The above division also forms the structure of the present chapter, which is divided into three broad sections. The first presents the conceptual reflections that eventually lead me to make specific methodological choices. In this respect the chapter operates as a liaison between the conceptual chapter 1 (conceptual framework and literature review) and chapters 4 and 5, which present the analysis of the data and the implications of the data for policy vis-à-vis other perspectives on vulnerability and the poverty dynamics.

Part two of this chapter describes the operative aspects related to the fieldwork undertaken, following a chronological approach from the beginning of the fieldwork to the analysis of the data. The rationale behind this approach is that all choices, such as between different sampling options, are closely linked to the research context and settings - the availability and physical accessibility of data, and the constraints of self-funded study.

Finally, part three presents the conceptual and methodological elements of the main method employed in performing vulnerability analysis on large samples, in this case using multivariate correspondence analysis with households as the unit of analysis.

Theoretical conclusions are never definitive and most of the time their most interesting aspect consists of their capacity to pave the way for new questions. In this regard it is useful to recall that the previous chapter left us with three main conceptual insights providing support for the academic relevance of the study of the operationalisation of vulnerability:

1. The literature review confirmed that the study of poverty dynamics is still open to new contributions.

2. Analysis of the empirical contributions to the definition of a vulnerability approach span from Chambers' (op.cit., 1989) initial insights to Moser (op.cit., 1998). These works represent a promising basis for further inquiry and often provide innovative elements and path-breaking reflections. However, partly due to the emergence of the sustainable livelihoods approach, these initial works can be re-conceived as an unfinished task.

3. The third point of departure is that the debate is still conceptually and methodologically relevant to the broad academic debate on social development and urban poverty, partly because a number of questions posed by early vulnerability studies are still unanswered, and partly because the academic relevance of understanding poverty dynamics has received a higher status thanks to the contribution of social risk analysis and management analysis. Studies of the role played by assets within the dynamics of poverty and also contributed to the reassessment of the significance of vulnerability, as has the continued struggle of policy-makers to find more comprehensive, effective, and user-friendly methodologies to analyze and create new policy insights both in general and for such specific groups as the chronically poor (Barrientos, op.cit., 2006).

The three points above summarise the conceptual legacy the present research has inherited from previous scholars. These contributions can be further specified by listing a

number of inspiring insights that were taken as reference points for the operationalisation of vulnerability:

1. The difference between vulnerability and poverty is a subject on which scholars have more than a conceptual hold but is also one for which less than a handful of methodological exist. Points (2) and (3) below list the two core differences between poverty - a condition - and vulnerability - a process. This difference is historically constructed; Rowentree's first attempts to measure poverty, including its conceptualisation and operationalisation, began a tradition that adopts an idea of poverty itself as a condition and, therefore, as something that is 'out there' as Ruggeri Laderchi, Saith, and Stewart have pointed out (2003). It can be objectively observed and, hence, measured.
2. The relationship of vulnerability with assets. Based on two decades of empirical evidence, this is the "stronghold" of social development thinking on vulnerability. It is founded on a tension between more people-centred and damage- and insurance-centred approaches.
3. The dynamic nature of vulnerability and its close relationship with the time variable. The first concept was clearly pointed out by Moser (1998) in her *World Development AVF* study. The search for the specific peculiarities of the dynamic nature of vulnerability is one of the tasks faced by this research. The analysis of previous case studies on the topic suggest that time is a constitutive dimension of vulnerability analysis, while 'time' as a variable, in its chronological sense, can be used to approximate aspects of vulnerability dynamics.
4. The existence of different asset profiles as an approximation to different poverty profiles. One key contribution of livelihoods-centred studies such as the vulnerability approach is that they result in an image of poverty as diversity. The poor are not all the same as they were thought to be in the conceptions of the sixties. Instead, individuals with different abilities and endowments face and respond to the universal task of finding a good life and well-being. The implications of human and poverty diversity should be

reflected within social science practice. In this case, a search within the results for insights regarding upwardly and downwardly poverty profiles and trends according to determined variables is necessary in order to assist the process of translating research results into social policy.

5. The relevance of vulnerability analysis in relation to micro-social analysis. Vulnerability analysis nowadays faces a problem of scale and constitutes a challenge to the scientific community achieving an up-scaling of concepts and methods from the micro level of individuals and households up to the meso level of city policies and the macro level of national policies and global processes. In recognising the relevance of the challenge, this research concentrates on a level where the concepts can be operationalised into a model, measured, and evaluated through the employment of such methods as interviews and other fieldwork strategies.
6. The advantage of categorising key assets (income, housing, health, education, socio-economic infrastructure, and social and kinship relations) as key entry points for both vulnerability analysis and a broader comprehension of people's livelihoods, compared to income-centred analysis.
7. The socio-economic and human-made (in the case of natural disasters) nature of shocks and hazards. Although it did not enter into the elaboration of the model used to operationalise vulnerability in this research, the relationship between macro and micro-processes is a key challenge for vulnerability analysis. Methodologically this research responded to this challenge through the analysis of the social, political, and economic aspects of national- and city-level contexts, as well as through a comparison between indicators identified within the latter analysis (chapter 2) and those of the research sample (first part of chapter 4).
8. The categorisation of a number of recurrent coping strategies analysed in relationship with key assets mentioned above. This work represents one of the core aspects of the analysis of the results presented in the second part of the research report beginning with chapter 4.

All these findings share a common trait: they do not provide any in-depth insight regarding the methodology to be adopted in order to carry out systematic vulnerability analysis. This holds with two partial exceptions. One is Moser's classification of assets and the related main coping strategies adopted by households (Moser, op.cit., 1996), while the other is Pryer's research in Bangladesh (op.cit., 2003), which however was published three years after the fieldwork of this research and hence was not taken on board in the current research.

It is important at this juncture to underline the main limitations of the present methodology, although more room is reserved to the discussion of this aspect in section 6.2 of the chapter dedicated to the conclusions of the research:

1. The focus on vulnerability mapping predominated over analysis of assets levels and profiles of the 903 households interviewed during an 11 month period between September 1997 and May 1998. Therefore the research provides a conceptual map of a number of "typical chains" linking up life events with their causes, consequences, and the strategies used by households to cope with, react to, recuperate from, and also prevent them. However due to the difficulty of quantitatively estimating assets the research does not provide a direct statistical analysis of the association between different household types and the most common vulnerability chains of cause-event-consequences and strategy.
2. The results are gender-biased because the fieldwork was carried out throughout the working week due to time restrictions imposed by the magnitude of the sampling, my role as a research assistant, and the independent nature of my research. I interviewed more women than men but although this introduces a gender bias by skewing it in favour of women's perception of household dynamics, this same bias adds value to the quality of the information collected because in Bogotá men are reluctant to talk about family issues and lack information on such issues as food consumption, spending or health services utilization.

3. The most important limitation is in terms of my capacity to understand the potential relationship between my initial thoughts and the contributions of numerous scholars that took me a good deal of time to fully penetrate, as well as my ability to foresee what results might have an application to policy. During the research design stage I focused too much on the operationalisation of the concept and what I now realise that I missed over the years was of much greater a magnitude and only very partially amended by more recent research. More systematic work on who 'looses' and who 'wins' was need and a lack of a clear understanding of upward and downward profiles were problematic. The fact of having missed, at least initially, the relevance of the 'chronic poverty' concept, and my incapacity to initially integrate research on the multi-dimensionality of poverty and on the concepts of human needs, capabilities, and well-being was also problematic.

Having made explicit these three core limitations, the contribution this research is those listed below. They may be thought of as the specific objectives of the research, although I have not adopted that terminology since this research is not hypothesis-based but rather takes a more constructivist approach to the generation of knowledge, assuming the presence of an initial key research question that is opened up in a number of specific tasks at the moment of being operationalised and that, most of all, tries to provide room and elasticity for the results themselves to feedback into the conceptual elaboration and conclusions of the work:

1. The introduction of the concept of 'life event' to overcome the weakness of the 'shock-stress' pair.
2. An analysis of existing definitions of vulnerability and the attempt to signal what would be entailed in pulling them together under a unique definition and an examination of different units of analysis across different levels of an ideal scale across which a unified vulnerability concept could be applied.
3. An attempt to present a new model of vulnerability concerning the social development tradition of analysis. This is based on a (formally) lineal

representation of vulnerability spread among four categories - life event, cause, consequence, and strategy - from which the vulnerability patterns or 'typical vulnerability chains' are constructed in order to realize a conceptual mapping of those patterns.

4. The mapping or identification of main hazards (causes and life events) and the qualitative estimation of the coping capacity of households through the analysis of consequences and strategies adopted in the face of critical life events.
5. An attempt to keep coherence with a main insight from Chambers concerning the poor's perception of the dynamics analysed, through the adoption of a methodology that employs as one of its core methods the semi-open interview through which the gathering of information on vulnerability is carried out by means of patterned life histories constructed on the basis of interviewees' recount of facts. By patterned life histories I here mean the use of a grid patterned according to four blocks corresponding to the four variables of the model: life events, consequences, strategies and causes.
6. The use of correspondence analysis to transform qualitative data into quantitative data through clustering and the subsequent re-interpretation of the result through a triangulation of qualitative, quantitative, and context-related data.

The following section introduces the genesis of the research question through a short exercise that provides a re-reading of the main insights from the conceptual chapter and the highlighting a number of conceptual implications that shaped the inception of the present research and that need to be explicitly analysed to explain why and how the research question took shape.

3.1 The Genesis of the Research Question

As introduced at the beginning of chapter 1, the main research question concerns the operationalisation of the concept of vulnerability: *Can the vulnerability approach be operationalised beyond the Asset Vulnerability Framework?*

The reason for using the word ‘approach’ instead of ‘concept’ is mainly historical. In the reviewed literature it can be seen that while the present research was being conducted more than one attempt to operationalise the concept of vulnerability had already taken place. They entail first of all Moser’s assets vulnerability framework (Moser 1998), already defined within this thesis as the most structured and, by the end of the 1990s, up-to-date attempt to operationalise vulnerability. In addition to this important work are the contributions of a number of scholars that explicitly worked on vulnerability; among them I discussed Blaikie (1994), Chambers (1989), Pelling (1997), Pryer (1989) and Rakodi (1999) as the most relevant. All of them used the concept of vulnerability as an important element informing their respective research interests and frameworks, whereas in the meantime the present research was still in the design stage.

All these works shared important ideas about the most relevant issues that should be pursued within development studies regarding what was being defined as a renewed poverty studies agenda that stressed the conceptual and policy relevance of studying poverty dynamics. It also took on board lessons from the social development studies tradition which privileged the point of view of people themselves. This resulted in a renewed understanding of the relationship between particular variables related to the household on the one hand and, on the other, the political economy that shapes broader social, political and economic contexts. That agenda identified three main challenges relating to researches conducting research using the household as a unit of analysis. Such studies did not manage to provide sufficiently robust insights regarding

- 1) The relationship between households and the process that take place at the macro level,
- 2) The nature of power relations and differential access to resources and control over them that are to be found within a given household; especially when gender and age are considered and, finally

3) The fact that there were reasons to complement the prevalent reading of poverty as a state or a condition with that of poverty as a process.⁹⁰ Such a perspective is based on the recognition of the technical limitations and many assumptions implied in the construction of poverty lines and implementations of measurement based on them (Greeley, 1994).

The contribution of these scholars to the vulnerability approach that was forming in the late 1990s has to also be framed within the context of another social development debate of that time. Before 1999, the vulnerability approach came to occupy for a short spell a promising role as an interpretative framework on the basis of which a new way of analyzing poverty facts could be explored and, possibly, put into a dialogue with traditional approaches and measurement; the latter mostly referred to as ‘monetary approaches to poverty’ (Ruggeri Laderchi, *op.cit.*, 2000). The vulnerability approach would connect those same poverty facts⁹¹ with variables regarding the way people cope with critical situations on the basis of their capacity and resources. As it was illustrated in the conceptual chapter, these variables were:

1) First of all people’s assets; following here Sen’s initial insights from his entitlement approach (*op.cit.*, 1981);

2) Second of all, following the elaborations put forward by Chambers (*op.cit.* 1989) and Swift (*op.cit.* 1989), a group of intangible variables such as claims; pointing to aspects that connect with the relational nature of poverty and,

3) Third of all, a group of variables that help describe the dynamic of vulnerability as a process and that made an important contribution to the setting up of the agenda of early vulnerability research.

This latter point makes reference to specific research questions related to aspects such as the sequencing and the timing as well as the magnitude of the impacts of vulnerability

⁹⁰ Longitudinal studies, also when carried applying non-contextual and quantitative methods such as household surveys, do offer a great added value towards the overcoming of these limitations because of the inclusion of the ‘time’ variable, that is of at least two points in time in the analysis, which is the key concept underlying what is usually defined as a process. Nonetheless, such studies are seldom implemented, especially in developing countries, due to the high cost they entail.

⁹¹ For example deprivation; measured as lack of income or spending capacity, or approximated through basic needs indicators such as low access to health care services, sewage or education

related shocks and, finally, the comparison of impacts across different population groups according to similar shocks' patterns.

In Latin America a concern for vulnerability came to the fore only after the year 2000, thanks to an initiative undertaken by ECLAC that, in a seminar held in Santiago de Chile in 2001, gathered a number of scholars who had been developing original reflections on Moser's work. As far as complementary areas of research are concerned, at the end of the nineties a limited amount of literature had been published on livelihoods and on social exclusion; these were however research themes that were gaining momentum within the debate on poverty and development at that time.

Recently, the work of the Chronic Poverty Research Centre (CPRC) contributed to a greater awareness of the importance of being able to think of what vulnerability entails for specific groups. Between 1996 and 2000, research on livelihoods and social exclusion also influenced my methodological reflections. This latter point particularly concerns the dilemma between whether or not including contextual and political variables with those empirically researched and, thus, including them as components of the vulnerability model. This was one of my concerns as the research was building to approach the fieldwork stage.

The distinction between contextual and non-contextual approaches to the study of poverty becomes a relevant one at this point in the reconstruction of the research design process. In fact, although this research shares a concern with the livelihood approach regarding the importance of the role played by contextual variables in the shaping of livelihoods trajectories (Bagchi et al., 1998), it also takes a clear conceptual distance from the latter on methodological grounds. As it was further justified on conceptual grounds in the literature review, the livelihoods approach is considered useful to understand the big picture and to explore households' and individual's trajectories at the meso and micro levels, but it falls short when it comes to defining a clear methodological proposal and, in this sense, the SLA does not differ much from a multi-sources-multi-method case study.

In terms of basic methodology, this work was part of a specific moment which saw a reformulation of the old quantitative vs. qualitative opposition put forward by Campbell & Holland (2005); poverty approaches can be divided into those that favour one or the other too. To this it should be added that the evaluation of a methodological approach does not end with the analysis of the type of methods but may be extended to the values and the epistemological perspective from which it approaches the unit of analysis as well as how it considers the interaction between the latter and other variables or dimensions. That is, how that methodological approach deals with what social sciences generally synthesise using concepts like ‘the influence of’ or ‘the relation with’ the social context. In social sciences this was long ago recognised as a key problem impinging onto the relationship between the agents and the structures or, from a more structural perspective, between micro and macro levels of social dynamics.

This way of reformulating the problem can be framed in terms of contextual vs. non-contextual analysis. Approaches that favour contextual analysis are not only interested in the relationship between the unit of analysis and its context, which may well be the case in non-contextual approaches, but make an explicit effort to include contextual and relational variables within their methodological construction. Among the approaches to poverty mentioned in this section, the livelihood approach, for instance, employs such an approach. The development of participatory methodologies and the greater role played by anthropologists and sociologists interested in social dynamics, within development and poverty studies also employ contextual analysis (Murray, 2001).

On the contrary, non-contextual approaches are more interested in the behaviour of specific variables or sub-sets of them. This is often the case with household surveys, which are an example non-contextual analysis, that is, they are mostly interested in the behaviour of such variables as income or consumption, without explicitly framing into the research design how these variables contextually relate to such other variables as macro-economic policies, environmental events, major or local economic downturns, changes in the processes regulating the access people have to different assets, such as those affecting health care costs, drug availability, old-age pensions and other subsidies, and so forth. This has nothing to do with the fact that the researcher may or may not be interested in the

relationship between the unit of analysis and the context but concerns the fact that the way research methods are built shapes what can be achieved in terms of knowledge.

Non-contextual analysis has the advantage of enabling the researcher to analyse a great number of variables and to manipulate them statistically with great possibilities for comparison in between different populations or within specific social groups. However, going back to national household surveys as an example of this type of approach, their goal is to analyse how income and people consumption behave as such or in relation with other sub-sets of variables such as social public spending. Most research on poverty lines from the 1980s and 1990s tend to overshadow the relationship among those variables, people's life cycle and the context that determine the structure of opportunities (Filgueira, op.cit. 2001) and tend to be non-contextual.

3.2 The Operationalisation of Vulnerability

This section illustrates the process of transforming vulnerability from a framework concept into an operative model. By 'framework concept' I mean a broad concept, useful to capture the dimensions of a social phenomenon or dynamic but still lacking a full operative definition and indicators but, even more than that, lacking a model that could be systematically used by others producing more in-depth knowledge about vulnerability and poverty as well as in formulating policy. Examples of this unclear use of terms in the development jargon are the concepts of empowerment, livelihood, impact, and participation, among others.

To provide a fairly workable example, in theoretical terms the situation is the same of a number of broad conceptual constructs that cannot be directly measured, for example, social status. Although vulnerability cannot be directly measured either, a researcher may use either one of two main options to accomplish the task of its indirect measurement. The first one is to break down the construct into directly measurable variables, such as income, educational level, or area of residence. Another approach consists of asking people about their perceptions of vulnerability, relying first on the common understanding we have of

social concepts and words in our social life and, second, on the fact that the observer may not be considered a biased subject but rather a privileged one due to her or his closeness and involvement with the specific social dynamic under study.⁹²

On the one hand, there is a need to maximize construct validity and, on the other, to incorporate the point of view of the observer, that is, people themselves as the participant-observers of their own life cycles and life dynamics.

3.2.1 The Concept of 'Life Event' within the Vulnerability Framework

As mentioned in the review of the literature, this research confronted an important conceptual contribution and several case-study insights on vulnerability. The two core concepts examined were those of *shocks* and *stress*, both proposed by Chambers (op.cit. 1989). "Vulnerability ... refers to exposure to contingencies⁹³ and stress, and difficulty in coping with them" (ibid: 1).

The pioneer reflection developed by Chambers can be rephrased in the following way. First, as a dynamic affecting people's livelihood, vulnerability is related to the presence of factors beyond people's control, factors that disrupt a pre-existing situation, generating crisis or worsening pre-existing crises. Second, vulnerability has an in-built time dimension, since what happened then or now can have long-term effects (which Chambers defines as stress). Third, vulnerability plays a key role in the construction of a sustainable livelihood, including the ability of individuals and households to avoid or escape from a situation of poverty. This, in turn, has a direct relationship with people's exposure to contingencies and, hence, with their capacity to cope with them. Therefore, vulnerability relates to the sustainability of people's livelihood due to both its impact and effects over time.

⁹² These two options reflect a much broader debate within social sciences, which has important methodological implications. Over the last twenty years the reflection of social sciences on its methods, after the emergence of the new paradigm of complexity in science, has been marked by the recognition of the end of the absolute validity old paradigms such as the positivist one, which dominated it particularly within sociology up to the end of the 1980s In order to operationalize the vulnerability variable this research tried to combine lessons from both approaches.

⁹³ In using the term 'contingencies' he is using a conceptual synonymous for shock, a term employed a couple of paragraphs before when he argues that "vulnerability (...) is not the same as poverty. It means not lack or want, but defencelessness, insecurity and exposure to risk, shocks and stress" (Chambers, 1989: 1)

In spite of being so rich in terms of their overall explanatory potential the concepts of shocks and stress require further operationalisation for a number of reasons. First of all, to think of an external factor that unleashes vulnerability, acting under the form of shocks and stress, introduces a sort of chronological point zero along an ideal time-line in the way vulnerability is conceptualised and understood. Second, 'stress' is a conceptually problematic term because it involves at least two dimensions related to the endurance of situations of psychological and material ill-being, constraint, and deprivation. This, without entering into the conceptual debate about these dimensions and their operationalisation or, possibly, even their measurement in terms of one indicator.

It suffices to say that just to summarise the whole lot of the above-mentioned dimensions presents too many difficulties. From the stabilization of the measurement across individuals the problem may increase when it comes to the recollection and standardization of data. Even the mere fact that both self-perception of stress, and the capacity to cope and react to it in terms of resilience sensibly vary from one person to another, all create methodological problems that should involve an inter-disciplinary approach. This would be even more complicated in the case of choosing the household as the unit of analysis. This psychological component is consciously left aside in this research in the sense that is considered but not scientifically touched upon; it remains a dimension that needs to be included in future vulnerability studies.

Now, going back to the concept of shock, albeit to consider a point zero in time is in operative terms both a functional approach and an acceptable compromise for policy, since policy interventions more often than not do require a baseline in order to focus their actions, in epistemological terms the same reasoning does not hold true because by accepting that assumption one should then also accept that vulnerability begins somewhere. Critical arguments traditionally put forward by the critique of traditional science about the way time and space are also relevant. They are dealt with within the treatment given to living systems or entropy by the Newtonian paradigm in physics and assert that there can always be a more complex explanation (Capra, 1996) or a further level of complexity from which one can broaden the understanding of systems' dynamics.

By the same token, there are higher levels of complexity in the strategies devised by low-income groups in order to face shocks and stress. They are not just reactions but, on the contrary, part of a planning for life (or a process of livelihood-building) which is not only an absolutely active process, strategically-driven and aimed at the achievement of different levels of social change within the local context, but also strongly dependent on both the context and the interactions unfolding over time in terms of the continuous complex feedback that the researcher finds when analysing units of analysis and in which what belongs to the context cannot be easily separated from the process

In order to overcome the limitations of the concepts of shocks and stress and, at the same time, preserve the key insights of Chambers, this research adopted the term 'life event' as a substitute for that of shock. The reason why is further explained below. The concept of stress was also operationalised in terms of consequences and strategies, that is, two variables that allow the expression of impacts over time in close relationship with people's process of livelihood-building. Let us begin with the description of the concept of life event.

Much of the material that will be examined in the following two chapters concerns things, facts, and happenings (let us call them 'facts and happenings' just for a few lines before defining them) showing that poor people produce social action aimed at the improvement of their living conditions and not only at reacting or coping with crisis, as some of the literature on vulnerability mainly presents (Moser, 1996). For instance, one of the most common strategies used by poor groups to face crisis is borrowing: they borrow money or utilise a network based on the moral economy of parental and kinship solidarity. This is not just something passive, a reaction or way to cope. In fact, taking up some debt is an action with a clear strategic orientation or aim and is used to maximise capabilities since it is something one does now to obtain a gain in the future, either in terms of her own functioning's or to protect and preserve them in the short term. For example, in order to allow a child to continue his or her study, or to pay for health insurance, or to build a better and larger house in order to be able to rent rooms at a later stage and thus generate more income.

In this sense, the action of taking up a debt, as well as hundreds of other actions, is not only something that happens to households and individuals and is not something that occurs only to them. Coping strategies also reflect that livelihood outcomes are actively sought in order to achieve a better quality of life, to fulfil needs, or to realise aspirations. Then, these outcomes are also something that is made to happen, in other words, any of them is an event in life. These events, which I will from now on define as life events, bear a strong relationship with three key dimensions: time, space, and context. The dynamics of poverty cannot be understood without incorporating them, although as in the case of vulnerability, the challenge is how to do it in methodological terms. Still, we can say that it is important to explore new paths in terms of knowledge with the aim to progress to a point when this knowledge can be sufficiently tested to be effectively used in policy.

From all these considerations, this research adopted the term ‘life event’ instead of ‘shock’. The concept of life event adds an active component to the vulnerability framework compared to the point to which it was crafted by Moser’s pioneering work, and this is a fundamental conceptual step in order to understand its dynamic. Furthermore, it represents an advance from a conceptual point of view with respect to any previous elaboration about vulnerability which, although arguing for the inclusion of the perspective of the poor as a necessary step towards its understanding, does not succeed in making it a reality.

The idea supporting what has just been said came out during the piloting of the questionnaire in August 1997 when after conducting more than 150 interviews in low-income areas of Bogotá, it resulted very clearly that to the question “During the last 5 years, what has affected you or your household?”⁹⁴. Members of the interviewed households reported a considerable amount of life events in which there either was no negative element at all (viz. they were positive life events), or where a negative component was confined to the cause or the consequence of the event itself, which was still on the whole positive (e.g. getting a new job or acquiring new tools for a productive activity). This not only led to a rephrasing of the initial question, but also spurred a reflection about

⁹⁴ Translated from Spanish: “¿En los últimos 5 años hubo eventos importantes que le afectaron a usted o a otro miembro del hogar o al hogar en general?”

how our research and personal prejudice or pre-formatted mental schemes may often prevent us from reaching at least a better and broader understanding.

Finally, the concept of 'life event' allows capturing one further aspect of vulnerability, that is, its temporal dimension. Life events such as the loss of a beloved one, or living through the long unfolding of a serious illness, or continuous indebtedness not only represent shocks and stresses for the household, but have a meaning throughout and over time too. Therefore, they are a snapshot of a more complex dynamic in which the same life event becomes the cause of others which, in turn, may become causes, or a consequence or even a strategy in relation to the unfolding of other life events within the life-cycle.

In this sense, this work certainly has a debt to Robert Chambers' work, but it also goes beyond its elaboration by introducing the concept of 'life event' that allows for the inclusion of the 'positive-active' component in the methodological structure built for the understanding of vulnerability,.

3.2.2 Assets and Resources: Risk and Losses

What is at stake when we are talking about vulnerability? In broad terms the answer is the sustainability of people's livelihood and through people's functionings also the breadth of their freedom to achieve what they have reasons to value. But having said this is neither sufficient to complete the operationalisation of the concept nor to make policy-oriented operative choices.

The literature on poverty dynamics, a heading under which several contributions of the specific literatures on vulnerability, livelihoods, and capacities and capabilities converge, has clearly shown the multiple relations existing between assets and resources on the one hand, and – in decreasing order of complexity – human development, poverty, and vulnerability on the other.

The key concept that represents a common thread among all these approaches is that of tangible or intangible assets or resources without which there cannot be achievements in terms of human needs, quality of life, well-being, down to basic needs satisfaction. Regardless of how one defines people's resources, the point is that an asset or a resource can be used, exchanged, or spent. Here there is a strong relationship with Sen's treatment of endowments and functioning as the elements that lead to a capability approach to the understanding of poverty not as an absolute concept but as a relational and therefore dynamic condition. Within vulnerability studies, the evidence points to the fact that assets and resources are strictly linked to people's capacity to cope with life events and used to avoid a loss of capabilities to function. The difference with Moser is that she uses the term assets to indicate not only proper assets but also strategies.

As pointed out in the literature review, the main difference between the livelihoods and vulnerability frameworks lays in the operative representation of social dynamic. Whereas the first "does not attempt to provide an exact representation of reality" (DFID, 1999:3), the second does describe how the vulnerability context (to which the livelihoods framework refers) operates within the social dynamic related to the use and combination of assets. A livelihood framework serves the purpose of studying those structures and processes that condition people's access to assets. A vulnerability framework starts from the consideration of the existence of:

- a) Hazards (the threat, the outcome of which is produced by those structures and processes under scrutiny within a livelihood approach).
- b) Risk (the probability attached to the likelihood that a hazard will affect the unit of analysis).
- c) Sensitivity (the exposure to those hazards related to the capacity to avoid the consequences).
- d) Resilience (the capacity and effectiveness of recovery from a life event).

The literature on engineering disasters tells us that vulnerability is the product of the magnitude of the hazard and of the exposure to it (Cardona et. al, 2002). But, if for a building exposed to an earthquake, vulnerability can be calculated and represented by a

value on a certain scale, the complexity of people's livelihood itself represent a formidable obstacle to the performance of such a task.

3.2.3 Patterns of Vulnerability: Life Events, Causes, Consequences, and Strategies

The contributions of scholars mentioned in the literature review led to a new working definition of vulnerability as a function of the capacity to foresee, resist, react to, recover from, and cope with life events implying a loss of tangible and/or intangible assets. This has to be taken on board considering that it is restrained to social vulnerability and can be criticised on the same grounds as others definitions analysed in chapter 1. Thus, more than a well tested definition it can also be accepted as a working hypothesis. If one breaks it down into its different components what follows is a detailed list regarding the issues the research had to work out in its inception from a methodological point of view.

Vulnerability depends on risk and hazard. Thus, risk and hazard have to be identified within the definition itself: the risk component relates to a multi-layered capacity to broadly face life events, whereas life events represent the different types of hazards.

Risk as a function of people's capacity: This capacity can be high or low according to a set of factors, which were not under direct scrutiny during the research. Starting from the broader picture, there is a logical relationship between vulnerability and what ECLAC defined as the structure of opportunities (the joint effect on people's livelihood of the way the market, the state, and civil society are structured and perform their functions within a given social context), which is not conceptually far from what DFID defined as the vulnerability context in its livelihood approach. At a more specific level, that of the household, this capacity depends on what Bebbington (1999) defined as capitals and Chambers (1989) and Moser, after him (1996), as assets. At the individual level there is Sen's elaboration about functionings and capabilities (1985 and 1990).

According to what is presented in the literature review, there are two key points to underline here, both having a direct methodological implication. They are one of the outcomes of the extensive mass of empirical evidence and theoretical elaboration produced

by the authors mentioned above and those that can be considered as close or even belonging to their schools of research. First, privileging Sen's terminology, the literature converges on one point, the importance of endowments (a set of resources or assets) as a key element that allows people to face vulnerability (for what directly concerns this research), to construct a sustainable livelihood or to direct their own lives towards higher levels of human development and well-being. Thus, the risk component of vulnerability (and the exposure to it) depends on the capability set of individuals and, in turn of households.⁹⁵ The second key contribution of that literature is that the level of capacity of low-income people is low indeed. In methodological terms this means that one can take it as a fairly constant variable and consider it as such for the purpose of sampling. In operative terms, this has two important implications. On the one hand, one can assume low capacity when considering the risk component of vulnerability and concentrate on hazard (life events) and, on the other, one can fairly legitimately use this assumption to study vulnerability by sampling low-income groups.

Life event as hazard: Around the core concept of life event, vulnerability was modelled using four variables that also allow for the inclusion of the time variable.

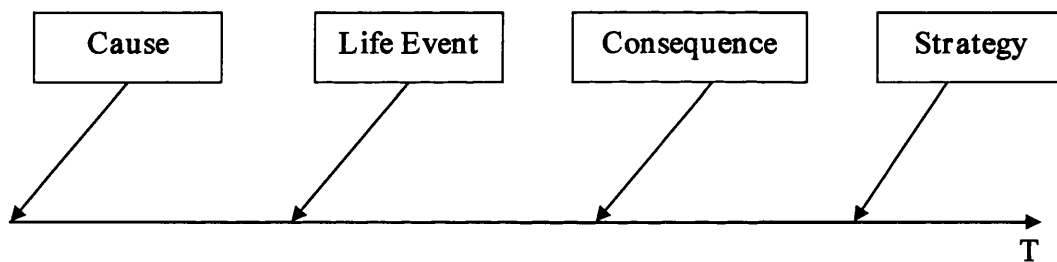
- Life event
- Cause of a life event
- Consequence of a life event
- Strategies used to cope or react to a life event

Life events represent hazard but, as mentioned above, they allow for the examination of some representative ways of how low-income groups pursue sustainable livelihood because, as it will be illustrated in the presentation of the results, many life events relate to positive actions.

⁹⁵ It cannot be assumed that the relationship between individual and household well-being is neither direct nor straightforward, as shown by the literature on gender, for instance by the work of Chant (1991) and Beall (1993). It is rather built within complex webs of power relations and differential access to resource command, shaped by culture, tradition and the same political economy of gender, which is changing according to specific socio-economic context in spite of some broad convergence in findings across countries.

Causes and consequences of life events represent different dimensions of vulnerability. The most straightforward to illustrate is the causal one, in spite of the fact that it is in a certain way more an ideal type than something that can be found in social reality. This conceptual modelling, as figure 2 illustrates below, may serve the purpose of establishing lineal chains of causation within the mapping of vulnerability. There is a life event that the interviewee chooses to put at the centre of his or her own reconstruction of that part of his or her household life history. Then it follows the cause he or she directly attributes as the origin of the life event and, of the same token, the consequence. That is, the description of what those two events chronologically ordered in a time sequence produced. Of course, a lineal interpretation of the relationship existing among these four factors is but one of several possible modelling.

Figure 2 - Lineal representation of vulnerability

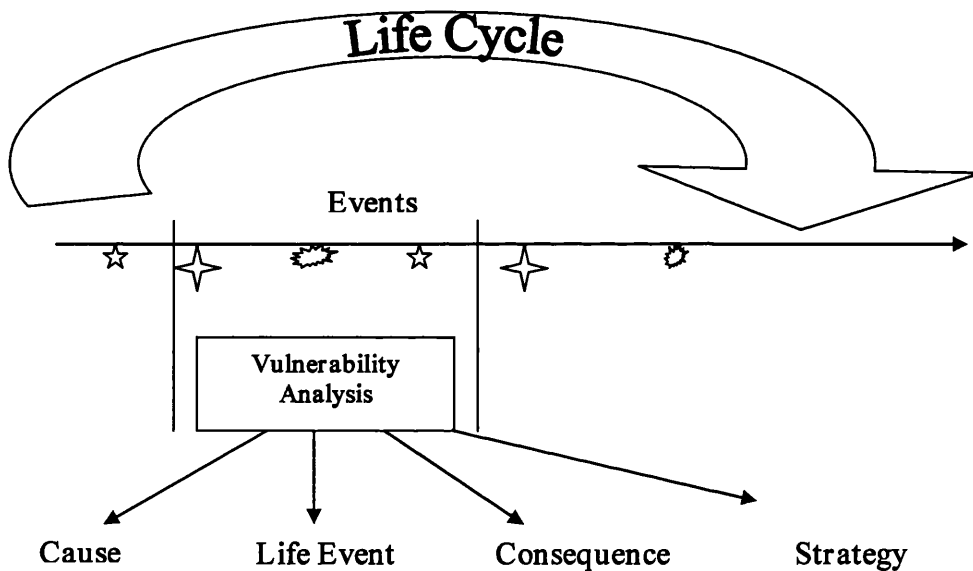


In reality things are much more complex than their representation on a time line as a chain of events causally related to one another. As figure 3 sketches out what is presented are just things that happen along people's life cycle. What causes what event or what is truly what in this categorisation, whether a cause, a life event (as the articulating point in people's account), a consequence of that life event or even a strategy used in the face of it or its consequences, eventually depends either on what people decide to stress or on what the researcher chooses as a focus of his or her research.

In both cases it seems there are specific conditions attached to the segment of the life cycle in which the interview is actually realised that determine, for each person

interviewed in representation of his or her household, the parameters under which the evaluation of what happened is carried out. In other words, first there is an interaction among the interviewer and the interviewee in which the latter selects a number of life events he or she considers as important. Only afterwards a further question is asked by the interviewer, which eventually is what shapes the temporality around the initial life event, asking for the cause of it, the consequences unleashed from it and, finally, the strategy (or strategies) the household used to face those consequences.

Figure 3 – Life events and the life cycle



In fact, a second reading of causes and consequences leads to the fact that they are themselves life events. Then, we enter the much more complex domain of time circularity, where not only are there sequences or chains of events (whether one calls them cause, life event, or consequence), but where even the same item such as ‘borrowing money’ or ‘losing one’s job’ can be found as a category under any of the three variables considered. The fact of borrowing money can be the main life event, caused let us say by the birth of a child or some kind of loss of income or an illness, but it may well be a cause of another

kind of life event, such as 'economic difficulties within the household'. Of the same token, it can be a consequence, when borrowing money is mentioned as the consequence of the economic difficulties. In this case, as it will be illustrated, complexity grows even further because to borrow money in order to face an event of economic difficulty is in itself also a strategy to cope with a previous life event.

Once this conceptual framework for the methodology was structured, the research strategy was planned accordingly. This meant taking a decision among different possible directions for the subsequent stages of the research itself. They are resumed in the following four points:

- 1) Deciding between a focus on hazard or on risk: The main output of this research was going to be a mapping of life events, that is, of the hazard component of the vulnerability equation. The mapping exercise would involve the causes of life events, as well as the consequences and strategies adopted by households in the face of them. Therefore, it can be said that at the inception of fieldwork this research was going to be primarily focused on household coping strategies in the face of crisis.
- 2) Pushing vulnerability beyond Moser's work: The difference with Moser's "confronting crisis" work, already highlighted in the literature review, consisted of:
 - a) The inclusion of positive life events within the framework to explore capacity and capability-building processes as well as the implications of different sorts of investments into productive or non-productive assets and resources.
 - b) The operationalisation of vulnerability with the separate analysis of the hazard component through life events and that of the risk component analysed as a by-product of the research results.
- 3) Structuring a time-line as a research tool: The decision to make vulnerability mapping the centre of the research implied leaving the problem of its inner time circularity to the analysis of the results. In fact, it was decided to privilege (in technical, not interpretative, terms) a linear structure in the time structure of vulnerability. Asking household members first for the life event, after going back in time and asking for the cause of it, and finally for the consequence in the third

place and eventually for the strategy used to face the previous chain (cause-life event-consequence) as the fourth step.

- 4) Using patterned-life histories to plot vulnerability: A specific section of the questionnaire used for the interview was dedicated to vulnerability. The section was structured as a patterned life history according to the four variables in which vulnerability was previously divided. Interviewed members of households were asked about the most important life events that occurred during the past 5 years within their household. No limit was imposed to the number of causes, consequences, and strategies related to each life event recalled by the interviewee, however they were ordered from the top to the bottom of the grid (see figure 3) in order to allow a methodological manipulation during the data analysis. This means, as it will be later illustrated, that this kind of methodology would lead to the recollection of a number of items under each of the four variables: life events, causes, consequences, and strategy. Under the latter three, in theory, there could have been more than one item for each life event. This structuring of the questionnaire allowed for a number of useful options in terms of data analysis. First, to be able to combine similar items into clusters; second, to use plotting methods such as that that was eventually employed, the analysis of multiple correspondences and, third, to work only with primary relations as was done later, that is on each life event and to the primary cause, consequence, and strategy attached or linked to it by the interviewee his- or herself.

Before presenting the details of how results were processed, the chapter continues with an account of the empirical work carried out in Bogotá, starting from the sampling and ending with the analysis of the data and main results.

3.3 Conceptual Considerations about the Pre-Selection and Sampling Frame

By the time the revision of the Colombian literature on poverty was completed (see chapter 2), it had already been identified where low-income groups concentrate in Bogotá. This information was used to select a sampling area with a high degree of homogeneity in terms of the indicators used in Colombia to measure poverty.

It was not possible to utilise any data set reflecting at least some aspects of the proposed conceptual framework of vulnerability since in Colombia there were no data gathered in relation to this theme prior to this research. Therefore, the search for a sound sampling frame concentrated on the poor as the social group that presented the best overlapping with the conceptual background of the research and, at the same time, offered the best chances of describing the dynamic of vulnerability. It is important to note that vulnerability does not just affect low-income groups because material or/and intangible assets do not only determine the chances to build a livelihood for the poor but for everybody. Anyone is to some degree exposed to the risk of losing them, however, the literature produced so far on the argument clearly illustrates that the poor are those who are the most affected by its consequences (Blaikie et al., 1994; Chambers, 1989; Moser, 1998).

3.3.1 Pre-Selection and Definition of the Sampling Frame: Analysis of Alternatives

Bogotá does offer the opportunity to carry out sound statistical work in terms of data availability, institutional capacity and infrastructure. This is the reason why a series of low-cost options implying rapid access to the field and to the social groups of interest were examined but then discarded.

The study of a mapping of the *barrios* was discarded because, in spite of being a valid method when the researcher has to carry out a rapid appraisal or is placed in a rural context with no pre-existing data, it is highly biased towards perception of both the researcher and the community about the intensity of the phenomenon (poverty in this case) and, as a consequence, highly imprecise. In this regard, it has to be considered that the area to be sampled was a much extended one, encompassing the whole south of the city. This would have required an enormously time consuming amount of work to acquaint myself with the zone that, it was deemed, could be better used. Most of all, this method implied a limitation in producing truly representative results in statistical terms and, therefore, it was discarded.

The utilisation of voter registers or telephone directories both presented a serious problem. The first one for political reasons originating in Colombian warfare that makes it extremely complicated to get access to voters registers, and also for the misrepresentation of the population biased by the lower participation of women and, in general, by the low level of participation to local election that averages 45%. The second option was discarded because of the under-representation of the population of interest implied by its utilisation. Many low-income *barrios* have just one telephone located most of the time in a shop (*tienda*). Data on telephone contracts, available at the local telephone company [the *Empresa de Teléfonos de Bogotá* (ETB)], were up-dated only to 1995 and offered a sample frame made up by 1,471,395 users, in turn made up of by a high percentage of high-income households, businesses, and companies (DAPD, 1997). For these reasons this option was discarded too.

Finally, the records of the implementing SISBEN, the system created by the local National Planning Department (DNP) to identify the beneficiaries of social programmes, were still at an early stage of implementation and, principally, affected by a strong debate on its methodology (Jaramillo, 1997a, Sarmiento, 1996). It was thought then best not to rely on it as a basis for sampling.

Having to maximise scarce resources, the first step was to identify the area of greatest poverty concentration in Bogotá, and in order to do so, I had to look for secondary data by locality, the smallest administrative unit from which data were gathered at the time of fieldwork. The type of data I sought to realize a pre-sampling work aimed at the geographical identification of poor or low-income households. Geographically I tried to look for areas where data relating to those poverty indicators had been consolidated by sound research: in Colombia the consumption-based poverty line and the UBN index were the data available in 1997 that responded to those indications. These, as Boltvinik (1991) points out, are the two methods used in Latin American to measure incidence of poverty.

a. Income-based data and poverty line

Data on income or on its estimators such as consumption have been gathered in Colombia by the National Household Survey⁹⁶ since 1984, as Muñoz (1991) specifies in a paper on poverty in thirteen Colombian cities analysing the poverty line of 1985. However, at the time of the fieldwork (1997-8) this poverty line was calculated using a methodology that employed a sampling procedure that was representative at the city level only of cities on the whole but not of smaller geographical units such as localities or smaller ones.

This meant that for Bogotá it was not possible to establish the poverty line for single localities, that is, the level of desegregation needed to accomplish the above objective of identifying the highest geographical concentration of poverty in Bogotá. This became possible with the Quality of Life Survey⁹⁷ of 1997 and later on, thanks to the modification of the methodology of the same National Household Survey, but these data were not available when the fieldwork was carried out. According to the above study 35.6% of people out of 3,067,089 and 38.4% of households were under the poverty line in Bogotá in 1985.

At the beginning of 1997, the *Departamento Administrativo de Planeación Distrital*⁹⁸ (DAPD) published a comprehensive compilation of statistical data on Bogotá (DAPD, 1997) as a step in the construction of the District Statistical Information System,⁹⁹ the aim of which was to provide standardized and validated information as a tool for the different institutional bodies of the city government and administration. Based on the Poverty and Quality of Life Survey of 1993 carried out by DANE, the study provided a desegregation of income per capita by locality. Considering the great difficulty of accessing data sets with the required level of desegregation, income was then considered as a fair proxy for poverty, also taking into account that it was going to be cross-checked against UBN values by locality, which is a complementary approximation to poverty measurement based on a wider conceptualization of poverty centred on human needs satisfaction.

⁹⁶ In Spanish, *Encuesta de ingresos y gastos*.

⁹⁷ In Spanish, *Encuesta de Calidad de Vida*.

⁹⁸ The Capital District Planning Department

⁹⁹ *Sistema de Información Estadística Distrital* in the Colombian literature in Spanish.

b. Unmet Basic Needs data and poverty line

The other available data set was the 1993 Census carried out by DANE, from which the calculation of UBN by localities was quite straightforward to calculate (Molina, 1996), once the variables of interest were selected. UBN are measured in Colombia on the basis of 5 indicators reflecting the provision of goods and services that are considered as fundamental for household subsistence (DANE, 1987; 1996). These are the following:

1) *Inadequate housing*: reflects housing deficiencies in relation to the material conditions of the house. Households are classified as having inadequate housing if they live in a mobile house, natural refuge or shelter, and if the house has no walls. As a sub-set criterion, any urban settlement is considered as having an unmet basic need whether the household dwells in a house with no floor or whose walls are made by such precarious materials as wood, cane, and a sort of pressed carton box with some cement coating called *bahareque*.

2) *Inadequate water and sanitation services*. This basic need is assessed on the basis of a different criterion according to an urban-rural divide. In urban areas households having both a regular connection to an aqueduct for water provision and a sanitary connected to sewage are considered as having this need met. In rural areas a more elastic criteria is applied and those households that benefit from one of the two services are considered meeting their needs for basic services provision.

3) *Critical overcrowding*. Households are considered as living in such a situation when they average more than 3 people who sleep in the same room; the definition of room includes bedrooms, living, and dining rooms and excludes the kitchen.

4) *High economic dependency rate*. This indicator is considered to act as a proxy for income. Those households having more than 3 dependant individuals for each working one and in which the head of the household simultaneously has less than 3 years of completed schooling are considered to have unmet basic needs.

5) *Formal education for children*. Those households having at least one child, who is also a relative of the head of household and, at the same time, is out of school, are considered as having an unmet basic need.

The assumption of DANE behind the choice of these 5 basic needs is that they reflect different dimensions of human needs (implying a wide range of them) and, therefore, that they are good proxies for the identification of poverty. Traditionally, the census in Colombia does not gather data on income since its declaration is considered unreliable. Therefore, in order to assess the validity of the 5 indicators of UBN, first employed in a study on poverty in Bogotá (DANE, 1987), DANE built similar indicators using variables contained in the national enquiries on 'Income and Spending', related to the years 1984-85; 'Alimentation and Nutrition' which was carried out in 1981; and the 'Household Study - Stage No. 53' of 1986 (all cited in DANE, 1987:13) obtaining very similar universes of poor population than those identified through the census. In order to further support the validity of the 5 UBN indicators as tools capable of truly identify poor groups, DANE measured the level of association between those indicators built over the data sets of the above mentioned studies and other significant variables selected from the 1985 census. These were those widely recognised as positively associated with poverty, such as infant mortality, low health care provision and low coverage in electricity, among others. The result was consistent with the hypothesis since DANE found high levels of association between these variables and the 5 UBN indicators for the same sampled population.

3.3.2 The Pre-Sampling Simple Index: Mapping Poverty to Focus the Fieldwork

These two indicators (income and UBN) were thus used to build a simple index according to the following steps. The mean value for the city was considered as equal to 100 and the specific value of each locality, both for income and UBN, was taken to calculate what percentage it represented compared to the mean value.

For instance, considering *Ciudad Bolívar*, the locality with the highest incidence of poverty, the UBN index calculated adopting the household as units of analysis gives 38.65

households under the poverty line, that is, households with 1 or more unmet basic needs. Since the average for Bogotá is 12.97 the simple index tells that this locality has an incidence of poverty by UBN 284% greater than the mean value for the whole city. The same calculation can be repeated for the income data set. Table 3.1 presents the values of the two indexes for UBN and per capita income by locality.

By plotting the values on a Cartesian plan using two different scales on the two different axes it is possible to identify two broad clusters of localities. The first one corresponds to the southern localities of Bogotá that from west to east include Bosa, Ciudad Bolívar, Tunjuelito, Rafael Uribe, Usme, and San Cristóbal. The second one goes from north to south and includes the localities of Suba, Engativá, Fontibón, and Kennedy (on the western border) and Puente Aranda, Los Mártires, and Barrios Unidos (towards the centre), where the industrial zone is mostly located (see map 4).

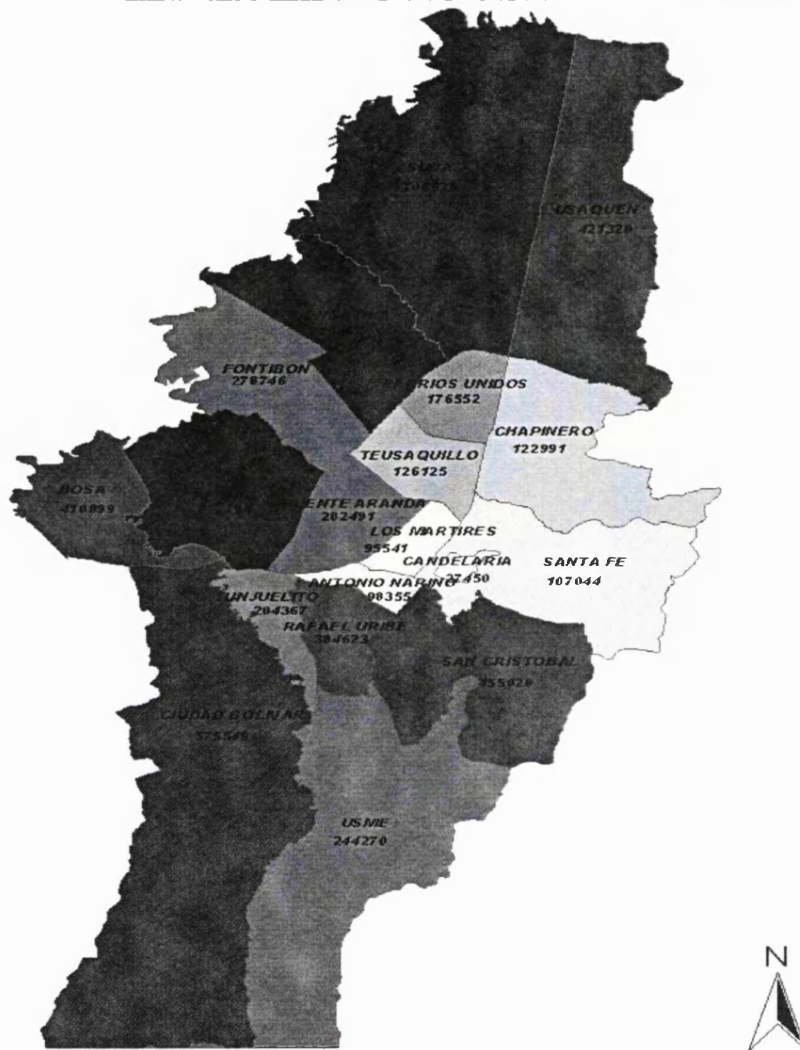
01 Usaquén	83.88	160.73
02 Chapinero	17.81	218.25
03 Santa Fe	146.93	97.36
04 San Cristóbal	210.80	62.72
05 Usme	152.99	61.69
06 Tunjuelito	100.38	78.08
07 Bosa	136.51	71.85
08 Kennedy **	63.79	91.64
09 Fontibón	89.74	93.83
10 Engativá	76.22	86.24
11 Suba	83.14	103.30
12 Barrios Unidos	48.01	110.08
13 Teusaquillo	08.00	150.19
14 Los Mártires	88.50	102.05
15 Antonio Naríño	52.99	106.55
16 Puente Aranda	42.65	82.26
17 Candelaria	125.64	92.09
18 Rafael Uribe	126.34	73.03
19 Ciudad Bolívar	283.60	56.04
100.00 = City mean value	100.00 = 12.97	100.00 = \$1.556.541

Source: DAPD (1997)

*Selected localities are highlighted with a darker background colour.

** Kennedy was later included in the above groups because as a huge locality of more than 1 million of residents its southern part presents features that are very similar to those of the limiting localities of Bosa, Ciudad Bolívar and Tunjuelito.

Map 4 - Bogotá population by locality in 1993



The first cluster has a high incidence of low-income households and a high level of UBN. The second cluster repeats the feature of a generalised low level of income but presents levels of UBN quite close to the city average.

The specific feature of these two clusters roughly corresponds to two different poverty profiles (table 3.2) as they are described by Fresneda (1991) in one of the few structured works produced about this topic in Colombia. The first cluster contains those localities where poverty is defined as structural in Colombia, that is, where high levels of informality and low asset ownership prevail together with low educational achievement,

large households in the early stage of their life cycle with young children, and high rates of economic dependency as well as scarce inter-generational social mobility.

The second cluster comprises on the one hand all the localities of Kennedy, Fontibón, Engativá, and Puente Aranda and, on the other, a number of localities with a more mixed poverty profile - Barrios Unidos and Los Mártires. The cluster still presents a low level of income but much closer to the city average than that of the localities of the first cluster which barely overcome the threshold of 70% of the city income average. The great difference is the level of UBN, which is halved or even reduced to one third or less of that of the localities of the first cluster.

There are several main factors to be considered in this second cluster. Many of these localities have a much longer history than those of the southern border of the city in spite of the fact that they also have some newer areas where features of the first cluster can be also found. That is to say that one factor is the difference in the life cycle of the households, with the second cluster presenting a much higher percentage of households that migrated long ago to Bogotá and that, after overcoming the early stage of family formation have settled in barrios where the achievement of a good provision of basic services was a struggle of the past and where they managed to improve their housing over the years.

A second factor, still related to the life cycle, is that these households have turned their large size from a burden into a resource once children have grown up and informal systems of insurance against risk have granted them a greater degree of security. Finally, a third factor hitting different types of household with different degrees of depth is the economic crisis related to structural adjustment and sudden economic up-turn (Ghai, 1991), which not only lowered the income level on a widespread basis, but also generated a 'new poverty' phenomenon among those living in the oldest barrios of these localities (generally but not always those closer to the centre of the city) who fell into income poverty from a situation where they had low pay but relatively secure jobs in factories or other industry-related firms, as well as in the retail and trade sectors or even in the lower levels of State-run or public companies and institutions (de Haan, 2005).

All factors described above contribute to conform a poverty profile where, according to the UBN approach, housing, schooling, overcrowding, dependency rate, and public services coverage are fairly well solved, whereas poverty persists when income generation and, in turn, well-being are considered.

Table 3.2 - Clusters of localities for the sampling frame and associated typology of poverty

Cluster 1 - Structural poverty		Cluster 2 - Recent poverty	
Ciudad Bolívar	Tunjuelito	Fontibón	Barrios Unidos
Usme	Kennedy	Engativá	Los Mártires
Bosa	Rafael Uribe	Puente Aranda	
San Cristóbal			

In spite of the many interesting implications presented by the second cluster, it was decided to concentrate the fieldwork on the first one due three considerations:

1) Its degree of homogeneity in terms of low level of income and high level of UBN, confirmed also by the examination of the socio-economic stratification, by which in these localities 90% of households belong to level 1 and 2. This was considered a very important feature when thinking of a sampling process with some degree of sampling error due to financial constraints that limited the number of interviews that would have been realized.

2) Second, the idea of a two-stage sample began to gain at that time a certain favour among the different possible options, because by using the cluster used by the census (called sectors and consisting in a cluster of barrios) it was then possible to select those with a low percentage of households with UBN and discard them thus obtaining an even more homogenous sampling frame.

3) The third factor is perhaps the most important. The population target of the research was low-income groups and the dynamic of vulnerability that affects them, as well as, as a second-order objective, their access to health services. All these features were much more likely to be consistently found in the first cluster rather than in the second one.

3.4 The Sampling Process

After determining the localities where the fieldwork was going to be carried out, the sampling frame was completed by adding the locality of Kennedy to cluster 1. The reason is that Kennedy is as a very large locality, actually a real city in itself¹⁰⁰ of roughly 1 million residents. Its southern part presents features that are very similar to those of the limiting localities of Bosa, Ciudad Bolívar, and Tunjuelito in terms of its poverty profile. Thus it was decided to include it within the sampling frame to widen and complete a sampling process embracing the ideal whole southern belt of the city.

The sampling process began by gaining access to the data base of the 1993 Census of DANE and proceeding with the selection of a two-stage sample. Different trials were carried out to determine an acceptable sampling error in relation to an expected magnitude of the sample, which was reckoned (according to the financial and time resources), had to range from 700 to 1200.

This process culminated with the decision to employ a sampling error of 10% because the cost of reducing it to 5% was overwhelming and a sample of 900 interviews was considered a good compromise, once one considers that there could have been no more than 90 interviews out of 900 that would hit non-poor households. In the first stage, where the sampling unit was the census unit, the sampling process employed a systematic sample method with a sampling error of 10%, obtaining a sample of 36 Primary Sample Units (PSU) out of the initial 758. In the second stage, using households with at least 1 unmet basic need as a sampling unit, a proportional sampling method produced a final sample of 936 households disaggregated according to what appears in table 3.3.

¹⁰⁰ In fact, its extended name is *Ciudad Kennedy* (Kennedy City). In 1961, in the occasion of the visit of President John F. Kennedy to Colombia, the then Colombian President Alberto Lleras Camargo launched an ambitious housing programme called *Techo* (Roof), based on the construction of huge housing blocks with a capacity ranging from 500 to 1.500 apartments grouped in multi-familial buildings. When Kennedy was killed in 1963 the same residents decided to dedicate the original *barrios* to him and changed the name of *Techo* to that of *Ciudad Kennedy*. Today Kennedy extends over 2.828 ha. , and has a population of 767.633 according to the 1993 Census of DANE, which today borders the figure of 1 million, according to the projections made from the same census.

Table 3.3 - Final sample by census unit, locality, number of interviews and map number of DANE			
Sector of the census	Locality	Number of households to be sampled	Number of the map from DANE
1105	San Cristóbal	4	44
1201	Antonio Nariño	16	38
1304	San Cristóbal	43	44
1308	San Cristóbal	20	44
1314	San Cristóbal	12	44
1321	San Cristóbal	22	44
1327	San Cristóbal	16	44
1401	Rafael Uribe	23	38
1408	San Cristóbal	14	44
2104**	Rafael Uribe	24	38
2205	Rafael Uribe	23	37
2307	Rafael Uribe	30	37
2411	Tunjelito	10	37
2417	Ciudad Bolívar	24	38
2421	Ciudad Bolívar	44	38
2502	Ciudad Bolívar	20	38
2505	Rafael Uribe	17	44
2510	Rafael Uribe	42	43
2516	Ciudad Bolívar	15	43
2519	Ciudad Bolívar	37	43
2526	Rafael Uribe	24	43 and 44
2530	Ciudad Bolívar	10	46
2535	Rafael Uribe	38	44
2537	Rafael Uribe	52	44
2543	Usme	29	50
2550	Usme	18	51
2559	Ciudad Bolívar	19	43
2567	Rafael Uribe	6	43
4521	Bosa	62	30
4524	Bosa	20	29
4526	Bosa	42	29
4528	Bosa	63	29
4529	Bosa	23	29
4533	Kennedy	42	30
4535	Kennedy	16	25
4539	Kennedy	16	25
TOTAL		936	

3.5 Qualitative Fieldwork Previous to the Interviews Stage

Prior to carrying out the interviews and together with the revision of the relevant literature, qualitative fieldwork was undertaken realizing 25 semi-open totally random interviews, in a very low-income barrio called *Egypto* on the outskirts of the city centre right below the mountains that border the city, a settlement built on very steep slopes with very poor housing and infrastructure, where residents belong to the 1st and 2nd quintile of the income distribution. The aim of these interviews was to test the perception low-income households had of the issue the research wanted to explore, as well as the kind of questions

posed, and the way they were understood to eventually make a better questionnaire reducing as far as possible non-sampling errors. The interview format is translated in annex

1. The topics, systematically covered in the same order, were:

1. Household structure. Interviewees were asked about the household composition, and the relationships between members. More specific questions were asked when it was needed to gather more in-depth insights about migration and its timing.
2. Socio-economic indicators related to education, health insurance and income.
3. The use of health services which had a greater importance for the research focus the thesis had in its beginning, including the access to preventive health care programmes, the use of hospitals, health centres, and private doctors. This section was actually articulated across three different sections with specific questions for each of the latter three aspects.
4. The knowledge household has of SISBEN.
5. The patterned vulnerability section gathered information about life events, consequences, strategies, and their causes; the latter always at the end not to arouse emotional reactions in the face of intensely remembered life events.
6. A section on people's evaluation regards different aspects of their standard of livings.
7. A section on income, employment and consumption.
8. A final section on collective capitals meaning infrastructure, housing quality and some key basic needs indicators mostly related with water and sanitation.

Qualitative methodology techniques were used in the very first stage of the fieldwork in order to define the conceptual aspects on the basis of which the quantitative methodology was later designed. At first 40 semi-open interviews with an average duration of 45 minutes each were tape-recorded. These interviews were randomly carried out in the two big clusters of localities described above, 20 in each of them. This approach is broadly accepted as a key step to find out perceptions about the most sensible variables of a questionnaire under construction.

Once these data were processed, the table of relative frequencies of the types of problems affecting households in relation to poverty and access to health care the research proceeded with the questionnaire design.

25 interviews with key-informants working in different institutions were also tape-recorded. The personnel interviewed worked with the Ministry of Health, the Health Department of Bogotá, the Mayor of Bogotá, the Misión Social of the National Planning Department, Universities and Foundations.

To test out the validity of the questionnaire in order to minimize non-sampling errors, 180 pilot interviews were conducted in the locality of San Cristóbal, which was selected at random among the localities of the sample. On the basis of this work the questionnaire was adjusted and another 50 pilot interviews were carried out to gain more insights about the context of poverty in Bogotá as well as the policies implemented in the previous years. The lessons learned by this piloting were of great help for the second stage of fieldwork, the realisation of the interviews.

Two main lessons can be reported here as examples of the importance of piloting the questionnaire as far as the formal aspects are concerned. The first is that space is never enough for notes in relation with open-ended questions. The second is that instructions of how to link one question to another in cases of 'yes/no' options are never enough since the risk of non-forced errors during the compilation of the more repetitive parts of the interview are always waiting behind the metaphorical corner of one's weariness or distraction.

In term of logistics the piloting taught a good deal about the security risks existing in Bogotá. These lessons range from the importance of making one's presence in the *barrios* acknowledged by communal leaders that may introduce the researcher to other members of the community, to the timing of arriving and departing that should be done in pairs or if possible with three persons moving in and out of the barrio together for security reasons.

There was also a good deal of learning in regards to the contents. First of all, the piloting allowed improvement of the pre-coding of a number of answers that contributed to the speeding up of the process of recollection during the interviews stage, which nonetheless lasted more than 8 months. The sections where codes were improved most were the demographic grid, health insurance, health access, and the use and vulnerability, that is from 8 up to 10 of the most frequent life events, consequences, strategies, and relative causes had been already identified during the piloting stage. That helped tremendously in the interaction with interviewed household members, especially to empathise but also to maintain a certain neutrality not to cut the flow of the life histories related to the critical episodes that have been defined as life events.

A last issue regards of the piloting deserves to be mentioned. Putting it in a very straightforward way one does not learn how to conduct an interview until he or she has done many of them! Such critical aspects as wording, emotional control, dressing, and attitude are learnt only at the price of failures and through a process of trial and error that is very much aided by the attempt to process one's result from the piloting to acknowledge not without some dismay that the interviews or the questions where there are inconsistencies are more than just a handful.

3.6 Data Collection: the Interview Stage

Once the questionnaire was refined the field work strategy was set and the interview stage began in November 1997. The sampling frame had provided a list of sectors of the census with its relative number of households to be interviewed (table 3.3). Within each sector, on the basis of maps acquired at DANE, the section where interviews were actually done was selected on the basis of a random number series previously printed and taken along in the folder with the copies of the questionnaires. The same process was used in order to select each block and housing unit. Sections (a geographical sub-division of the sector), blocks, and housing units were all randomly selected on the map with the above mentioned random numbers list. At this point the interviewers, the researcher, and an assistant began calling and or knocking at the doors of the housing units of the selected block proceeding anti clockwise and strictly avoiding corners in order not to bias the

results due to the fact that shops are generally placed on the corners below a housing unit also generally belonging to the owner or renter of the shop. Once the units of a block of apartments or row of houses had been completed and there were no more apartments or houses to be interviewed, the interviewers passed on to the next one always in anti-clockwise direction until there were no more blocks in a section of the sector. At that point the next section from the first one was chosen on the map going always in anti-clockwise direction. The process was repeated until completion of the number of interviews assigned to that sector by the sample.

The interviews were preceded by a formal presentation of the interviewer and the scope of the research project. Interviewers carried a badge from the Faculty of Social Work of the *Universidad Externado de Colombia* in Bogotá that provided logistical help during the fieldwork period. Interviewers also carried in a transparent plastic folder a letter signed by the Dean of the Faculty stating the purpose, independence, and confidentiality of the research and the treatment of the data.

3.7 Vulnerability Patterns and the Use of Multiple Correspondences Analysis

This section has two purposes; the first is to illustrate the main conceptual elements of Multiple Correspondence Analysis (MCA) as a technique derived from simple correspondence analysis for the modelling of complex realities characterised by a high number of variables; the second is to illustrate the main steps of its application, the key steps of the procedures through which the data were processed, and the results obtained. The elaboration of the conceptual elements explaining the functioning of MCA draws on a classical text dealing with the applications of MCA (Greenacre and Blasius, 1994) to the social science realized by Greenacre (with the collaboration of Blasius), the former taking a lead on this methodology after his initial developer, Jean-Paul Benzécri, back in the 1960s. The next section introduces the most important concepts supporting and complementing the interpretation of correspondence analysis, leaving aside the mathematics of the technique for reasons of space.

3.7.1 Conceptual Elements of MCA

The purpose of simple correspondence analysis is to perform descriptive and exploratory analysis of simple two-way and multi-way tables that contain some measure of correspondence between rows and columns. An interesting feature of vulnerability analysis is that it provides information quite similar in the nature of its results to that produced by factors analysis techniques; therefore it offers to the researcher a method to explore the structure of categorical variables included in the table and therefore a way of working with qualitative data by framing them quantitatively. In a typical correspondence analysis, a cross-tabulation table of frequencies is first standardized, so that the relative frequencies across all cells sum to 1.0. One way to state the goal of a typical analysis is to represent the entries in the table of relative frequencies in terms of the distances between individual rows and/or columns in a low-dimensional space (Greenacre, 1984). Originally developed in France by Jean-Paul Benzécri in the early 1960's and 1970's, correspondence analysis results are very useful for the analysis of complex research contexts where a high number of variables play a relevant role and in which the researcher wants to know about their mutual relationship and not just about the behaviour of a dependent one in the face of assumptions made on the behaviour of others such as in multiple regressions that are very useful within econometrics but that do not offer satisfactory answers when the issue at stake is the behaviour of many variables in relation to many others.

To think of a table of 10 rows by 10 columns or 10 rows by 100 columns is a handy way to visualise what is challenging in this method. On this issue, referring to large data sets, van Meyer and his colleagues have pointed out that when the data collected consist of very large multidimensional tables of units (individuals, time periods, geographical units, etc.), cross-tabulated with categories of several discrete variables (sex, age, education, etc.) statistical techniques are initially used to produce an intelligible, descriptive summary of data and to find 'possible' structures which verify or reject certain aspects of the initial hypothesis. Classical statistical tools, they add "offer little help in analyzing the 'messy' data often obtained in the context of nascent sociological theories" (van Meyer et al., 1994: 132) and, they further clarify, have a purpose which is different from exploration, tending to rule out complementary problems such as the structure of the data set, their description, and exploration for new insights. On the basis of Guttman's 'quality control' testing

approach to the data researchers look for inference on the basis on a previously elaborated hypothesis. One of the important contributions of MCA is that it deals with categorical data without postulates concerning the distributional characteristics of the initial variables.

MCA has some specific terms must be clarified especially if the reader is interested in analysing the material contained in the methodological annexes No. 3 (table of Burt), No. 4 (clusters) and, most of all, No. 5 (correspondence analysis) in-depth.

Mass: In correspondence analysis the programmes for data processing like the French Social Programme for the Analysis of Data (SPAD) help at first through the computing of the relative frequencies of rows (life events in our case) and columns (consequences, strategies and causes in this research). In a second moment the relative frequencies are divided by the total so to obtain a sum of all entries equal to 1.0. In this way, in correspondence analysis authors such as Greenacre (op.cit. 1994) say that we are distributing one unit of mass across the cells. In fact the terminology used to technically describe the MCA technique talks of *row mass* and *column mass*.

Inertia: This term comes from an analogy with mathematics. As explained by Greenacre inertia stands for the integral of mass, times the squared distance from the centroid (Greenacre and Bisius op.cit., 1994: 35). MCA also employs the terms of *row profiles* and *column profiles*. Computations are based on the hypothesis that rows and columns are completely independent from each other. This means that each entry in a two way table, regardless of the number of variables, can be reproduced on the basis of the totals alone, or, in MCA terminology, from the row and column profiles. This is based on the formula for computing the Chi-square statistic for two-way tables: the expected frequencies in a table, where columns and rows are independent of each other, are equal to the respective column total times the row total, divided by the grand total. Thus, deviations from the expected values (expected under the hypothesis of complete independence of the row and column variables) will contribute to the overall Chi-square.

Reduction of dimensionality: As poignantly specified by Greenacre himself, “it requires a stretch of the imagination to picture profile points in a space of dimensionality greater than three” (Greenacre, 1994: 15), although it is not impossible to consider the possibility of imagining those points laying close to a line or a plane. There are great similarities between this basic feature of MCA and regression analysis where a straight line, or a plane in some higher-dimensional space, is fitted to a set of points in order to

explain the values of a particular response variable of interest. Now, the difference between the two techniques basically amounts to the following: while in regression analysis the fit is measured by the square of the so-called ‘multiple correlation coefficient’, denoted by R^2 in MCA we are looking for a plane the is the closest to all points. While in regression analysis a value of R^2 above 0.5 is considered a good fit and generally presented as very satisfactory, MCA makes a different reading of the latter as non-satisfactory because it does not indicate which response values are explained relatively well or poorly. The idea of the plane closest to all points developed in MCA can be considered as a solution to this issue.

Greenacre¹⁰¹ in the same paper that introduces the interpretation of MCA illustrates that for any given plane the distance from the profile point (let us imagine this as a single item of life event) to the plane can be computed as the smallest chi-square distance between the profile and the plane. The point in the plane which is closest to the profile is called the projection of the profile onto the plane. The distance from the profile to its projection is denoted by e_i and the distance in the plane from the centroid to the projection by \bar{d}_i , so that the centroid, projection, and profile points form a right-angled triangle, in which Pythagoras’s well-known theorem applies:

$$d_i^2 = \bar{d}_i^2 + e_i^2$$

The total inertia $\sum_i r d_i^2$ is thus decomposed into two components:

$$\sum_i r d_i^2 = \sum r \bar{d}_i^2 + r_i e_i^2$$

This can be verbally states as: total inertia = inertia in plane + residual inertia.

3.7.2 The Construction of the Final Data Base

In order to get to the final data base processes of filtering, examination and depuration had to be carried out. Fieldwork research does not end with the collection stage but it has a tail that consists of procedures that one has to learn to respect in order to keep the internal and external validity of the data. The first moment of this post-collection phase starts when one leaves the household, it is there that it is handy to sit for a few minutes outside or in a nearby coffee bar to countercheck the interview: running through it,

¹⁰¹ The next two paragraphs and the formula presented draw heavily on Greenacre (op., cit. 1994: 15).

improving the notes, especially those regarding the open ended questions, and writing down observations. After that the interview has to be coded and reported on a format sheet for future monitoring and recounting.

Once the physical questionnaires have been safely taken back to one's office the phase of the critique may start. The critique is on the one hand a second countercheck operation performed on the physical questionnaire whereas on the other hand, it serves the purpose of coding and highlighting the codes that have to be taped in the capture programme. Generally the latter is carried out with a red pencil such as those used to mark children's homework in the past, to allow for corrections and to make sure the coding and annotation are noted by the person who processes the capture stage with a computer using such programmes as Excel or DBIII. In this research the latter was used.

These started with the processing of the frequencies of all variables in SAS. This allows for examination of the frequencies in a very similar manner to what is done with stem and leafing graphs, looking for outliers and inconsistencies. For instance males for whom sex had been reported as female or children with a university degree etc. Secondly a list of inconsistencies related to cases such as those mentioned above was drafted together with a list of the codes that had been signalled during the critique process. Thirdly, the physical questionnaires were retaken and inconsistencies sorted out. After that the process of running the frequencies was repeated and data checked until obtaining a consistent data base on which the analysis could be performed.

3.7.3 Clusters and Patterns

Data on vulnerability were collected in a specific section of the questionnaire and recorded on a pre-set format (see appendix 2, *Questionnaire*), as illustrated below in Box 1.

Box 1. – Section of the fieldwork questionnaire dedicated to vulnerability analysis																
Evento	Afectado			Consecuencias					Estrategias					Causa		
X	A	B	C	A	B	C	D	E	A	B	C	D	E	A	B	
1																
2																
3																
4																

As explained in greater depth in the section on the methodology (chapter 4), this section of the questionnaire was structured in a way that enabled the recording of the main elements of a life event. The following four simple variables or indicators were:

1. The life event(s) to which the questions asked refers.
2. The cause(s) that produced the event(s).
3. The consequence(s) that derived from it/them.
4. The strategy or strategies devised by households and individuals to face the event(s).

On each line of the grid reproduced in box 1, both graphically and logically, each life event, the person who was affected by it, the consequences it implied for the household, the strategies the household unit employed to face it, cope or react to it and, eventually, the identification of the main causes, come together to make up a life history.

These are not typical life histories based on the traditional in-depth reconstruction of complex paths of life along the life cycle; according to what characterises their use in anthropology and ethnology. Rather, they are patterned life histories that articulate along a quadripartite logical categorisation: cause-event-consequence and strategy.

This logical categorisation is linear in as much as there is a high degree of linearity in the treatment given to the sequences obtained: from a cause an event is unleashed; from this event one or more consequences and, finally, in the end there is a strategy devised by

the household and/or its members in order to face, cope with, or react to the event. However, within real life dynamics the relationship among the four variables is not so straightforward.

The analysis of the results, carried out in chapter 4, explores the existence of a complex circularity of the dynamic of vulnerability. According to this more complex reading of the interrelation existing among the four variables, the same item¹⁰² (for instance, *economic difficulties*) may be found as a cause, a life event, or a consequence. Other items can be found not only as a cause, a life event, or a consequence but also as a strategy. For example: the *sale of an asset* such as a house, or *moving home to a different neighbourhood* or city. These, as well as hundreds of items from the collected interviews, can be found in one of either four categories 1, 2, 3 and 4 above, according to the life cycle and the particular moment in time when the life history was told.

3.8 Elements for the Interpretation of the Vulnerability Patterns Map

- a) The vulnerability map is a factorial map produced using the analysis of correspondences to process the data collected through the questionnaire. The statistical technique of correspondence analysis (one of the multivariate methods) considers variables as if they were masses in a multi-dimensional space. Masses correspond to the cumulative frequencies of the different clusters represented on the map.
- b) In this case, the clusters including the different items are our variables. On the map they are represented by a '+' symbol.
- c) The map is the projection of a multi-dimensional space delimited by 13 axes onto just 2 dimensions, as in a Cartesian plan. That is, it represents a simplification of the relationships existing among clusters within reality to allow for its graphic representation.
- d) In the analysis of correspondences, the closer a variable is located to the border of the map and the further removed from the centre where the axes cross, the more it contributes to the formation of one of the axes and, being this a manifestation of the

¹⁰² All items mentioned in the chapter correspond to the answers provided by the interviewees categorised and standardised.

inertia, that is, of the power the variable has to explain part of the total variance. This helps to spot those clusters (or groups of them) that are more important to the explanation of the relationship among the variables. As a general rule of thumb, a map scattered towards the borders tells of a meaningful and successful outcome of the analysis (as in the present case), while a map presenting all variables clustered and close to the origin of the axes, means a negative outcome in statistical terms.

- e) In order to explain the map, the analysis has to pay special attention to the spatial relationships among the different types of clusters. The degree of closeness (1), the grouping of clusters that allows to draw meaningful insights (2), and (3) the relative importance of them [as said at point (d) above], are the three main elements we took into consideration in order to understand the map.
- f) Each cluster is formed by a variable number of items; the number of items in a cluster primarily depends on how many times people expressed similar ideas phrasing them in a different manner (see annex 4). Thus, the number of items in a cluster does not depend on any statistical rule.
- g) To illustrate the previous point (f), an example of interpretation could be the following one: Looking at map 5 in next chapter, it can be seen that it presents four homogeneous thematic areas A, B, C & D. In Group A, the cluster of life events LE01 *Employment & Income* is close to the cluster of consequences CNQ01 *Consequences Affecting the Household Economy*. Therefore, this is the relationship on which the analysis will have to concentrate most in order to provide an explanation of the dynamic generated by life events related to the domains of employment and income generation. There is no doubt that the events included in the life events cluster *Employment & Income* have also a relationship with consequences *Affecting Physical & Mental Health*. However, the main story the map tells us is that from life events of an economic type the most probable outcome will be some kind of economic consequence.
- h) The table of Burt (see annex 4) is then used to analyse the strength of both primary and secondary relationships; between clusters as well as within items belonging to different clusters. Here primary relationships are those that clearly appear on the vulnerability map, whereas secondary relationships although existing in reality and hence are worth exploring, may be hidden on the map. In fact, the map pictures only the strongest

relationships among all clusters and among all their possible relations within the whole dynamic of vulnerability.

4. Research Results

The presentation of the research results is divided into four sections, ordered in two pairs, as follows: sections 4.1 and 4.2 characterise the sample on the basis of demographic and socioeconomic indicators; the second part is dedicated to the analysis of vulnerability, with section 4.3 presenting the patterns of vulnerability and section 4.4 the asset profiles.

4.1 Characteristics of the Sample

The demographic sub-sections are presented under three headings corresponding to the analysis of the respondents' profiles in terms of (i) parenthood, with the head of household; (ii) typology of the household in terms of overall arrangement (mono-parental, bi-parental or extended); and (iii) demographic indicators concerning its members. Socioeconomic characteristics are presented under four headings, each corresponding to a type of capital assets. The analysis concentrates on indicators that reflect the dimensions of vulnerability analysis at the micro level: (i) physical, (ii) financial, (iii) human and (iv) collective capital assets.

i. Demographic characteristics

During the 1997 fieldwork period, 903 households were interviewed in a low-income area of southern Bogotá. The sample was statistically representative of the whole population, in a condition of poverty according to the then UBN index; the official measure employed by DANE to estimate the incidence of poverty.

a. Profile of respondents by parenthood with the head of household More than 75% of respondents were heads of households (table 4.1). Between them women clearly prevailed (54.33%) over men (29.56%). This was due to the fact that interviews were carried out over the whole working week when men were mostly away from home at work.¹⁰³

¹⁰³ See the introductory points from chapter 3.

Table 4.1 - Respondent by parenthood with the head of household		
Parenthood	n	%
Female Head	489	54.33
Man Head	266	29.56
Male partner	59	6.56
Female partner	39	4.33
Son	15	1.67
Daughter	15	1.67
Nephew	5	0.56
Niece	4	0.44
Male cousin	2	0.22
Female cousin	2	0.22
Sister	3	0.33
Uncle	1	0.11

Data on headship of household presents another feature illustrative of the progressive transformation of more traditional patterns. Although the fieldwork reached 903 households, there were 1049 heads of household. That is to say that, in 146 cases the respondent declared that both husband and spouse played the role of head of household, corresponding to 16.1% of the total. Among those households reporting only one head of household (the other 89.9% of the total) 68.3% was male-headed and 30.1% female-headed.

What has just been said should not overshadow that fact that household headship is a socially constructed variable to a greater extent than a demographic ones entailing a biological component. As such, it very much reflects and is determined by power distribution within and outside the household sphere. Indeed, when looking at what percentage of mono-parental households are headed by what gender; with 77.4% vs. 22.6% the difference is staggering. Table 4.2 illustrates some aspects related to the complexities attached to the analysis of the headship of households. It demonstrates what happens when that variable is contrasted with macro variables such as the conditions of poverty and vulnerability or specific socioeconomic variables, such as the educational level attained. These issues are revisited from a more analytical and less descriptive perspective in chapter 5.

In its second and third row the table shows that, compared to bi-parental households, mono-parental ones tended to present higher percentages of heads of households with a very low (incomplete primary school) or low (completed primary school) educational level. The respective percentages were 23.2% vs. 19.6% for incomplete primary school, and 26.2% vs. 25.8% for those who had achieved the completion of the primary cycle. Since the majority of mono-parental households were headed by women, this data indirectly gives information regarding a number of socioeconomic dynamics concerning low-income groups in Bogotá, at a time worsened by the economic crisis whose main features were described in chapter 2. These are related to the greater difficulties women were and still are encountering in accessing secure jobs and obtaining good wages, or at least wages commensurable to those men would expect for the same type of job. They also relate to women's difficulties finding social security cover, paying for their health services and those of their children, renting housing in safe areas, and so forth.

	Type of Household		% Total
	% Mono-parental	% Bi-parental	
None	5.9	5.3	5.5
Incomplete primary school	23.2	19.6	20.6
Completed primary school	26.2	25.8	25.9
Incomplete secondary school	25.3	31.3	29.6
Complete secondary school	13.9	13.3	13.5
Incomplete university	1.7	2.7	2.4
Complete university	1.3	1.0	1.0
Post-graduate	0.4	0.6	0.6
Technical studies	1.7	0.3	0.7
Training course	0.0	0.2	0.1
Self-taught	0.4	0.0	0.1
Total	27.5	72.5	100.0

Bi-parental households had a clear advantage in terms of the years of education of the head of households, especially when the schooling years between the 6th and 11th grade (31.3% vs. 25.3% of mono-parental households) are analysed. Needless to say, this is a feature that in Colombia, as generally in developing countries, tends to be found in a relationship of close statistical correlation with the probability of finding better, or even any, employment (PNDH, 2000, 2002).

b. Internal features of the interviewed households by size, gender and composition

The 903 households housed 5.252 persons, distributed according to their size as resented in table 4.3. More than half of the households' total (56.9%) had a size that ranged between 4 and 6 members, with almost a quarter of the entire sample (22.7%) having 4 members. Remembering that this is a representative sample obtained on the basis of the 1993 National Census, it is interesting to look at this data describing low-income groups from another point of view, asking 'how many households have a size of 6 or more members?'. The answer is 39.3%, which is a very interesting data if analysed against a tendency of social policy-makers from the 1990s onwards, who fostered the idea that in Bogotá, as well as at the National level, social reproductive arrangements were taking place in the private sphere around a core structure; the family.

n	%
1	0.3
2	3
3	10.7
4	22.7
5	17.8
6	16.4
7	8.2
9	3.9
10	2.8
11	2.4
12	1.8
13	1.4
14	1.6
15	0.4
16	0.2
17	0.1
22	0.1
Total	100

This has had the implication of removing from social policy programmes the concept of household, firmly replacing it with that of family (Misión Social, op.cit. 2002).

Other relevant features that help complementing the information on the size of these households are the typology of the nucleus, whether that is mono or bi-parental, and the number of children and youth respectively. Through the listing of the number of children per household, table 4.4 allows for a comparison with data on the fertility rate of Bogotá. It shows that the dependency ratio (relative to children) was still high among low-income groups in the south of Bogotá in 1997/98. By taking as a reference point the data provided by the *Encuesta Nacional de Demografía y Salud*¹⁰⁴ (ENDS) 1995, it is possible to extract a few relevant figures as landmarks for a comparison. Just two years prior to the fieldwork, according to the ENDS by PROFAMILIA (1995), urban fertility averaged 2.5¹⁰⁵ children per woman in Bogotá, and 3.45 in its rural areas.¹⁰⁶

Table 4.4 - Number of children per household		
No. of children	N	%
0	61	6.8
1	60	6.6
2	139	15.4
3	247	27.4
4	207	22.9
5	113	12.5
6	43	4.8
7	16	1.8
8	14	1.6
9	2	0.2
10	1	0.1
Total	903	100

¹⁰⁴ National Survey of Demography and Health. It provides information regarding demographic and health trends relative to the 3-year period previous to the realisation of the fieldwork (March to June 1995 in this case); that is, roughly from the beginning of 1992 to that of 1995.

¹⁰⁵ According to Rincón Mesa (2003), who calculates the fertility rate of the city on the basis of the data provided by the 1993 National Census, Bogotá has an average of 2.33 children per woman, which gives even more relevance to the difference found within low-income groups.

¹⁰⁶ Data in this case refer to the locality of Sumapaz, located at the southern edge of the city.

Table 4.4 also shows that only 28.8% of sampled households have less than 3 children per woman, confirming that women from low-income groups in the southern area of Bogotá present a higher fertility rate; a relevant insight regarding intra-urban differential in demography and health (Tabibzadeh et al., 1989 and Stephens et al., 1994). The analytical elements indicate the existence of significant gender-related inequalities.

8.3% of households have a child under 1 year old. This represented an important sub-group that could potentially be hit by critical life events insofar as the health of those children was concerned; an issue also affecting the relationship between health and vulnerability when considering dimensions such as the provision of public services.

Up to 29.2% of households had a child between 1 and 5 years old, while a more critical group of 87 households (9.6%) of the sample had 2 children in that same age range. Since the beginning of the 1990s children tended to be spaced according to general recommendations of preventive health care, indicating a minimum of two years between one pregnancy and the following, in order to guarantee women sufficient time for a recovery and the child the necessary conditions for healthy growth. This is, however, from a public health point of view, which is a narrow one. It does not include any particular consideration for cultural or equality issues. Among mono-parental households, 5.3% had 1 child below 1 year old, while this was the case for 9.4% of bi-parental households. There were only 3 households in each of the two categories that had 2 children below 1 year old; that is, 1.2% and 0.4% respectively. When it comes to children between 1 and 5 years old, mono-parental households had one in 23.6% of the cases and 2 in 8.9%. Bi-parental households had 1 in 31.3% of the cases and 2 in 28.8%. This provides two insights relevant for the analysis: on the one, hand bi-parental households seemed to have had greater facilities for rearing children. This seems perhaps an obvious thing to say but, given the limitations in the child rearing and development programmes provided by the local social welfare department, the *Departamento Administrativo de Bienestar Social* (DABS¹⁰⁷), it deserves to be explicitly stated. On the other hand, mono-parental and mostly women-headed households presented a relative high proportion of young children, particularly

¹⁰⁷ It was transformed into *Secretaría Distrital de Integración Social* (SDIS) by the administrative reform that, at the end of 2006, reordered the departments of the local government according to functions rather than sectors.

those in the age range of 1-5. It is more difficult to rear children under 1, to place them in kinder-gardens etc., since they require continuous attention and more frequent control by a paediatrician. On average 11.6% of the 903 households had at least 1 child between 0 to 5 years of age, while 94,1% had a child between 6 and 17 years of age.

4.2 Socioeconomic Characteristics

This section presents data from a selection of socioeconomic indicators closely related to households' capitals and assets. It reflects the suggestions of the literature on vulnerability and livelihoods regarding which socioeconomic indicators should be considered as most relevant. These are presented in table 4.5, listed according to the corresponding capital asset.¹⁰⁸ Most of them are straightforward indicators, therefore hereafter only a short commentary will be dedicated to describing the most relevant among them.

Table 4.5 – Indicators used to assess the capital assets profile of sampled households by type of capital

Physical capital	<ul style="list-style-type: none"> • Housing tenure • Material of the roof • Material of the walls • Material of the floor • Human waste disposal
Financial capital	<ul style="list-style-type: none"> • Typology of the economic contribution towards household income • Employment status at present and 1 year prior to interview • Income • Working status • Type of work
Human capital	<ul style="list-style-type: none"> • Educational level of the head of household • Subsidised health care affiliation • Use of health centre • Use of hospitals
Collective capital	<ul style="list-style-type: none"> • Sanitation • Road type • Potable water

¹⁰⁸ The term capital asset is used in this section

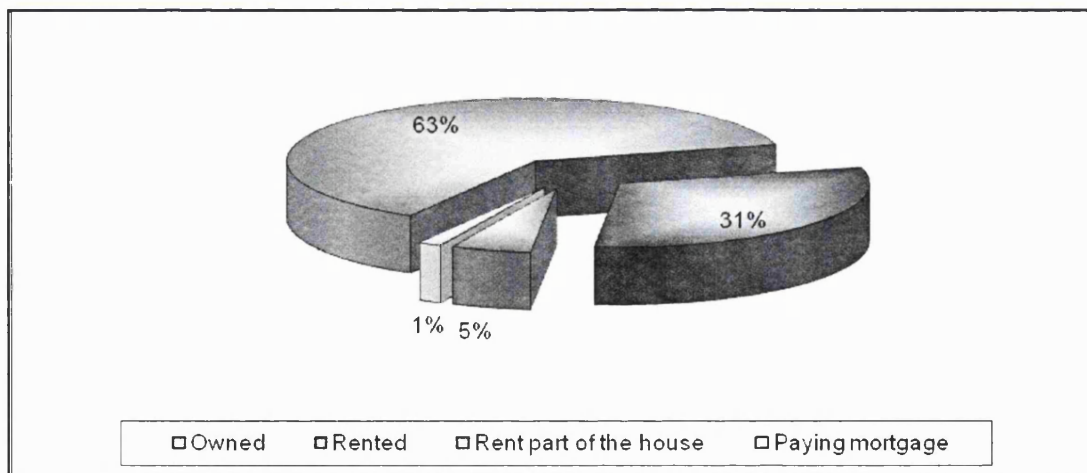
i. Physical capital and assets

Housing tenure is considered a key indicator within vulnerability, as well as in traditional poverty, analysis. However, since Moser it has been defined as a productive asset (Moser, 1996) and has become a sort of flag indicator reflective of how poor groups tend to actively employ the assets and capitals over which they happen to have control. It is also one of the most commonly used indicators to approximate what the sustainable livelihood approach (SLA) defines as physical capital. In the assessment of rural poverty, land tenure generally replaces housing tenure, whereas in urban areas the latter indicator is generally complemented by a few other indicators. These include the degree of overcrowding, or indicators that focus on the physical conditions of the building as a proxy for deprivation and poverty, as is the case when they are employed as part of an index to assess basic needs satisfaction.

Graph 4.1 illustrates the pattern of housing tenure for the 903 households of the sample. It might seem unusual that so many households own their house (31%) among a sample of low and very low-income households. However, the reason for this is that in Bogotá land is often illegally sold to the needy, and households often lack the legal tools and knowledge to distinguish a legal from an illegal builder. By the same token, the quest for a secure livelihood favours cultural patterns that highly value home ownership, thereby increasing the probability of people being cheated and misled. Housing ownership has a symbolic value, and may be a conduit to good social relations with others. Besides, in more than one case, nominal ownership has been turned into a legal claim. For instance, in cases, such as those recorded under the administration of the Mayor Peñalosa, when an important programme of slums improvement was launched and implemented (Duque Franco, 2008). A case also documented by UN-Habitat that puts the issue of tenure in Bogotá in this way: “The inner-city slums are, typically, rental housing and dilapidated tenement houses, commercial room-renting in marginal housing and critical social situations of poverty, drugs and delinquency.” (UN-Habitat., 2003: 205).

In terms of percentages, the graph indicates that up to 63% declare themselves as owning their homes. Of these, 1% are paying a mortgage,¹⁰⁹ while 31% declare renting the place where they live. A group of those with the lowest assets in often more critical situations, only rent part of their accommodation (5%). The majority have walls made of bricks, generally mixed in varying proportions with bigger empty bricks that can be filled with cement; locally called *bloque*. Roofs are generally made of zinc, or sometimes tiled frequently; they also have a refined lower ceiling that prevents water infiltrating and insects penetrating, etc. The great majority (95%) have a toilet connected to the sewage system, while the percentages of other facilities or services that qualify the quality of the housing and the immediate surroundings, demonstrate some very interesting data. This is especially so in relation to the fact that official data provide a much rosier picture, portraying almost universal coverage and good standards; as has been discussed in chapter 2 (DAPD, 1997).

Graph 4.1- Housing tenancy – 1997/8 fieldwork



ii. Financial capital and assets

Whilst taking account of the limitation that always exists in terms of underestimation when trying to directly infer household income from a direct question,

¹⁰⁹ A date which also indirectly reinforces the analysis above regarding the aspects behind tenure declaration.

table 4.6 does illustrate some structural features of this key aspect in the analysis of capitals and assets. A good proportion of households responded to the question; 699 out of 903 heads of household. The first relevant element is that men outnumber women. This is due to the fact that headship of household is clearly dominated by men, as has already been seen in the analysis of the demographic characteristics. The second element, that overshadows small gender differences, is that all these people have very low incomes. More than 70% do not earn even the minimum salary, and often have either quite large families or a high number of dependants. This is reflective of what by no means can be defined as a resilient pattern of income generation in the face of critical life events, such as those analysed in the second part of the chapter. Just in terms of the general trend, and reiterating all the limitations on the reliability of this particular data, the distribution of women is worse than for men for those who have such an instable or bad income. They define it as “low”, while there are no appreciable differences for the other level ranked on the table, apart from one level. This is the one indicated in the second row from the top, corresponding to those heads of households who earn less than one minimum salary; here we have 210 men and 73 women, that is, 42.0% of all men and 36.5% of all women. In all the other categories ranked differences do not exceed 3 percentage points.

Income	Gender		Total (n = 699) %
	Men (n = 499) %	Women (n = 200) %	
Low	22.9	10.9	33.8
Less of one minimum salary (COL\$172.000)	30.0	10.4	40.5
Up to one minimum salary (COL \$202.000)	11.0	4.1	15.2
More than COL \$202.000 but no more than COL \$250.000	3.3	1.6	4.9
More than COL \$251.000 but no more than COL \$300.000	4.1	1.6	5.7
Total	71.3	28.7	100.0

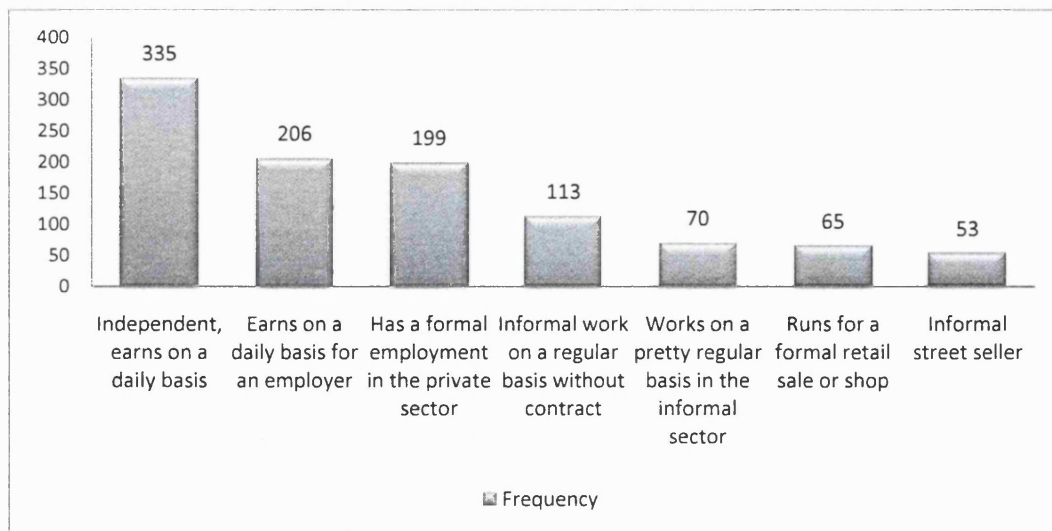
Table 4.7 is interesting insofar as it complements a qualitative picture provided by the previous analysis. However, it contains the addition of a temporal element of comparison that provides a distinct insight related to vulnerability. From one year previous to the interview, to the moment of being interviewed, respondents indicated that income generating capacity worsened on average by 4 percent.

Table 4.7 – Income generation capacity: comparison between present level and one year prior to the interview according to a minimum criterion		
One year prior to the interview		
	n	%
No member of the household has a job	502	55,6
At least one member of the household has a job	401	44,4
Total	903	100
At the moment of the interview		
	n	%
No member of the household has a job	537	59,5
At least one member of the household has a job	366	40,5
Total	903	100

Thus so far data on financial capital and assets, focusing on income and employment, indicate that the sample on average presents very low declared income levels, worsening trends in income generation capacity and, as indicated by graph 4.2, a very unstable pattern of employment regarding the heads of households, that is, those who often play the role of main breadwinners in their respective households.

The graph reports data on the type of employment of the head of household, using a criterion of security vs. insecurity. This is based on the stability of earning patterns, since the concept of informality presents important technical limitations in its definition, as much as to the possibility of verifying the working status was beyond the scope of questions contained in the questionnaire (see annex 1). Secure earning patterns are those corresponding to jobs in the public or private sector that have a contract and social security provision. Only 199 heads of households (22.0%) of the total 903 have what can be defined as formal employment. The majority earns on a daily basis or, if employed, on a pretty regular basis. They have no guarantees and no long term prospects in their current employment. A small number run a formal retail shop in the *barrios*, although the degree of formality could definitely vary to great extents. This issue was quite a delicate one, and so difficult for the research to probe.

Graph 4.2- Type of employment of the head of household



n = 699

iii. Human Capital: education and health as key resources and assets

This is an analysis of human capital indicators, taking into consideration those that help create a picture of how the sampled households fare in physical and financial capital. It offers the opportunity to take advantage of one important insight suggested by the SLA; although in the SLA inherited the idea from the social sciences. This is to analyse a social group from a number of entry points, in order to gather the best possible 360° understanding of its features and relationship with the context. What is striking about the population sample under analysis is the very low level found in the majority of the indicators. Also, in this regard, from table 4.8 it is possible to see that 52% have had no opportunity to achieve a level of education higher than the fifth grade of primary school. Only a tiny proportion (13.5%) has managed to finish secondary school. Such a level of education does not make a great positive difference in the Colombian job market, which is typically segmented and bent towards features of high insecurity, low wages and precariousness for those who are below the threshold of a university degree (Pineda, 2008).

Table 4.8 – Educational level of the head of household by type of headship

		Type of household headship		All Households
		Mono-parental	Bi-parental	
Educational level of the head of household	None	5.9	5.3	5.5
	Incomplete primary school	23.2	19.6	20.6
	Primary school	26.2	25.8	25.9
	Incomplete secondary school	25.3	31.3	29.6
	Secondary School	13.9	13.3	13.5
	Incomplete university	1.7	2.7	2.4
	Complete University	1.3	1.0	1.0
	Master	0.4	0.6	0.6
	Technical studies	1.7	0.3	0.7
	Training courses	0.0	0.2	0.1
Autodidact	0.4	0.0	0.1	
Total	100.0	100.0	100.0	

From a qualitative reading that looks at income generation and educational achievement as part of the same composite picture, the fact that more than 50% of the heads of households in the sample have not passed primary school level, indicates the likely existence of a chronic poverty core. Households that either stay in a condition of poverty for very long spells, or that do not get out of poverty more than once or twice over periods of 5 or more years (Hulme and Shepherd, 2003), continuously struggling to achieve minimum stability in the sources of their livelihoods, ridden by frequent and often overlapping critical life events, ill health and often even the lack of the most basic services (CPRC, 2005) are those that this research is finding as a core group on the basis of these indicators.

The data from table 4.8 offer another insight. The differences in educational achievement between heads of mono and bi-parental households show that the former ones appear with greater relative frequencies at the lowest grades of educational achievement. Thus, they seem to represent a specific case of a more disadvantaged group. This appears a

working hypothesis consistent with what was said before about a chronic poverty core. Mono-parental households present a greater incidence of female headship, and the table illustrates that in 5.9% of them the head of household had no education at all, vs. 5.3% among bi-parental households. Although this is not a major difference, the next category: 'incomplete primary school', presents a difference of 23.2% vs.19.6%. Following this trend, there are more heads of bi-parental households in the categories indicating intermediate achievement, up to 'incomplete secondary school'; 31.3% among bi-parental and 25.3% for mono-parental. However, the trend for high level achievement (relatively speaking), that is some years of university or a full degree, or technical studies, shows a rebalancing of the difference. From this it can reasonably be inferred that some female heads of households have a better level of education and belong to those more self-sufficient and resilient female-headed households, as pointed out by the literature on poverty, vulnerability and gender (Chant., 1991; González de la Rocha., 1994).

Indicators of access and use of health services complete the picture of the analysis of human capital. Chapter 2 illustrated the main institutional arrangements of the Colombian health care system after the 1993 reform promoted by Law No. 100, which created a two-tiered system where low-income people, identified through SISBEN,¹¹⁰ initially provided access for low-income groups to a restricted package of health care services, especially those of higher complexity. At the same time, this opened up a new era in terms of coverage improvement that achieved the affiliation of more than 60% of the whole national population during its first 5 to 7 years. However, from 2002-3 onwards it became stuck due to financial and institutional reasons (PNDH, op.cit, 2004).

In terms of affiliation to one of the two tiers of the health care system, 52.4% of the 4.508 individuals regarding which the respondents had information, were reported as being affiliated to the health care system. Within the above 52.4% holding one of the two types of health insurance, only 20.6% had an effective affiliation to the subsidised tier. On limitations in terms of focalisation and inclusion of the subsidised tier, Fresneda has written that:

¹¹⁰ The system of identification of eligible beneficiaries of social programmes, as illustrated in chapter 2.

“Out of the 19 millions of poor in 1997¹¹¹, less than half (8.900.000) are classified as poor according to levels 1 and 2 of SISBEN, which are generally used to identify those familial nucleuses eligible for the subsidised tier. This way the exclusion error is 53.1%, and according to the same criteria out of the 10.550.000 individuals classified within those same levels 1.550.000 are not poor, with which the inclusion error amounts to 14.9%.” (Fresneda, 2003: 221)¹¹²

Inclusion and access are indicated as two of the main problems left open by the health reform at the national and city level (Garay, 2002). There is also evidence about the validity of this diagnosis within this sample of low-income groups from southern Bogotá, as a number of indicators clearly show.

Low access is evenly spread across the whole geographic area of the sampling frame, corresponding to the whole southern arch of Bogotá (as indicated in chapter 3): more than 80% of less than 30% of mono-parental and bi-parental households are affiliated to the subsidised tier of the system. Thus, limited access is evenly spread geographically, according to a key analytical category that approximates fairly well the association between gender and headship of household, as well as greater potential exposure to critical life events.

No more than 42% of the respondents¹¹³ declared using health services provided by health centres on a regular basis. 53% declared using hospitals, which reflects aspects of a still on-going health reform attempting to redirect people towards health services, but without managing to achieve a rebalancing. Hospitals in fact are compelled by law to attend to low-income people through their emergency services, even if they have no means for paying for attention. This indicator of service usage cannot tell us more, since data have not been compared with epidemiological indicators and, furthermore, are not backed by any health centre or hospital record. Nevertheless, the fact that people declare health centres not to be their main point of call when ill, fits with the picture given by the analysis of socio-economic indicators in step by step building; that is, a critical condition in terms

¹¹¹ He refers here to income poor individuals.

¹¹² My translation from Spanish.

¹¹³ This indicator does not apply to all household members but only to those who were interviewed.

of households' livelihood insecurity exposes those households to the impact of critical life events.

iv. Collective capital

Public lighting, with a lamp post located at a minimum distance of at least half block of houses, is a feature found in 72.9% streets of interviewed households. A smaller proportion (17.8%) was covered by the service, but with worse quality; that is, streets having lamp posts situated only every entire block. Paved streets are an improvement from which only 77.5% of households can benefit, while the rest have to put up with unpaved roads and cope with the harsh health-related implications that range from a worsening of health status, greater difficulties in maintaining a good standard of hygiene in their dwellings; potentially important impacts in terms of vulnerability dynamics. In fact, unsatisfactory levels in the indicators reviewed often come in association with other characteristics of slums and peri-urban settlements that make them prone to more frequent episodes. For example, landslides, local floods and, in general, impacts of a type of environmental vulnerability not appearing much in the database collected by the research, but that nonetheless important to mention (Cárdenas et al., 2003).

4.1 Vulnerability Patterns in Bogotá in 1997/8

During the fieldwork 2.047 life events were recorded in the sample of the 903 interviewed households, together with their direct causes, related consequences and the strategies households adopted to cope with, react to and recuperate from them. As illustrated in chapter 3, multiple correspondence analysis techniques were employed to identify the main patterns through which clusters of life events are interrelated with causes, consequences and strategies. One of the main contributions of this methodology is the possibility to determine the patterns of association among variables. In this case it means being able to identify the most frequent groups of critical life events, and identifying what causes, consequences and strategies associate most frequently with them. The next section presents these principal patterns of vulnerability for low-income households in the southern localities of Bogotá during 1997/8. Map 5 shows four groups of clusters, ordered

from A to D, that correspond to four critical dynamic patterns of vulnerability or epicentres of what was often a true household's crisis. From now on, the text will adopt the present tense in its historical connotation, describing the results of this first fieldwork as if they had been collected more recently than they actually have. This to achieve a more compelling presentation of the insights.

It is interesting to note two things that help focus on what the results concern. Firstly, each group of clusters corresponds to a principle pattern of vulnerability. Secondly, this also contains a triggering factor reflecting difficulties that vary in the following way:

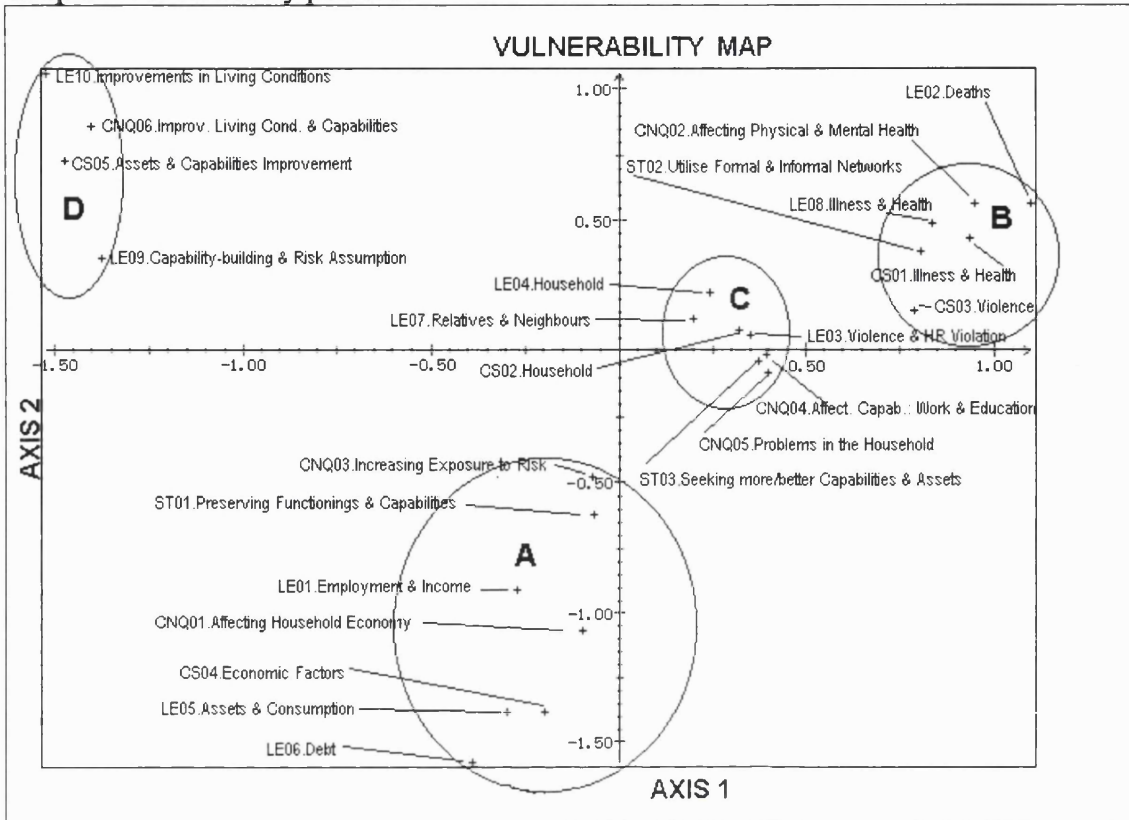
- a) Income generation is the triggering factor in Group A that will often be referred to as 'Economic Crisis Pattern' (ECP).
- b) The incidence of ill-health coupled with limited access to health care services is the triggering factor for what has been called the 'Health Crisis Pattern' (HCP). It is represented in the map by Group B.
- c) Group C corresponds to the inner dynamic of the household. It is triggered by tensions between couples and relatives. This group has been called 'Household Dynamic Pattern' (HDP).
- d) Finally, the fourth group (D) represented on the map, represents processes that do not reflect an immediate crisis as such. Although they revolve around the search for better living conditions, they are nonetheless also quite dramatic, since they are undertaken by households whose endowments are predominantly as insecure as their assets base.

To statistically evaluate the relative importance of a cluster of life events, it is necessary to analyse its contribution to the variance on the axis to which it contributes the most. The same thing should be done with the clusters of causes, consequences and strategies of the entire group. Analytically, this means we are observing the role played by a whole factor, composed of a number of items that directs the dynamic of vulnerability. This is, for instance, the type of analysis the reader will find regarding problems related to

assets and consumption, as is the case for the first cluster of life events related to *Assets and Consumption*, which will be analysed in the next section.

This methodological choice gives a better explanation of the whole complexity of the vulnerability dynamics than the analysis of single items, or that of the first five or ten according to the ranking of their relative frequencies. Multiple correspondence analysis techniques provide a more robust analysis of those results that are the outcome of multidimensional research designs. That is, those based on either a hypothesis or research questions that cannot find adequate answers in the behaviour of one main variable, but only through an approximation of the interaction existing among many variables. What the multiple correspondence analysis technique offers here is a great added value insofar as it determines the position of each cluster on the map on the basis of the relationship they have in respect of all the others in the reality under examination. This is with awareness that the latter is also an approximation itself, since it is mediated by the researcher and the respondent.

Map 5 - Vulnerability patterns



MAP KEYS:

PATTERNS (Groups of Clusters)

- A: Economic Crisis Pattern (ECP)
- B: Health Crisis Pattern (HCP)
- C: Household Dynamic Pattern (HDP)
- D: Capability Search Pattern (CSP)

CLUSTERS (Groups of Items)

- LE: Life Events
- CS: Causes of life events
- CNQ: Consequences of life events
- ST: Strategies adopted in the face of life events

SYMBOLS

- + Projection of the spatial position of each cluster on the plane

4.3.1 Analysis of Group A - Pattern No.1: Economic Crisis

i) Life events and their causes

On the whole, Group A explains 65.1% of the whole dynamic of vulnerability. The clusters LE05 and LE06 alone account for more than 25% of the variance of all clusters that compose Group A. Since each household experienced on average 2.2 life events, the probability of finding a household that had a life event related to the economic aspect is almost 60%.

a. Assets and consumption centrality within economic difficulties

The cluster of life events *Assets and Consumption* (LE05 in map 5) is the most important within the Economic Crisis Pattern (ECP) because, among all clusters of life events, it is the one that explains the highest percentage of the total variance¹¹⁴ (16.9%). At the same time, it is the one that has the highest relative frequency (n = 393). This is to say that 393 households had a life event (LE) to do with problems concerning the sustainability of the economic dimension of their livelihoods. As indicated in table 4.9 below, the cluster has a peculiarity: its single item *economic and cash difficulties* has a frequency of n = 320 and, as such, is the most frequently mentioned item of the whole dynamic of vulnerability across the four groups A, B, C and D.

This item is a good starting point to illustrate a key feature of the whole analysis of vulnerability: how it differs from poverty per se. To say *economic difficulties* means referring to a broad range of situations that have wider implications and do not necessarily overlap with lack of income. To experience economic difficulties points to a wide semantic spectrum characterised by the coexistence of realities as diverse as ‘not being able to afford eating three times a day’ or ‘having to care for someone else’s child’. The meaning of economic difficulties spans from the strenuous defence of income levels and its sources of generation, to the conservation of material assets. It also includes consuming patterns on a more instrumental side of people’s freedom to achieve well-being, and concentrates on defending ultimate achievements such as the capability to be well nourished, to be educated and informed, to participate to critical aspects of social life, and not to lose the

¹¹⁴ Annex 5 ‘Correspondence analysis’ reports the original data processing from the application of the multiple correspondences analysis SPAD.

satisfaction of those basic needs that we can nowadays consider as social rights. For instance, the social right to benefit from the provision of public services, in spite of the fact that they are mediated by the market blurring at times the distinction between citizen and client. All other life events of the same cluster *Assets and Consumption* relate to the loss or lack of assets and consumption capacity.¹¹⁵ This can be conceptually and empirically related to what was said above. Besides, assets differ from income poverty in technical terms, since when, for instance, a person borrows money, he or she becomes less income-poor but more asset-poor and thus more vulnerable. The money borrowed will contribute to either rise above or draw closer to the established poverty line. However, the same action will cause deprivation of monetary and non-monetary assets with which, in a more or less close future, the contracted debt will have to be repaid. Hence the individual borrower is now more vulnerable: less income poverty may logically and factually coexist with greater vulnerability.

b. Indebtedness, unemployment and income generation: complementary entry points of the Economic Crisis Pattern

The ECP, graphically represented by Group A in map 5, has another peculiarity: besides the main cluster *Assets and Consumption* it contains two other clusters, *Indebtedness* and *Employment and Income*, which complement the picture.

Table 4.9 - Frequencies of life events from the cluster 'Assets and Consumption' (N = 393)

Item	n	Item	n
Economic and cash difficulties	320	Economic problems due to informality of work	1
Withdrawal from school	10	Losing one year of schooling	1
Sale of goods	8	Health insurance expired	1
Cuts in consumption	6	Loss of pensionable years	1
School desertion	5	Child not accepted at school	1
Growing up as the responsible one for the household	5	Strong economic crisis affecting the household	1
Assuming the care of someone else's child	5	Having to pay for medical attention	1
Not having the means to improve one's trade	4	Withdrawal of all household children from school	1
Difficulty in paying for services	4	Renting	1
Theft in the house	3	Difficulty paying for rent	1
Sale of business	2	Difficulty paying for school fees	1
Not owning one's home	2	Being expelled from school	1
Working in the informal sector	2	Legal problems with house ownership	1
Rise in the cost of transportation	2		

n = frequency (N = 903)

¹¹⁵ This is different from purchasing power, which is a sub-category of consumption capacity in analytical terms, because the latter also includes the material ability to consume what one already has.

The cluster of LE *Indebtedness* (n=60) is representative of another point in time along the life cycle of households that experienced an economic crisis. These are households that either had already lost a job, or faced a harsh situation and reported the fact that they had to borrow as their more recent life event. This is because of the overlapping of different moments across the life cycles of different households, along patterns that may be otherwise be similar on the basis of other categories analysed. Two households experienced economic difficulties and both ended up borrowing. However, the first one was interviewed in 1998, after it experienced economic difficulties in 1997, while the other household was interviewed when it was experiencing economic difficulties without yet having borrowed. Technically this may happen when analysing vulnerability at any one point in time.¹¹⁶ In other words, there are insights concerning a number of inter-temporal processes that can be gleaned, either from the analysis of the relationship between two of the four operational variables (life events, causes, consequences and strategies), or from the meaning of the clusters, as in this case, i.e. borrowing is an action that tends to happen to counteract the lack of resources for payments and obligations, or to invest, which is a particular case of the former.

It is interesting to provide a reading of these two temporal moments as a continuum. If the data on the factorial weight of the two clusters (16.9% and 3.2% of the variance explaining axis 1) are read together with the frequency of each cluster, n=577 for *Assets and Consumption* and n=60 for *Indebtedness*, the outcome is that, with 637 life events (LE), Group A accounts for more than one quarter of the 2.047 life events recorded in the entire fieldwork stage. We are then able to establish our first stable conclusions:

- Vulnerability is a dynamic aspect that differs from income poverty per se, although it may often be interrelated with it.
- In the southern localities of Bogotá in 1997 and 1998, its main epicentre is represented by the experience of economic difficulties expressed by interviewed households through items indicating problems with assets availability and consumption capacity.

¹¹⁶ This point is developed in more depth in chapter 5.

- Vulnerability analysis allows capturing inter-temporal dynamics that in this case bind together a pattern of economic crisis indebtedness.
- The ECP represented by Group A in the map, has three entry points or clusters: *Assets and Consumption*, *Indebtedness*, and *Employment & Income*.

The analysis turns now to the latter, before analysing the relationships between life events and their causes. The cluster *LE01 Employment and Income* was kept separated from the cluster *Assets & Consumption* for two main reasons. Firstly, because of what was illustrated above regarding the difference between vulnerability and poverty. Secondly, because, although employment and income are assets, not all assets refer to employment and income. Merging these two clusters would have meant blurring the principle of coherence employed in the building process of the clusters themselves. As explained in the methodological chapter 3, that is based on the semantic separation of groups of items reflecting different aspects of a complex reality, on the basis of a guiding principle of achieving the maximum grade of specification to minimise overlapping. According to these analytical considerations, it followed to explore the specific role played by employment and income within the dynamic of vulnerability, in order to investigate the link between vulnerability, employment and income-poverty.

As reported in table 4.10 below, 126 households (that is 14% of the sample) had a life event explicitly related to problems with income or employment. Within this group, 42.8% reported *unemployment* as a life event, while 28.5% said they had lost their employment in the last five years as a major event affecting the household. As these two items are very similar, it can be said that 71.3% of those 126 households reported lack of income through unemployment as at the core of a situation of crisis. This result can be analysed in the following way, to highlight another conclusion: life events directly related to income and unemployment play an important although complementary role in shaping the ECP.

Table 4.10 - Percentages of items in the cluster of life events 'Employment & Income'
(N = 126)

ITEM	%	ITEM	%
Unemployment	42.8	Breadwinner son in military service	1.5
Loss of employment	28.5	Having to sell one's business	1.5
Problems at work	14.2	Unemployment of son	1.5
Quitting one's job	3.9	Prohibition of powder use in Bogotá	1.5
Bankruptcy of informal business	2.3	Bad outcome of business	1.5
Breadwinner son in military service	2.3		

- 1) The fact that *Income and Employment* presents only a relative contribution (14%) to the variance of the whole dynamic of vulnerability, should be considered within the framework of a greater ECP shaping vulnerability, as it was the case with *Indebtedness*.
- 2) In terms of life events, this economic factor reflects a third entry point of the ECP: taken together *Assets and Consumption* and *Indebtedness* and *Income and Employment* sum up 579 life events; 28.8% of all life events.
- 3) The cluster *Income and Employment* with cumulative frequency of N = 126 accounts for 21.7% of these 579 events.

By looking again at the vulnerability map 5, the great closeness that exists between the clusters of life events and causes LE05 *Assets and Consumption* and CS04 (Causes related with) *Economic Factors* indicates that the first segment of a broader¹¹⁷ pattern of vulnerability is made by causes related to the economic domain leading to critical life events within that same domain. This graphic interpretation of the map can be complemented with the analysis of the degree of association among clusters.¹¹⁸ That is, to see how many households that experienced a life event contained in the cluster of life events *Assets and Consumption*, also recalled a cause that falls within the cluster of causes of life events *CS04*. The results are as follows:

1. Out of all possible combinations of each single life event from the cluster of LE *Assets and Consumption*, with each single item of cause from any of the

¹¹⁷ The term 'broader' is employed because the segment is part of a pattern that also entails a relationship with clusters of consequences and strategies.

¹¹⁸ This is obtained from the so-called 'Table of Burt' (annex 4), which is a table that presents all the possible double-entry associations among all elements considered. In other words, it reports how many times the items of one cluster are found to be directly related to those of any other one.

five clusters of causes,¹¹⁹ the most frequent association is found with the cluster of causes *Economic Factors* (69.4% of the cases).

2. When consistently examining the association in the same cluster, LE *Assets and Consumption*, and all the other clusters of causes, the second ranking association is the one between the former and the cluster of causes *Illness and Health* (8.3%). This means a huge difference from the association illustrated in the previous bullet point.

c. Typology of the causes of the Economic Crisis Pattern

Vulnerability analysis can be taken down to a further level of in-depth disaggregation, splitting a cluster of causes of life events into sub-groups or sub-clusters, as illustrated in table 4.11. This is what is done hereafter with CS04 *Economic Factors*, which happens to be composed of:

- a. Causes having to do with investment and acquisition of material (i.e. the house), but also intangible assets (e.g. education), both important in terms of functioning correspond to sub-cluster 4a, *Investment and Asset-building*. Their relative weights correspond to 34 items; 7.1% of all items in the cluster of which they are a subdivision.
- b. Causes related to lack of employment and/or income and, more generally, to income generation can be classified as sub-cluster 4b, *Employment & Income*. This sub-cluster contains 74.8% of all the items of the cluster of which they are a subdivision.
- c. Finally, there are those causes related to indebtedness and other factors that directly or indirectly imply a lowering of assets level (i.e. having to use one's savings due to the economic crisis; loss of money; not being able to pay rent, etc.). These fall under the sub-cluster *Indebtedness and Assets-depletion*, accounting for 18.1%; a significant (almost) one fifth of the total.

In the light of the clear dominance of the sub cluster 4b *Employment & Income* over the other two sub-clusters; the discussion of the specific dynamic of

¹¹⁹ See chapter 3 for the overall number of clusters for each of the four variables of life events, causes, consequences and strategies.

employment/unemployment assumes great relevance. As mentioned, 74.8% of those 126 households reported a lack of income generation opportunities as the direct core of a situation of economic crisis. This was expressed through one outstanding item, *unemployment*, that appears as having the highest relative frequency within a sub-cluster in which all other items illustrate the high degree of overlapping existing between unemployment and lack of income. Right at the beginning of the period spanning from 1998 to 2002, Bogotá witnessed a sharp increase in the incidence of income poverty, the impact of which kept extending alongside the profound economic crisis that hit the country as a whole. Income poverty, for the groups considered in a situation of extreme poverty, was back to the level of the beginning of the nineties, as unemployment and poverty are associated.

The sub-cluster 4a, *Investment & Asset-building*, is composed by items such as *housing or land purchase, spending for education and increase in the number of people in the household*. This is a finding which is complementary to what has been said above regarding the two clusters of life events *Assets & Consumption* and *Indebtedness*. All items from sub-cluster 4a clearly illustrate another case of temporal circularity within the dynamic of vulnerability. This time it exists between causes and life events. Depending on the life cycle, what for one household is an event may be a cause of a relevant event for another, and so on.

**Table 4.11 - Percentages of items in the cluster of causes of life events 'Economic Factors'¹²⁰
(N=480)**

SUB-CLUSTER		n	% of cluster
4a – Investment & Asset-building		34	7.1
Items	N	Items	N
Housing purchase	12	House refurbishment	4
Spending for education	10	Increase in the number of people in the household	1
Land purchase	6	Car purchase	1
SUB-CLUSTER		n	% of cluster
4b – Employment & Income		359	74.8
Items	N	Items	N
Unemployment	77	Having to paying for a funeral	3
Low income	42	Retirement	2
Cost of living due to the economic crisis	40	Poverty	2
Loss of employment	30	Problems with the boss	2
Lack of work	21	Defaulter tenant	2
Economic difficulties	19	Firm restructuring	1
Temporary unemployment	13	Taking economic responsibility for grandchildren	1
Unstable employment due to work in the informal sector	12	Power abuse on the part of the boss	1
Minimum wage is not enough	12	Death of the main household breadwinner	1
Loss of job due to end of contract	12	Death of the main bread-winner	1
Problems at work	10	Expenditure for public services	1
Negative outcome of business	10	Employer cut jobs	1
Crisis in the labour market	9	Only the husband is able to work	1
Job Instability	6	Unemployment of sons	1
Bankruptcy of firm where person was working	5	Employer restructured the firm and cut jobs	1
Ex-husband does not contribute economically	5	Expenditure for taxation	1
To be the only source of income of the household	4	Bankruptcy of business	1
Economic problems on the job	4	Payment of higher education for the children	1
Assuming responsibility for a relative's child	4		
SUB-CLUSTER		n	% of cluster
4c – Indebtedness & Assets Depletion		87	18.1
Items	N	Items	N
Having to use one's savings due to economic crisis	13	Being a female head of household	2
Debt for the construction of the house	9	Being an orphan	1
Debts	9	Debt for buying a plot	1
Having to sell the house	9	Having to quit one's job due to pregnancy	1
Borrowing to pay taxes	6	Lending somebody else money	1
Loss of money in the attempt to get into a better business	4	Lack of father's economic contribution	1
Borrowing in order to pay for school fees	4	Sale of small farm in the countryside	1
Not being able to save money	4	Lacking basic services	1
Debt for payment of medical attention	3	Having to sell a plot	1
Parents have to work extremely hard to cope	3	Low educational level	1
Loss of money	2	Being forced to change life and town	1
Not being able to pay for rent	2	Lack of credit	1
Loss of money due to a swindle	2	Buying a house in an illegal settlement	1
Having no money to pay rent	2	Low training level	1

¹²⁰ Percentages of sub-clusters refer to the total weight of the sub-cluster against the cluster. By the same token, items percentages refer to the weight of each item against the cluster. This is because the analysis and the explanation are both based on clusters and not on sub-clusters. Sub-clusters serve the purpose of specifying the import of the main findings. Whenever sub-totals are too small and the use of percentages could be misleading, tables present just frequencies in order for the reader to better appreciate differences among the weight of single items within a cluster or sub-cluster.

The sub-cluster 4c, *Indebtedness and Assets Depletion* is more controversial. It includes items such as *indebtedness; attempt to get a better business, or buying a house in an illegal settlement*. What they have in common is that they illustrate how low-income households in Bogotá try to exploit any opportunity to secure a more stable and sustainable livelihood through the investment of the few assets they have, in order to generate more and new assets.

Making a comparison between 4a and 4c, the difference seems to lie in the outcome and, likely, in the timing of the actions undertaken. In the first case (*Investment & Assets-Building*) there is no negative outcome implied in the wording that describes the strategy (a fact that could be related to the life cycle as well as to the closeness in time between the life event and its cause),¹²¹. In the second case, (*Indebtedness & Assets Depletion*), either the failure of the action/strategy or its negative outcome is made explicit. In order to cope people have to borrow, sell their assets or face a situation in which they cannot access services or achieve important goals such as obtaining education.

ii) Consequences: the immediate impact of life events

Economic consequences *affecting the Household Economy* (CNQ01 in map 5) present a strong degree of association with all three clusters of life events of the ECP. Table 4.12 illustrates that the overall degree of association¹²² between this cluster of consequences and life events related with *Indebtedness*, is 71.6%; 63.8% with life events from the cluster *Assets & Consumption*, and 57.2% with those reflecting problems with *Income & Employment*.

More in detail, as illustrated by the table rows, the three typologies corresponding to the sub-clusters of the cluster of consequences *Economic Factors*, have different internal weights:

a) *Consequences affecting consumption* (51.1% of the whole cluster).

¹²¹ From a chronological perspective, the life event is the consequence or outcome of the cause that precedes it in time.

¹²² In technical terms, the question posed to the Table of Burt is, 'How many times within the same life history from real interviews carried out during fieldwork, do items of the cluster of consequences *Affecting the Household Economy* appear together with an item from one of the clusters of life events from Group A?'

b) *Consequences affecting income and employment (32.7%).*

c) *Consequences leading to indebtedness and a depletion of assets level (16.1%).*

Table 4.12 - Main associations between the cluster of consequences 'Affecting the household economy' and 'clusters of life events' from the ECP

Sub-clusters of Consequences from the cluster 'AFFECTING THE HOUSEHOLD ECONOMY'	(A) Cluster of Life Events INDEBTEDNESS (%)	(B) Cluster of Life Events ASSETS & CONSUMPTION (%)	(C) Cluster of Life Events INCOME & EMPLOYMENT (%)
Affecting consumption	53.3	43.1	24.4
Affecting income and employment	10.0	9.6	28.3
Affecting the assets level	8.3	11.1	4.5
Totals (Cluster vs. cluster association)	71.6	63.8	57.2

a. Most common pattern of consequences of the Economic Crisis Pattern

This part of the data provides another key element for an outcome; the consequences of economic vulnerability illustrate another segment of the ECP. There is, in other words, a pattern that originates from lack of employment and income, and mostly manifests itself through economic difficulties, tending to produce economic consequences having to do with:

1. Cuts in consumption
2. Direct or indirect loss of income
3. Depletion of the assets level

How can these consequences be explored in more depth? This type of methodology continuously requires iteration from the quantitative to the qualitative aspect of the data set. The qualitative aspect entails a closer examination of the meaning of the items.

In this case, as with the economic causes of vulnerability (table 4.11), an important point to make is that the majority of these items are active actions undertaken by low-income households as a consequence of something that had happened previously; a life event. Therefore, as a matter of fact, they are coping or reaction strategies to life events. This insight is a key one for the analysis, because it shows on the one hand that Chambers's and Moser's insistence on the active role of the poor finds confirmation in another geographical and socioeconomic setting. On the other hand, it shows that the

concept of strategy can overlap with that of consequence. Therefore, already at the stage of the analysis of consequences, it offers the opportunity to develop a more interesting analysis, focusing not only on ‘what happens to low-income groups as a consequence of life events’, but also on ‘what low-income groups do, and how they cope and react in the face of economic vulnerability’.

The analysis starts with the most important of the sub-clusters, *Consequences affecting consumption*. This is so because, in terms of relative frequencies, its items account for 51.1% of the cluster of consequences *affecting the Household Economy*. Within the whole set of items directly or indirectly related to cuts in consumption, those most frequently mentioned by interviewed members of households are *cuts in overall consumption* and *particular cuts in food expenditure* (see highlighted items at the top of table 4.13). One important consequence of vulnerability is the generation of insecurity.

b. The generation of livelihoods insecurity from the impact of the crisis

Vulnerability generates insecurity when its consequences prevent households from managing to secure themselves the means to provide for their basic needs. Specifically, looking back at the items listed in table 4.13, when the consequences of life events are particularly harsh in terms of income generation, unemployment and assets depletion, then households undergo a rapid process that paralyses their ability to choose or, better, to devise effective strategies against the crisis.

The fact that, within the consequences of vulnerability affecting the household economy, one finds items presenting a strong relation either with functioning or capabilities, has most probably to do with the life cycle. Although this is an hypothesis that needs further testing (and in particular a thorough look at the historical assets of households), it is possible that those households having to resort to borrowing as a consequence of the economic crisis, are on average worse off than those experiencing others' economic difficulties. The latter possibly do still have some means by which to provide themselves with some cash in emergencies, while those who borrow have reached a rock bottom stage wherein they have to start to mortgage even their future assets in order to sustain a livelihood.

Table 4.13 - Percentage contribution of items to the cluster of consequences of life events 'Affecting the Household Economy' (N = 577)			
Sub-cluster 1a Consequences affecting Consumption (N = 295) (% = 51.1)			
Item	%	Item	%
Cuts in overall household expenditure	28.2	Having to spend all income on medical attention	0.7
Particular cuts in food expenditure	10.3	Experiencing an even worst economic crisis	0.7
Loss of main economic contribution for household	3.2	Being able to eat just once or t twice a day	0.3
Particular cuts in clothing expenditure	2.9	Having to do more than one job	0.3
Assuming responsibility for a minor of age	1.5	Living in a condition of poverty	0.3
Particular cuts in health expenditure	1.3	Not being able to afford new clothes	0.1
Particular cuts in leisure expenditure	0.7		
Sub-cluster 1b Consequences affecting Income and Employment (N =189) (% = 32.7)			
Item	%	Item	%
Economic difficulties	18.3	Continuous expenditure for medical attention	0.8
Loss of income	2.5	Lack of financial help from ex-husband	0.7
Harsh economic consequences	2.4	Having to pay off debts	0.3
Having to pay for medical attention	1.5	Problems at work	0.3
Having to pay for a funeral	1.3	Losing one' s job security	0.3
Loss of Money	1.2	Having to pay for legal expenditure	0.3
Having to provide economic help to a ROH ¹²³	1.0	Heavy loss of money	0.1
Income level lowered by other's children maintenance obligations.	1.0		
Sub-cluster 1c Consequences affecting Assets through Indebtedness and Loss (N = 93) (% = 16.1)			
Item	%	Item	%
Indebtedness	50.0	Spending the little one has for subsistence	0.3
Indebtedness for medical expenses	10.0	Losing everything	0.3
Loss of consumer goods	1.3	Birth of an handicapped child	0.1
Being overdue with rent payments	1.2	Losing one's business	0.1
Having to mortgage the house	0.7	Loss of goods due to burglary	0.1
Debts contracted for rent expenditure	0.5	Not being able to make an important payment	0.1
Being in a situation of constant indebtedness	0.3	Bankruptcy of one's business	0.1

iii) Households' strategies in the face of vulnerability

This section presents examines households' strategies to cope with the economic crisis pattern in two ways. Firstly, it makes a comparison of the association between life events, consequences and strategies and, secondly, analyses the internal composition of the clusters of strategies. Table 4.14 illustrates that the most important among the clusters of life events of the ECP (Group A) *Assets and Consumption* generates consequences that have an impact on households' economies in 63.8% of the cases. When life events are related to Indebtedness, this percentage rises to 71.6%, and when the central issue of the life event has to do with Employment & Income, the percentage remains considerable. 57.2% of households experience a range of economic impacts.

It is important to know more about these impacts. In particular, in order to make vulnerability analysis more useful for policy makers, it is an absolute priority to refine the analysis in order to answer the following questions:

1. “What happens to a household that experiences a certain type of life event?”
2. “What causal relationship can vulnerability analysis help to clarify in order to contribute to a better assignation of policy resources?”

The relationships between a) clusters of life events and clusters of consequences, as well as that between b) clusters of life events and strategies, or c) clusters of consequences and strategies are academically interesting, but too broad to be useful for policy.

Table 4.14 - Association among the life events clusters and the consequences and strategies clusters and sub-clusters within the ECP of vulnerability *

CONSEQUENCES AND STRATEGIES	LIFE EVENTS		
	Assets and Consumption (%)	Indebtedness (%)	Employment & Income (%)
Consequences Affecting the Household economy	63.8	71.6	57.2
Consequences Affecting Consumption	43.1	53.3	24.4
Consequences Affecting Employment and Income	9.6	10.0	28.3
Consequences Affecting Assets	11.1	8.3	4.5
Strategies Preserving functioning and Capabilities	57.0	81.6	42.7
Indebtedness and Mortgaging of Present and Future Assets	23.7	40.0	12.9
Cuts in consumption	11.1	16.6	9.1
Increasing Workloads and Maintaining the Assets Level	17.1	25.0	12.9
Withdrawal from Action	5.1	-	7.8

*Clusters are presented in bold and sub-clusters in normal characters to graphically differentiate between them for ease in reading.

It is necessary to unpack what are the more specific final effects of a certain type of life event, in other words where, under what condition, and for whom do certain life events produce certain types of immediate (consequences) and longer term (strategies) impacts. For methodological limitations mentioned in the introduction, and specified in chapter 3 on the methodology, this research presents clear limitations in answering the “whom” question. However, using the sub-clusters allows for some interesting insights regarding the questions of “what” and “under what conditions”.

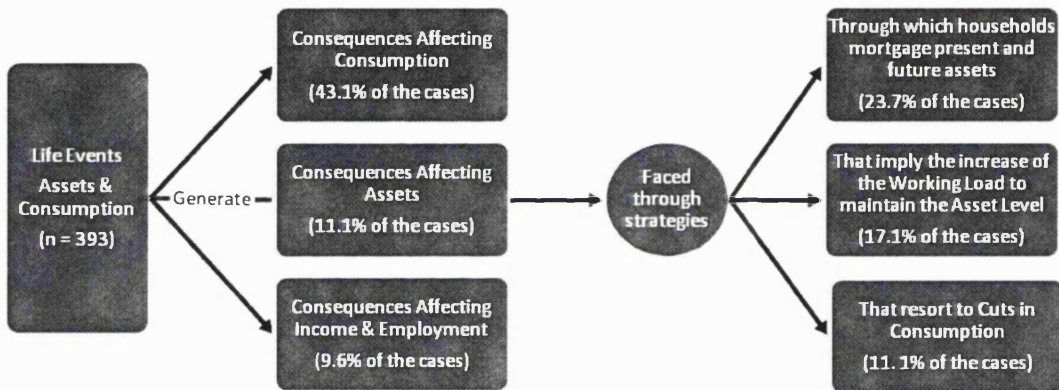
a. Charting the Relative Importance of Coping Strategies for Policy: Insights and key limitations from the analysis starting with the Life Events cluster *Assets & Consumption*

In order to provide answers to the above questions, it is very useful to look at the relationship between life events, consequences and strategies in a graphical form. Figure 4, shows the main associations between the cluster of life events *Assets & Consumption* on the one hand, and, on the other, the cluster of consequences *Affecting the Household Economy* (63.8% of all consequences that associate with that cluster of life events). The graph subdivides this latter cluster into three. In its sub-clusters, 43.1% of consequences are reaction strategies consisting of drastic *cuts in consumption* patterns, 11.1% are affect assets mainly incurred through *indebtedness*, and, in 9.6% of the cases, households reported experiencing economic difficulties through effects concerning *employment & income* (as it was numerically illustrated in table 4.13).

Three main types of strategies are employed by households to react to the former three types of consequences or immediate impacts. The most frequent ones (table 4.15, sub-cluster 1a) are the mortgaging of present and future assets (23.7%); mostly by borrowing from different sources. This is a very unsustainable strategy because it entails the use of tomorrow's assets to face the contingencies of today's urges, reflecting how little resilient low-income households are, and the fact that they have to search for solutions within their already scarce endowments. The absence of effective public action here becomes a key insight for policy. The second most frequent strategy is the mobilisation of further working forces. This is to assist with reproductive tasks, from reproductive chores to the competition for some income in the job market (table 4.15, sub-cluster 3a). It has already been noted by the most important research on vulnerability reviewed in the conceptual chapter, especially Chambers (1989), Moser (1996) and Rakodi (1999). It is interesting to see it reappearing in Bogotá, since it also illustrates the existence of certain core aspects of vulnerability in the Colombian capital. This finding is certainly not a novelty for those most used to analysing urban dynamics, such as urban studies and urban poverty, in their research. However, that nowadays it may also strike a bell for many local administrators and policy makers. The third most frequent strategy

employed within the ECP corresponds to cuts in consumption, another well-known strategy within vulnerability studies (Moser, 1998; Pryer, 2003). Here (table 4.15, sub-cluster 2a) the different items of the sub-cluster seem to indicate that the restrictions in spending are either spread across a number of items and dimensions (item 'reduction in housing expenditure'), or concentrated on cuts in food purchases or meals (item 'eating two times a day instead of three'). The latter item, corresponding to 1.8% of those 96 households that form the sub-cluster, indicates that the analysis has most possibly spotted a nucleus of chronic poverty.

Figure 4 - Vulnerability pattern from the Life Events cluster 'Assets & Consumption'



The fourth sub-cluster 4a 'Withdrawal from Acting' associates with the cluster LE01 *Employment & Income* in 7.8% of the cases, and with LE05 *Assets & Consumption* in 5.1% of them, while it does not appear in association with cuts in consumption. A likely reason for the above is that such a sequence would imply a very extreme combination of actions, such as 'cutting in consumption' first followed consecutively by 'non-action due to psychological or material impediments'. This sub-cluster also reflects a specific pattern that fits the hypothesis of a nucleus of chronic poverty. It is analysed in chapter 5 in coherence with the attempt to separate technical from policy-oriented analysis.

**Table 4.15 - Cluster of strategies
'Preserving Functionings and Capabilities' (N = 761)**

Sub-cluster 1a - Indebtedness and Mortgaging of Present and Future Assets (N = 281) (% = 36.9)			
Item	%	Item	%
Standing debt with friend or relative	9.8	Having to economically contribute for relatives	1.0
Standing debt with a bank	5.3	Standing debt with the employer	0.9
Standing debt with money-lender	4.7	Repaid debt with money-lender	0.7
Using one's savings	4.3	Standing debt with a shop for food stuff	0.6
Repaid debt with friend or relative	3.6	Repaid debt for land purchase	0.2
Mortgaging goods	2.6	Repaid debt with employer	0.2
Repaid debt with bank	1.0	Planning to borrow money	0.1
Being forced to enter the debt spiral	1.0	Standing debt for tools purchase	0.1
Sub-cluster 2a - Cuts in Consumption (N =96) (% = 12.6)			
Item	%	Item	%
Reduction in household expenditure	7.0	Being able to buy just what is strictly necessary	0.5
Eating twice a day instead of three times	1.8	Cuts in diversion	0.2
Cuts in food consumption	1.3	Moving to a smaller house	0.1
Eating only once a day	1.3	Eating only once or twice a day	0.1
Sub-cluster 3a - Increasing the Workload and Maintaining the Assets Level (N = 211) (% = 27.7)			
Item	%	Item	%
Working harder, longer hours	7.2	Doing whatever is in one's ability to keep up with children education	0.7
Working	6.4	Using one's savings	0.7
Working in the informal sector	3.9	Not being able to quit working in spite of problems	0.5
Increase of the workload	3.4	Eldes son had to start working	0.2
Having to start working	1.3	Having to buy everything again due to theft	0.2
Taking responsibility for the economy of the HH	1.0	Doing whatever is in one's ability to keep up with alimentionation of children	0.1
Having to send the children to work	0.9	Keeping two jobs at the same time	0.1
Sub-cluster 4a - Withdrawal from Acting (N = 173) (% = 22.8)			
Item	%	Item	%
Selling one's consumer goods as a last resort	2.8	Having to get documents to work	0.2
Doing nothing for lack of time or money	2.1	Using one's retirement pay for daily expenses	0.2
Having to pay for the medical expenses of a relative	1.1	Lack of financial help from actual partner	0.2
Not being able to afford to pay a medical specialist	1.1	Hospital did not bring medical attention	0.2
Being able to afford just a temporary therapy	0.7	Facing a problem but not being able to solve it	0.2
Using assets to generate income by selling them	0.6	Resignation in the face of an event	0.1
Having to opt for a job as a house maid	0.6	Inefficient intervention of police	0.1
Staying at home at night	0.5	Being afraid that something may happen and pray	0.1
Getting pregnant	0.5	Employer did not want to pay for medical attention	0.1
Not receiving financial help from relatives	0.5	Feeling bad because husband works outside the city	0.1
Having to face difficulties alone	0.5	Failure to bring of medical attention from ISS	0.1
Not being able to see a doctor due to lack of money	0.5	Having to sell one's plot	0.1
To keep working in spite of (illness, problem, etc.)	0.5	Not managing to care for one's children	0.1
Frustration due to being not able to help someone	0.5	Deciding to take care of somebody else's child	0.1
Receiving discontinuous financial support from ex-husband	0.5	To not attend health services for fear of mistreatment	0.1
Having to temporarily leave one's residence	0.3	Having to face a difficult situation without help	0.1
Do not undergo a surgery for fear	0.3	Not being able to save because husband takes money away	0.1
Suffering from the consequences of the sanitary landfill	3	Losing working time due to children's illness	1
Not being able to work owing to the commitment to care for somebody of the family	3	Not being able to solve a problem	1
Children do not help in the house	3	Not using ISS due to long waiting times	1
Trying but not succeeding in getting credit	3	Worsening of life perspectives	1
Health insurance covered only part of the expenses	2	To look at one's future with disillusionment	1
Sharing the house with another family	2	Having to care for a family member outside home	1

b. Departing from the clusters Indebtedness and Employment & Income to find other paths that lead to deprivation

Figure 5 presents another path among those found within the ECP. The entry point here is defined as 'life events related with indebtedness'. Although they have a lower relative frequency,¹²⁴ (n = 60) the cluster of LE to which they belong explains 3.2% of the variance of the second axis (No.2) of the vulnerability patterns represented back in map 5. When using multiple correspondence analysis techniques, this relatively small contribution deserves attention both as part of quantitatively bigger dynamics, and from a qualitative point of view, which is the aspect that will be stressed hereafter.

Indebtedness, as another way of putting what has been analysed in section 4.3.1 (both under numeral b and in relation to table 4.9). It is an extreme type of life event most often experienced by low-income groups as a last resort in the face of a sudden or a protracted crisis. Thus, to analyse indebtedness both as a life event and a strategy is a good way of approximating the analysis of particularly asset-poor groups, despite the fact that not all low-income households who get into some kind of debt are necessarily asset-poor or in a situation of chronic poverty.

Compared with the result when analysing figure 4, here the order and the scale of the consequences vary. On the one hand, 'cuts in consumption' remains the first order consequence. However, its incidence is greater compared to when the life event is related to Assets & Consumption (53.3% vs. 43.1%). This seems to confirm that those who do have to borrow are also those who have a weaker assets profile. Consequences *affecting households' income* and employment (10.0%), that is items normally indicating the need to make compulsory or urgent payments, and an erosion of negligible savings, rise to the second place. This leaves consequences affecting assets, especially through more borrowing, to fall slightly in terms of percentage (8.3%), yet sufficient to place this sub-cluster in the third place (see table 4.13 above for a reminder of the specific items).

¹²⁴ It must be remembered that indebtedness is also found as a consequence or a strategy depending on the life cycle.

The strategies adopted over the medium to long run in order face the consequences just described, seem to rest on three pillars; two of them being less stable than the third. The main pillar (40% of the cases of households that experienced one of the three types of consequences analysed above) reflects the mortgaging of present and future assets through (often further) indebtedness. These can be households that are finding themselves placed by in a condition with very low assets and little capacity to mobilise further workforce to the job market by unforeseen life events. They can also be households having to face at two or more different life events in quick succession. They are often mono-parental and/or very asset and income poor. These are some of the most vulnerable households among those analysed by this research. They are also those that could benefit the most from a further development of the methodology employed by this research in terms of applied social policy, mostly through the monitoring of critical life events.¹²⁵

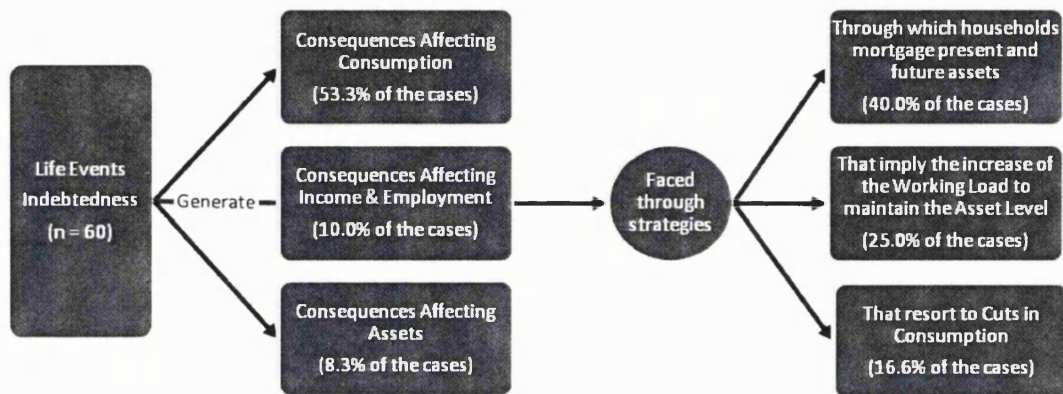
The second pillar corresponds to those 25% of households that managed to increase their workload, mostly mobilising workforce to the job market or increasing the number of hours worked. In spite of the fact that this is not a zero sum strategy, since it often implies diverting resources from other critical areas, such as care of children or the elderly, it still reflects a greater capacity to react in an active way, that is, using resources, assets and capitals that are controlled by the members of the household themselves. To add a further point here to the analysis so far: the diversity of the strategies employed by households seems to question the description that poverty studies have often adopted regarding the strategies employed to counteract vulnerability. These often talk of strategies that EITHER *cope* with OR *face* critical life events, thus leaving a lingering idea that coping and facing are somehow interchangeable. Beyond the semantic subtleties regarding verbs, the lesson learned seems to be that work has to be done to define who manages to deploy a more sustainable strategy on the basis of criteria such as sustainability and effects in terms of well-being.

The third pillar is represented by a typology of strategy already seen in the analysis of the previous pattern, from figure 1: cuts in consumption. Here they appear in 16% of the cases and their definitions, keeping up with the previous metaphor, as an unstable or a

¹²⁵ See about this section 6.1 in the conclusions.

stable pillar, depends on the quality and intensity of the cuts. This has to do with whether the cuts are in the number of meals or the quality of nutrients, and for how long families or specific members have to endure them.

Figure 5 - Vulnerability pattern from the Life Events cluster 'Indebtedness'



What happens when the main breadwinner loses his or her job? What are the patterns that lead from unemployment as a life event to certain types of coping strategies? Figure 6 provides some indications that help answer these and other questions for low-income groups from the south of Bogotá. The cluster of LE from which the analysis starts now, *Income & Employment*, has a relative frequency twice as big as the previous cluster of life events Indebtedness (n = 126 vs. n = 60). Thus, we are analysing here a pattern beginning with the second most important cluster of life events of the ECP. The main types of consequence (following again the details provided by table 4.13 above, regarding the specific items and relative frequencies of the sub-clusters) are economic difficulties appearing in association with 28.3% of the life events. This is a typical case of circularity within the dynamic of vulnerability. *Economic difficulties* is the core item that unleashes the pattern called economic crisis pattern (ECP), yet that type of life event can now be found among the consequences. Thus, the majority of the households that present this pattern are those that have recently lost a job or a source of income generation, and are experiencing economic difficulties as a consequence. This can also be inferred when analysing the temporality of life events, through comparing the relative frequencies of the active questions processed by the correspondences analysis processing programme SPAD for the two clusters of life events LE05 *Assets & Consumption* and LE01 *Employment &*

Income over three different points in time. This was done less than one year prior to the interview, between one and three years prior to the interview and between three and five years prior to it, with the following outcome:

- a. Less than one year prior to the interview:
 - Assets & consumption (n = 26)
 - Employment & Income (n = 21)
- b. Between one and three years prior to the interview
 - Assets & consumption (n = 134)
 - Employment & Income (n = 29)
- c. Between three and five year prior to the interview:
 - Assets & consumption (n = 40)
 - Employment & Income (n = 10)

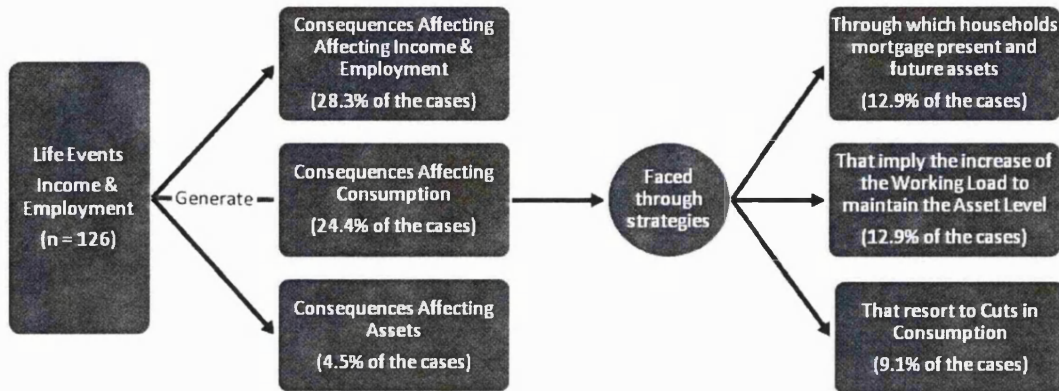
Case (a), life events that were reported happening ‘less than one year prior to the interview’, is the only one in which the cluster *Employment & Income* has almost the same relative frequency (n = 26) of the cluster *Assets & Consumption* (n = 21), already identified as the most important cluster within the whole ECP over the five years previous to the interview.

The second most frequent consequence (24.4%) is making cuts in consumption patterns. In this case, facing a direct shortage of income, rather than cutting consumption as a medium term strategy, for instance when attempting to counteract an already on-going situation of economic crisis. The third cluster of consequences appears only in 4.5% of the cases, which is consistent with the above hypothesis on the timing of this pattern of vulnerability. Households that have recently lost their employment use their internal capacity to cope, and only when this fails resort to getting a loan.

The three main clusters of strategies found in close association with the life events cluster *Income & Employment*; do not differ much in terms of relative frequency. As figure 6 illustrates, those strategies that are mostly centred on borrowing from a) friends, b) banks or c) money-lenders are found 12.9% of the times; with the same frequency as those

strategies centred in the mobilisation of the workforce. Cuts in consumption follow behind, comprising 9.1% of the cases.

Figure 6 - Vulnerability pattern from the Life Events cluster 'Employment & Income'



4.3.2 Analysis of Group B - Pattern No.2: Health Crisis

Together with the ECP, the Health Crisis Pattern (HCP) is the most important within the dynamic of vulnerability. The importance of the HCP is supported by numerical evidence from the data. Table 4.16 details the different percentage contributions of all clusters from Group B to the conformation of the axes of the vulnerability map. The HCP contributes 43.1% to the construction of the main axis 1, whereas its clusters make a lesser but still significant contribution of 11.9% and 10.4% to axes 2 and 3 respectively (the latter is not shown in the vulnerability map above). The key role played by this pattern can also be appreciated from the graphical reading of the vulnerability map. The clusters that are part of the pattern are all very close to each other, as well as positioned towards the border of the map (see Group B on the top right hand side of the map). This indicates that they significantly contribute to the conformation of the axis, especially axis 1. In fact, they stretch towards the right-hand border of the map, literally pulling the axis in that direction. Among these contributions, particularly significant are those made by causes relating to illness and health, as well as to consequences affecting physical and mental health. This is both in term of contribution to the axes and absolute frequencies.

**Table 4.16 - Percentage contribution of the clusters of Group B
to the variance explained by the axes**

Group B Clusters	Percentage contribution to the axis			Absolute Frequencies
	Axis 1	Axis 2	Axis 3	
LE08 Illness & Health	5.6	2.0	3.1	391
LE02 Deaths	7.9	2.2	2.3	317
CS01 Illness & Health	10.6	2.3	3.8	582
CS03 Violence	2.8	0.1	0.0	214
CNQ02 Affecting Physical & Mental Health	11.0	4.1	1.2	589
ST02 Utilising Formal & Informal Networks	5.2	1.2	0.0	390
Cumulative percentage of axes explained	43.1	11.9	10.4	

LE = Life Event; CS = Cause of life event;
CNQ = Consequence of a life event; ST = Strategies adopted to face a life event

The above data indicate that, together with the Economic Factor, the Health Factor is the most important within the dynamic of vulnerability. The implications of these data are diverse and can be listed as follows:

- a) In the southern localities of Bogotá, health related life events, their causes, consequences and related strategies have well defined statistical and analytical characteristics conforming to a pattern of vulnerability that has to be differentiated from other patterns.
- b) The strong weight of this pattern within the whole vulnerability dynamic provides sufficient elements to affirm that, in Bogotá, the aspect of health in vulnerability merits exploration. This study aims to illuminate this health aspect of vulnerability in Bogotá by connecting the findings of this research to those already presented in existent literature.

To illustrate these two points with all their implications, there are four main questions to be answered:

- 1) Within the HCP, what kind of links between life events and their causes can be identified, in order to determine how health status and access to health care are affected by vulnerability?

- 2) Is there any evident relationship among the HCP and the other patterns contributing to the dynamic of vulnerability, such as the ECP or that describing the inner dynamic of the household (HDP)?
- 3) What are the main consequences of health-vulnerability?
- 4) Which are the main strategies people adopt in order to cope with, face or react to it?

i. Life events and their causes

Life events within the HCP relate either to the decease of a relative, a member of the family (table 4.17, cluster of LE02 *Deaths*), to the onset of illness or to the alteration of status in health (table 4.18, cluster LE08 *Illness and Health*). LE08 *Illness and Health* contains life events that, in the majority of cases, directly relate to the onset of illness. The first step towards the interpretation of their implications for vulnerability is to analyse the items contained in the two clusters.

a. Illness and catastrophic loss at the centre of the health pattern of vulnerability

On the one hand (for example, the cluster *Deaths*), there is a group of life events that, with 317 cases, accounts for 15.4% of all recorded life events. Among them, the item *death of a relative* presents the highest relative frequency (38.2% of 317).

However, more important than any specific item is the group of items, all referring to the loss of a member of the family, when considered as a whole. This group, with a cumulative frequency of 61.2%, includes all those life events that refer to the death of one of the parents, a child, a sibling or a partner. Therefore, when the implications of life events for livelihoods are considered, these items can be clustered to make up a meaningful category within the cluster *Deaths* itself: that of loss of a family member.

Livelihoods are affected by decease on different grounds. Firstly, due to the personal pain and mourning of those directly affected. Secondly, the moral and financial obligations claimed by other family members. These relate to the expenditure for the funeral, as well as to material support. The latter's provision is implied by the unwritten rules regulating mutual help within kinship networks. Thirdly, there is the future cost and impact of such losses, which deserves special consideration from a policy perspective if the

deceased is either an important earner or the main breadwinner of the household. These, it is suggested here, are the three main issues to be explored when looking at the causes and consequences most relating to the life events cluster *Deaths*.

Table 4.17 - Cluster of life events 'Deaths' (n = 317)

Items	%	Items	%
Death of a relative	38.2	Death of a child	6.3
Death of a brother or sister	15.8	Death of both parents	0.3
Death of the mother	14.5	Death of a worker	0.3
Death of the father	12.6	Death of a very close person	0.3
Death of the partner	11.7		

The other cluster of life events, *Illness and Health* (table 4.18), with 391 cases, accounts for 19.0% of all recorded life events and, in numerical terms, is slightly more important than the *Deaths* cluster.

Table 4.18 - Cluster of life events 'Illness and Health' (n = 391)

Items	%	Items	N
Illness	61.6	Having to quit one's job due to pregnancy complications	0.5
Accident	10.2	Pregnancy of son's girlfriend	0.5
Surgery	6.9	Suffering from depression	0.5
Illness of one of the parents	4.1	Premature birth	0.3
Illness of a child	3.6	Undergoing sterilisation	0.3
Pregnancy	3.1	Stress due to too much work	0.3
Illness of a brother or sister	2.0	Using alternative medicine	0.3
Abortion	1.5	Post-delivery problems	0.3
Effects of the landslide of the sanitary landfill	1.0	Worsening of the health status	0.3
Feeling sick	1.0	Problems with the ISS	0.3
Problems related to delivery	0.8	Delivery	0.3
Birth of a handicapped child	0.5		

Looking at the items in the above table 4.18, it is possible to see that in spite of the predominance of the item *illness*, which stands out with a relative frequency of 61.6%, it is a change in health status of a household member's of the household that characterises the cluster. Therefore, it seems that it is not just illness per se, but its implications that make of it a memorable event relevant to the livelihood of the household in the five years prior to the interview.

b. The perception of illness: the body as an asset

An interesting insight, that supports what has been discussed above, comes from the evidence provided by the recorded answers to the question: “What is for you the meaning of illness?”¹²⁶ Table 4.19 records the ten first ranking answers. The outcome presents a picture wherein the alteration of health status is seen as an event that primarily affects the functioning of the body (i.e. the first ranking item *being unable to carry on with normal activities* as the most representative of this perception). However, in this case too, a more complete appreciation of the implication of illness and its relation with vulnerability comes from the other items when considered as a whole. Answers such as: *to become a burden for the household, being unable to work, a person without health is worth nothing, all the worst* and *worrying*; indicate that the experience of illness is perceived as the inability to be productive and/or to play one’s role well. This is in terms of one’s life, as much as concerning the implied obligation regarding household reproductive processes these items bear.

Table 4.19 - Ten first ranking perceptions of the implication of illness for a persons’ life
 N = 810 and (% = n/N)
 Percentage of valid answers represented by the items in the table = 68.5%

Perception	%	Perception	%
1. Being unable to carry on with normal activities	16.0	6. Being unable to work	4.2
2. Feeling bad	11.5	7. A person without health is worth nothing	4.0
3. Bodily aches	9.0	8. Feeling sadness and depression	3.7
4. To become a weight for the household	5.7	9. All the worst	3.6
5. Being unable to get out of bed	5.4	10. Worrying	2.7

As has been documented in other urban settlements of developing countries (Hardoy, Cairncross, and Satterthwaite, 1990; Davis Lewis and Kiefferam, 1994), a focus on the importance of the body for low-income groups in Bogotá, reflects quite well the perception poor groups themselves have of the implication of illness as an event that depletes their assets and restricts their opportunities. In particular, within discourse about the implications of vulnerability, this study further confirms Chambers’ argument that a feeling of helplessness in the face of sudden shocks is one of the important consequences of vulnerability. This is well reflected in the answers provided by the interviewed members of households here.

¹²⁶ This question was asked within the section of the questionnaire aimed at clarifying the perception people had of illness as an event.

c. The causes of the Health Crisis Pattern: Illness and access to health care

The causes of HCP of vulnerability reported in tables 4.20, 4.21 and 4.22,¹²⁷ need not be interpreted alone, as if they were epidemiological data. In fact, they do not reflect the epidemiological profile of the sampled population, given that they are not the outcome of questions related to health status, but a retrospective explanation of what caused a life event.

Table 4.20 - Cluster of causes of life events 'Illness & Health', sub-cluster 1a 'Illness'
(Cluster, n = 582)

Sub-cluster 1a 'Illness'		N	% of cluster
		423	72.7
Items	%	Items	%
Cancer	9.1	Bodily pain	0.3
Heart attack	7.2	Haemorrhoids	0.3
Illness	6.0	Pelvic inflammation	0.3
Ulcer or gastritis	3.4	Amebas	0.3
Diabetes	2.7	Apendicitis	0.3
Brain haemorrhage	2.7	Pulmonary embolism	0.3
Acute respiratory infection	2.6	Nervous and psychological problems	0.3
Cervix complications	2.2	Problems related to infidelity	0.3
Problems with kidneys	2.1	Muscles aces	0.3
Health problems	2.1	Peritonitis	0.3
Being elderly	1.9	Anaemia	0.2
Problems requiring otorhinolaryngology	1.7	Infectious disease	0.2
Orthopaedic problems	1.4	Menopause	0.2
Unknown cause of death	1.4	Bad functioning of the vasovagal nerve	0.2
High blood pressure	1.4	Tuberculosis	0.2
Respiratory infection	1.2	HIV-AIDS	0.2
Hernia	1.2	Eye infection	0.2
Arthritis	1.0	Stress, State of Worry	0.2
Pregnancy related illness	0.9	Malnutrition	0.2
Problems with the stomach	0.9	Psychological shock	0.2
Effects of Dona Juana	0.9	Burn	0.2
Blood disease	0.7	Embolism	0.2
Liver complications	0.7	Miscarriage	0.2
Nervous problems	0.7	Meningitis	0.2
Migraine	0.7	Gynaecological complications	0.2
Bladder complication	0.7	Hydrocephalus	0.2
Prostatitis	0.7	Hysterectomy	0.2
Intoxication	0.7	Rhinitis	0.2
Genetic malformation	0.5	Neurogenic shock	0.2
Leukaemia	0.5	Sexually transmitted disease	0.2
Colon complications	0.5	Breast cyst	0.2
Osteoporosis	0.5	Dizziness	0.2
Asthma	0.5	Surgery	0.2
Trauma, fracture	0.5	Diarrhoea	0.2
Liver cancer	0.5	Arthritis	0.2
Incontinence	0.3	Asphyxia	0.2
Circumcision	0.3	Breast cancer	0.2
Problems with blood circulation	0.3	Stomach cancer	0.2
Varicose veins	0.3	Death of the partner due to illness	0.2
Birth of a premature baby	0.3	Death of the mother due to illness	0.2

¹²⁷

This cluster has been split over three tables for reasons of space.

Health related causes of life events have been grouped, as mentioned, in three sub-clusters. Table 4.20, above, presents the first one. When considered together (including the items of tables 4.21 and 4.22, below), that is as the whole cluster of causes *Illness & Health*, they account for 28.4% of all causes of life events. This is to say that almost 30% of the whole vulnerability dynamic originates within the health domain. Of the three sub-clusters, the first one, 1a *Illness* (table 4.20, above) contains those causes reflecting the incidence of illnesses in the generation of vulnerability. At least in numerical terms, this is the most important of the three sub-clusters of causes related to illness and health. It contains 423 items, which account for 20.6% of all causes of life events, out of a total of 2051¹²⁸ recorded life events; approximately one fifth of all recorded causes of vulnerability. This data provides the first interesting insight regarding the causes of the HCP: that illness is the main direct cause of health related life events.

Table 4.21 - Cluster of causes of life events 'Illness & Health', sub-cluster 1b 'The Body as an Asset' (Cluster, n = 582)

Sub-cluster 1b 'The Body as an Asset'		N	% of cluster
		144	24.7
Items	%	Items	%
Alcoholism	3.4	Working in unsafe conditions	0.3
Working without the necessary security measures	2.1	Smoking	0.3
Death due to illness	2.1	Problems during delivery	0.3
Pregnancy	1.9	Lack of medical check-ups	0.3
Faulty contraceptive method	1.4	Having to quit work due to pregnancy	0.2
Accident at work	1.0	Being physically impaired	0.2
Doing dangerous work with lots of risks	0.9	Problems related to being old	0.2
Psychological problems	0.9	Giving birth after 40 years of age	0.2
Age	0.9	Child death during delivery	0.2
Failing to look after one's health	0.9	Bad alimentation	0.2
Too much work	0.9	Age related problems	0.2
Living in a cold area and house	0.7	Lack of birth spacing	0.2
Do not use family planning	0.7	Stress	0.2
Inability for work	0.7	Irregular, insane life style	0.2
Bad outcome of surgery	0.7	Drug addiction	0.2
Working with secret police	0.5	Sorcery	0.2
Suicide	0.5	Disgrace	0.2
Insecurity in the house due to open fires and other hazards	0.5	Alcoholism of female partner	0.2
Living in a house without the minimum safety conditions	0.5		

The second sub-cluster, *the Body as an Asset*, is composed of items that are closely related to social, economic and cultural determinants of health (table 4.21, below). It bears

¹²⁸ Including those life events for which the respondent did not report a cause. If the total of reported causes is considered (N = 1561), the percentage rises to 27.0%

a close relationship to the issues analysed on the basis of the perception of the interviewed members of households regarding ill-health (see table 4.19, above). None of them directly described an illness, but rather how the functioning of the body is limited, affected or modified by life events. The third sub-cluster, *Access to Health Care* (table 4.22, below), has a very low relative frequency (2.6%), but it still a relevant inertia in the construction of the relative axis 1.

Table 4.22 – Cluster of causes of life events ‘Illness & health’, sub-cluster 1c ‘Access to Health Care’
(Cluster, n = 582)

Sub-cluster 1c ‘Access to Health Care’		N	% of cluster
		15	2.6
Items	%	Items	%
Bad medical attention	1.4	Very bad medical attention	0.2
Not having health insurance	0.7	Low quality of health care services	0.2
Employer did not provide health insurance	0.2		

d. The causal link between causes and life events

Table 4.23 shows the association between clusters of life events and their causes. It illustrates that, for 'Illness & Health' and 'Death', in 65.0% and 59.0% of cases respectively, the cause of a life event is illness. In turn, when the cause is related to violence and human rights violations, there is association between these kinds of causes and health-related life events in only 8.9% of the cases. However, it is also worth mentioning that when the life event is the death of a member of the household, *Violence* also occupies a relevant place as a cause, with a percentage of 25.2%.

Table 4.23 – Cluster of life events ‘illness and health’ and its causes

Clusters of causes	ILLNESS & HEALTH (%)	DEATHS (%)
Illness & Health	65.0	59.0
Violence and Human Rights Violations	8.9	25.2
Illness and Health plus Violence and Human Rights Violations	75.0	86.2

This primacy of illness as the main cause within the HCP results is also clear when desegregating the cluster of causes *Illness and Health*. Its two main sub-clusters (*Illness* and *The Body as an Asset*) can be associated with the two life event clusters (*Illness & Health* and *Deaths*). Table 4.24 illustrates that illness, as a cause of further illness (51.0%)

as well as death (53.1%), is much more important than causes related to the sub-cluster *The Body as an Asset*, the latter occupying, with 14.0% and 7.9%, a place of secondary importance.

Table 4.24 – Association among the sub-clusters of the cluster of life events ‘Illness & Health’ and the clusters of life events ‘Illness & Health’ and ‘Death’

Sub-clusters and cluster of causes	Clusters of life events	
	ILLNESS AND HEALTH (%)	DEATHS (%)
Sub-cluster Illness	51.0	53.1
Sub-cluster The Body as an Asset	14.0	7.9
Cluster Illness and Health	65.0	59.0

ii. Consequences: the immediate impact of life events and the mental health burden

The consequences of health-related life events concentrate mostly in the cluster of consequences *Affecting Physical and Mental Health*. Table 4.25 presents the items contained in the cluster of consequences of life events *Affecting Physical & Mental Health*. The use of the term “mental health” follows its use in literature on the social aspect of health found within the literature on development (Harpham and Tanner, 1995; Phillips and Verhasselt, 1994). The socio-economic context of people, such as the groups interviewed in this research, is one of great distress, characterised by high levels of anxiety, insecurity and fear about the future, in a situation of deep as well as worsening crisis (McIlwine and Moser, 2004). Sub-cluster 1a from table 4.25 presents the consequences related to mental health. They represent 68.1% of all consequences of life events directly or indirectly related to health; the majority of the items contained in the cluster belong to this sub-cluster. Among them, the first three, *being affected by a feeling of pain and sadness, psychological consequences and alteration of the nervous balance and fear*, account for 60% of the contribution of all items to the cluster.

Table 4.25 – Cluster of consequences ‘Affecting Physical and Mental Health’
(n = 589)

Sub-cluster, 1a – Affecting Mental Health		N	% of cluster
		401	68.1
Items	%	Items	%
Being affected by a feeling of pain and sadness	40.1	Being the last adult in the household	0.5
Psychological consequences	16.5	Feeling frustration for not being able to see the results of one's hard work	0.3
Alteration of the nervous balance and fear	3.4	Having to stay in bed	0.3
Suffering of bad temper and bitterness	2.2	Feeling not at ease in Bogotá	0.3
Resignation	1.5	Feeling unstable and insecure for not owing a house	0.2
Health reasons prevent from collaborating to the household cores	0.7	Stress due to inability to look after one's children for working reasons	0.2
Feeling isolated and without friends	0.5	Being not able to work well due to instability of mood	0.2
Being forced to temporarily leave one's place	0.5	Remaining alone	0.2
Being unable to recuperate from a shock	0.5		
Sub-cluster, 1b – Affecting Physical Health		N	% of cluster
		156	26.5
Items	%	Items	%
Worsening of health status	13.8	Losing well-being	0.7
Suffering of physical impairment as a consequence of surgery	1.9	Worsening levels of nutrition	0.7
Being in need of continuous medical treatment	1.7	Losing the ovaries	0.5
Total physical impairment	1.5	Getting pregnant and giving birth	0.5
Losing physical mobility	1.4	Having an abortion	0.3
Having to undergo a surgery	1.2	Suffering gunshot wounds	0.3
Serious physical trauma	1.0	Suffering stab wounds	0.2
Being impaired due to practising sports	0.7	Living close to a source of high pollution	0.2
Sub-cluster, 1c – Affecting Access to Health Care		N	% of cluster
		32	5.4
Items	%	Items	%
Being unable to cure an illness for lack of money	1.7	Being unable to attend a medical specialist for lack of money	0.3
Having to use low-quality health services	0.8	Economic difficulties related to the need for medical treatment	0.3
Receiving bad attention by the Institute of Social Security	0.5	Becoming blind	0.2
Loss of pension and health insurance	0.3	Being in need of special health care	0.2
Being unable to look after the health of one's children	0.3	Being without shelter	0.2
Being unable to pay for medical attention	0.3	The Institute of Social Security does not allow someone in the household to register for health insurance	0.2

iii. Households' strategies in the face of vulnerability

Low-income groups in the southern localities of Bogotá cope with health-vulnerability by adopting two main types of strategies. In the first place, through a strong

reliance on informal networks of mutual help and support and, secondly, by adopting different and diverse ways to maximise their present and future assets; a strategy defined here as one of functionings preservation.

a. Resistance through informal networks, and functionings preservation as strategies to cope with health-vulnerability

Within Group B, on the top right-hand corner of the vulnerability map (which is the same presented at the beginning of the chapter but copied here below) the cluster of strategies *Utilising Formal and Informal Networks* appears in a very close position to the cluster of life events *Illness and Health*, already presented when analysing table 4.18 under the numeral (a) at the beginning of this same section.

Copy of Map 5 Vulnerability patterns axes 1 and 2

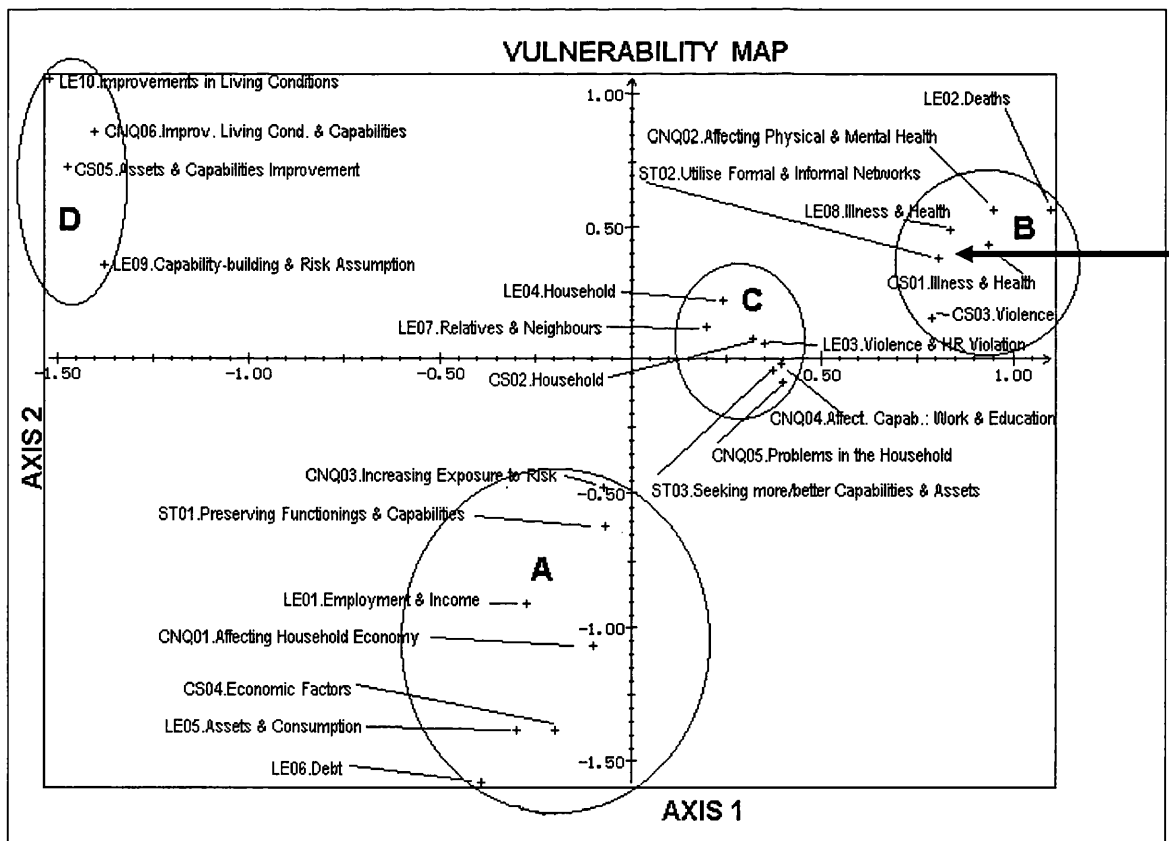


Table 4.26 presents a comparison of association, in order to analyse the final part of the Health Crisis Pattern. The table represents a sort of qualitative test. It first presents

what strategies associate with the main cluster of life events of the HCP (see the bullet point No. 1 below) and then what strategies associate most with the main cluster of consequences (bullet No.2):

1. The strategies that associate the most with the life event cluster *Illness and Health* are those based on the *Use of Formal or Informal Networks* in 32.9% of the cases; *Preserve Functionings and Capabilities* appearing in almost equally, in 32.4%.
2. When the last part of the pattern is analysed in relation to the relationship between consequences and strategies, the order and the difference of the clusters of strategies do not vary in any substantial way: use of formal and informal networks is found as the main strategy in 31.0% of the cases, preservation of functionings and capabilities following closely behind with 30.3%.

Informal networks always prevail over formal, reflecting the absence of institutions in terms of social protection and assets conservation policies (de Haan, Holland and Kanji, 2002; Beall, 2005). In fact, considering the sub-cluster in table 4.26, either from the life event cluster LE *Illness and Health*, or from that of LE *consequences affecting Physical and Mental Health*, it can be seen that households resort primarily to informal support networks to cope with health-vulnerability (23.7% and 24.7% respectively).

In the case of the other clusters of strategies, those that in one way or another imply action towards the preservation of functionings and capabilities, the picture is less clear and more complex. The sub-cluster *Losing Empowerment* presents the highest relative frequencies (15.3% and 12.1%) when associated with the mentioned clusters of life events and consequences.

Table 4.26 – Cluster of life events ‘Illness and Health’ and cluster of consequences ‘Physical and Mental Health’ vs. Clusters of Strategies

	LIFE EVENTS	CONSEQUENCES
Clusters of Strategies	Cluster Illness and Health (N = 392)	Cluster Physical and Mental Health (N= 594)
Clusters and Sub-clusters	%	%
Utilising Formal and Informal Networks	32.9	31.0
Utilising Formal Networks	9.2	6.2
Utilising Informal Networks	23.7	24.7
Preserving Functionings and Capabilities	32.4	30.3
Mortgaging Present and Future Assets	9.2	8.8
Cuts in Consumption	2.3	2.0
Increasing the Workload and Maintaining the Asset Level	5.6	7.4
Losing Empowerment	15.3	12.1

The differences in the reliance on formal and informal networks of support by low-income groups in southern Bogotá in order to cope with health-vulnerability are best understood by looking at table 4.27. The two sub-clusters have different weights. On the one hand, all items indicating a reliance on formal networks of support such as public health insurance, subsidised education, motor insurance, etc., account just for 18.9% of all strategies within the cluster. On the other hand, reliance on all those networks mainly represented by the extended family, but also made by relationships of kin, neighbourhood and patronage, represent 81.1% of the set of strategies most frequently employed..

The other cluster, *Strategies Aimed at Preserving Functionings and Capabilities*, the items of which are presented in table 4.28, below, is made of four sub-groups of strategies:

- a) *Mortgaging Present and Future Assets*,
- b) *Cuts in Consumption*, and
- c) *Increasing the Workload and Maintaining the Asset Level*.
- d) *Losing Empowerment*

The first sub-cluster, *Mortgaging Present and Future Assets*, accounts for 39.6% of the whole cluster. The concrete actions undertaken relate to the management of a number of assets and resources.

**Table 4.27 – Cluster of strategies using formal and informal networks
(n = 390)**

Sub-cluster 1a – Utilising Formal Networks				N	% of cluster
				74	18.9
Items	%	Items	%		
Health insurance covered all expenses	12.6	District Health Secretary covered health care expenses	0.3		
Employer paid for burial expenses	1.3	Health insurance contributed for burial expenses	0.3		
Social worker conceded a discount for medical attention	1.3	SOAT paid for medical and extra medical expenses	0.3		
Employer conceded a subsidy for housing	1.0	To receive the pension of a dead relative	0.3		
Being legally supported by husband and children	0.5	College helped with fees payment	0.3		
Employer paid for medical expenses	0.5	Health insurance covered some expenses	0.3		
Being able to realise a payment for medical attention due to SISBEN	0.3				
Sub-cluster, 1b Utilising Informal Networks				N	% of cluster
				316	81.1
Items	%	Items	%		
Receiving moral support in the household	17.9	Help collection of cash by the members of the JAL and neighbours	1.3		
Help from relatives	17.4	Present partner helps out with expenses relating to child rearing	1.0		
Informal housing payment allowed by a relative, friends or other	14.4	Sharing the household economy with the other family living in	1.0		
To go back to one's parents home	4.9	Using an informal savings chain	0.8		
Receiving financial help from relatives	4.1	Friend or relative paid for a funeral	0.8		
Receiving financial help for funeral payment	3.1	Receiving financial help from parents	0.8		
Receiving psychological help	2.8	Moral support of a very close friend	0.8		
Receiving financial help from former husband	2.6	Becoming more careful with oneself and the house	0.5		
Receiving material but not financial help from relatives	2.3	Trying to buy on credit from local shops	0.3		
Help from the neighbourhood and working companions	2.1	Having a good solidarity network in the neighbourhood	0.3		
Helping a relative outside the household with some cash	1.8	Maintaining a sort of risk insurance with relatives	0.3		

Table 4.28 - Cluster of 'Strategies Aimed at Preserving Functionings and Capabilities'

(N = 761)

Sub-cluster, 1a – Mortgaging Present and Future Assets		N	% of cluster
		281	36.9
Items	%	Items	%
Unpaid debt with friend or relative	9.9	Being forced to enter the debt spiral	1.1
Unpaid debt with a bank	5.4	Unpaid debt with employer	0.9
Unpaid debt with money lender	4.7	Repaid debt with money lender	0.8
Having to use one's savings	4.3	Debt for food stuff purchase with local shop	0.7
Repaid debt with friend or relative	3.7	Repaid debt with employer	0.3
Mortgaging goods	2.6	Repaid debt for plot purchase	0.3
Repaid debt with a bank or corporation	1.1	Having to pay rent	0.1
Receiving financial support from relatives	1.1	Planning to borrow money	0.1
Sub-cluster, 1b – Cuts in Consumption		N	% of cluster
		96	12.6
Items	%	Items	%
Reduction of household overall expenditure	7.1	Cuts in leisure expenditure	0.1
Eating two times a day instead of three	1.8	Moving to a smaller house	0.1
Cuts in food purchase and consumption	1.3	Having to pay for a burial	0.1
Eating once a day	1.3	Having just the pension to cover everything	0.1
Being able to buy only what is strictly necessary	0.5		
Sub-cluster, 1c – Increasing the Workload and Maintaining the Asset Level		N	% of cluster
		211	27.7
Items	%	Items	%
Working harder, more hours	7.1	Using one's savings	0.8
Working	6.4	Elder son started working	0.3
Working in the informal <i>rebusque</i>	3.9	Having to make up for the goods lost due to a robbery	0.3
Increasing the workload	3.4	Being not able to leave the job in spite of a serious cause	0.3
Having to start working	1.8	To keep working in spite of the negative consequences	0.3
Taking economic responsibility for the household	1.1	Doing everything possible to maintain child nutrition	0.1
Sending the children to work	0.9	Opting for the temporal closure of one's business	0.1
Doing everything possible to keep the children in school	0.8	Doing two jobs at the same time	0.1
Sub-cluster, 1d – Losing Empowerment		N	% of cluster
		173	22.8
Items	%	Items	%
Selling goods needed in the house	2.9	Having to get documents to work	0.3
Doing nothing for lack of time or resources	2.1	Using one's retirement pay for daily expenses	0.3
Doing nothing for the need of continuous treatment	1.6	Lack of support from actual partner	0.3
Not going to a specialised because too expensive	1.2	Lack of financial help from actual partner	0.3
Having to pay for the medical expenses of a relative	1.2	Facing a problem but not being able to solve it	0.3
Undergoing temporary therapy	0.8	Hospital did not provide medical attention	0.1
Using inherited assets in order to try to generate income	0.7	Ineffective intervention of police	0.1
Having to go to work as a maid on a daily shift basis	0.7	Being afraid that something may happen and praying	0.1
Not going out at night anymore	0.5	Employer did not want to pay for medical attention	0.1
Having no financial support from relatives	0.5	Feeling bad because husband works outside the city	0.1
Getting pregnant	0.5	Failure to bring of medical attention from ISS	0.1
Having to face difficulties alone	0.5	Having to sell one's plot	0.1
Being unable to see a doctor due to lack of money	0.5	Not managing to care for one's children	0.1
To keep working in spite of (illness, problem, etc.)	0.5	Deciding to take care of somebody else's child	0.1
Frustration due to being not able to help someone	0.5	To not attend health services for fear of mistreatment	0.1
Receiving discontinuous financial support from ex-husband	0.5	Having to face a difficult situation without help	0.1
Having to temporarily leave one's residence	0.4	Not attending hospital due to bad treatment	0.1
Not undergoing surgery due to fear	0.4	Not being able to save because husband takes money	0.1
Suffering from the consequences of the sanitary landfill	0.4	Losing working time due to child illness	0.1
Not working because of looking after family member	0.4	Not being able to solve a problem	0.1
Lack of financial help from former partner	0.4	Not using ISS due to long waiting times	0.1
Children do not help in the house	0.4	Worsening of life perspectives	0.1
Trying but not succeeding in getting credit	0.4	To look towards one's future with disillusionment	0.1
Health insurance covered only part of the expenses	0.3	Having to care for a family member outside home	0.1
Sharing the house with another family	0.3	Being left alone and unprotected	0.1
Having to visit a relative on a daily basis	0.3		

According to opportunity, the legal status of their job position, as well as their personal and family connections, low-income groups borrow from either a bank (a legal case), a money lender (an illegal case), or a friend (a case where moral obligations are not clearly separated by illegal implications or actions, such as the charge of very high interest). In either case, they are taking a high risk in order to get fresh cash with which to meet pressing daily or short-term obligations regarding the sustainability of their livelihoods. Most of the debt taken up by the interviewed households had, according to the items of the table, not been repaid at the moment of the interview. This confirms the fact that the preservation of functionings and capabilities implies an increase in exposure to the risk of undergoing further and harsher difficulties. As in the case of economic and asset vulnerability, these may often be both an effect whilst causing a crisis situation in other dimensions of people livelihood, such as the household inner dynamic, as will be illustrated.

Cuts in consumption, a strategy that occupies an important place when related to the economic and assets vulnerability, is a secondary one here. The items that comprised the sub-cluster accounted for only 12.6% of the whole cluster. This is possibly due to the fact that in order to deal with illness and its consequences, a strategy based on cuts in consumption is not the most viable because illness is an event requiring greater resources to overcome than just an adjustment in consumption. This does not mean that the strategy is less harsh for those households who adopt it. It is just not a preferred strategy when life events revolve around something that has happened in the domain of health. This seems to contrast with Beck's study of 'Survival Strategies and Power amongst the Poorest in a West Bengal Village' (1989), where female heads of households maximised their functionings and chances of future survival by mixing seeds with sand in order to hide them from the mouths of their children. However, also in the urban context of southern Bogotá, the point is not the technique by which low-income groups maximise their future assets by preserving functionings, but the fact that they do adopt strategies having this as their main goal.

Increasing the workload is a strategy that was adopted by 211 households to cope with vulnerability. Still, the majority of them adopted it as a reaction to a crisis mostly

related to an economic and asset crisis, as was illustrated in chapter 5. In the case of health-vulnerability, the association with the main clusters of life events and consequences is relatively low: 5.6% with life events related to illness and 7.4% with consequences of life events related to physical and mental health (see table A.6.12, above). However, even in this case, items such as *working longer hours*, *having to start working*, *doing two jobs at the same time* or *taking up responsibility for the household economy*, have significant implications for the health, since they imply a less sustainable management of the body, which is a key asset for low-income groups.

The Losing Empowerment sub-cluster contains those strategies that associate, in 15.3% of the cases, with life events related to illness and, possibly more importantly, with those consequences that have to do with mental health and distress. Its items, however diverse they might appear at first sight, all have to do with powerlessness. They are representative of situations in which there seems to be no other choice but to refrain from acting, and to lose some or all degrees of control over the direction of one's life. All these items taken together create a picture of the despair experienced by the poor. There are those who have already borrowed and have nothing left but to sell their goods. There are those who have already sold what they could, or taken up the most disparate informal jobs, but still have to forego medical treatment due to lack of resources. There are those women who cannot avoid deep depression due to the heavy pressure of informal work, house chores and lack of any help within the household. Those mistreated by violent husbands are helpless in the face of the ineffectiveness of the police and the tolerance of a male-dominated.

These, and other rather passive strategies in the face of life events, show how vulnerability may represent the very negation of capabilities meant to facilitate the freedom of choice people have regarding the direction and fulfilment of their lives. Vulnerability can produce a dramatic process of disempowerment seen here as the loss of that freedom of choice, which is the essence of the capability concept.

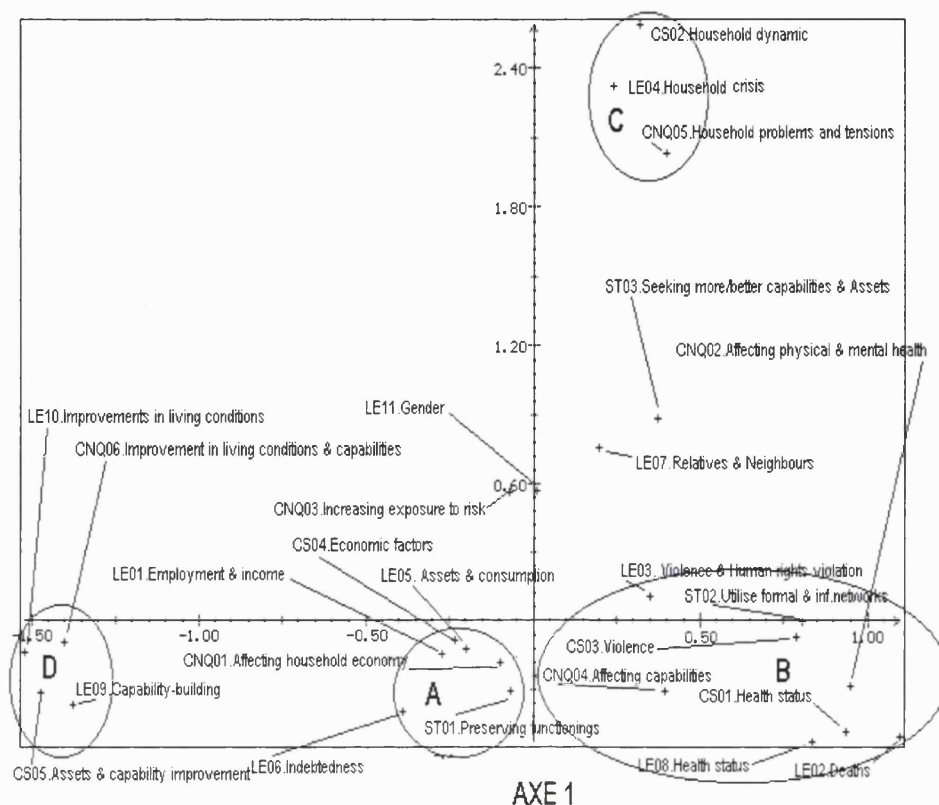
The whole cluster of strategies *Aimed at Preserving Functionings and Capabilities*, is a specific case illustrative of how vulnerability is strictly linked to a loss of tangible and intangible assets. Depending on the household cycle and the available assets, some of these are employed to deal with a situation of crisis, in an attempt to maintain the widest range of opportunities and freedom of choice, both now and in the future. The dynamic of vulnerability seems to indicate how this utilisation of assets becomes often unsustainable, leading to further exposure to the broad risk represented by finding oneself in a condition of poverty.

4.3.3 Analysis of Group C - Pattern No.3: Household Dynamic

This section presents the last two dimensions of vulnerability researched in this work: the inner dynamic of the household (Groups C in map 6 below), and the anti-vulnerability process (Group A in map 6 below). These denote low-income groups trying to generate better capabilities. As will be analysed, their attempts may become subject to a mechanism actually increasing vulnerability by magnifying exposure to risk.

To begin with the inner dynamic of the household, pictured in Group C in the vulnerability map 6 above, it can be seen that this group contains three clusters: the life events cluster *Household Crisis*, the cluster of causes *Household Dynamic*, and that of consequences *Generating Problems and Tensions within the Household*. They are important because it is through their interaction that the role played by the gender variable can be better highlighted.

Map 6 - Vulnerability patterns axes 1 and 3



i. Life events and their causes

The items of life events contained in the cluster *Household Crisis* (see table 4.29 below) were mentioned by 216 households; almost a quarter of the whole sample, and account for roughly 9% of the 2051 recorded life events. Beyond the relevance they have for the gendered analysis of vulnerability, they show the impacts the latter has outside its main economic and health dimensions, which were considered in the previous two chapters.

As mentioned in chapter 5, as far as the dynamic of vulnerability as described by the methodology of clustering and applying the analysis of correspondences is concerned, the gender variable was not well-captured or, at least, it did not emerge as a theme expressly mentioned by interviewed households.

The analysis carried out on the data included an attempt to check for an independent role played by the gender variable through the inclusion of those life events most explicitly related to the gender issue, either in a cluster alone.¹²⁹ The reason why this attempt was not statistically successful was that the cluster contained too few items and was not considered relevant by the software performing the correspondence analysis. Technically, the reason is that the software has a level of sensibility to the weight of cumulative frequencies dependent on the relationship among all the cumulative frequencies of the clusters. That was eventually also the reason why this result could not be predicted before performing the analysis.¹³⁰

In spite of this, it has to be stressed that the gender variable does play an important role within this research, for a complex number of reasons. Firstly, the majority of household heads interviewed were women. This implies that the results of this work are the outcome of a female-driven perception of the dynamic of vulnerability. This, which could be also considered an inner bias of the research, is partly balanced out by the fact that the number of life events and consequences that women were able to recall is remarkably higher than men's.

Furthermore, the majority of the events have the household as the centre of the dynamic to which they refer. This makes of any specific gender impact something that can only be inferred by the analysis of the consequences and strategies, unless there had been either a specific gendered focus or a more qualitative re-interviewing of a number of households where relevant. Secondly, as was illustrated in the section dedicated to the consequences of life events in the area of mental health, women appear to be those who suffer the worst consequences, as well as those who suffer higher coping costs.

Group C in the vulnerability patterns map N.6 revolves around the inner-household dynamic of production and reproduction, mostly shaped by conflicts and tensions, where a

¹²⁹ The life event cluster that, in both vulnerability maps N. 1 and 2, appears as LE01 Gender.

¹³⁰ It could be reasonably argued that, in such cases, the analysis could have been repeated using a different and more aggregated clustering. The reason why this was not done is that the technical and financial resources available at the time were enough to realise just one thorough round of correspondence analysis. In the light of the results obtained, the inclusion of the 13 life events (out of 2051) in another cluster would have only just slightly modified the results. This consideration was valued as sufficient to not undertake further fieldwork at substantial cost after almost 18 months had passed since the completed fieldwork period.

marked gender component catalyses the focus of the analysis and almost overshadows the role played by more structural variables in the co-generation of the crisis.

Table 4.29 - Cluster of life events 'Household Crisis'

(N = 216)

Items	%	Items	%
Separation	35.2	Marriage of a relative	1.4
Problems within the couple	22.7	Relative came to live in the household	0.5
Taking responsibility for someone else's child	5.6	Abandonment by the male partner for another woman	0.5
Separation of parents	5.1	Abandonment by the male partner for a woman who is his wife's relative	0.5
Pregnancy of a minor in the household	4.2	Rescuing a child from the custody of the father	0.5
Separation of the daughter	4.2	Being a lone woman abandoned by family members	0.5
Children leaving the household	3.2	Homosexuality of a son	0.5
Sharing the house with one's parents	2.8	Worrying for the future of the children	0.5
Child minor left the household	1.9	Alcoholism of male children	0.5
Alcoholism	1.9	Relationship problems between mother and children	0.5
Abandonment by the male partner	1.9	Parents split up but remained in the house	0.5
Relationship problems with one's child	1.4	The appearance of a formerly unknown step-brother	0.5
Drug addiction of a son/daughter	1.4	Separation of relatives who were living in the house	0.5
Child living the household	1.4	Having a close relative in jail	0.5

The cluster of life events *Household Crisis* is dominated by items such as *separation, problems within the couple, separation of the parents and abandonment by the male partner*, which on the whole account for more than 60% of the frequencies of the whole cluster (see table 4.29 above). Once the overall structure of the main cluster of Group C has been examined, the question is: What role does the factor that has been defined as the household inner dynamic play within the broader dynamic of vulnerability?

ii. Consequences and strategies: the impacts of life events

Table 4.30 presents the main association found between, on the one hand, the cluster of life events *Household Crisis* and, on the other, the clusters of causes, consequences and strategies that are most associated with it. Clusters are presented in bold and sub-clusters in normal font. The main causal relationships found within Group C relate to the inner dynamic of the couple, acting as the primary direct cause of the household crisis. In fact, the sub-cluster of causes *The Couple and its Dynamic* contains items that, in 43.6% of the cases, are the direct cause of life events related to the household crisis (see

second highlighted row in table 4.30). In order to better typify the causes of the crisis, it is useful to look at which items predominate within the sub-cluster of causes *The Couple and its Dynamic*. These are the following two items: Infidelity and Incomprehension, respectively having relative frequencies of 36.5% and 22.6%. These data seem to point to the existence of a process in which the productive and reproductive unit is breaking up, apparently born of behavioural and cultural features that regulate the relationship between the genders.

Table 4-30 - Main associations (%) between the cluster of life events 'Household Dynamic' and clusters and sub-clusters of causes, consequences and strategies

Clusters and sub-clusters (clusters in bold)	Cluster of life events Household crisis
CLUSTERS OF CAUSES	%
1. Household dynamic	51.8
1.a. <i>The Couple and its Dynamic</i>	43.6
2. Health Status	9.5
3. Violence	9.1
4. Economic factors	9.1
CLUSTERS OF CONSEQUENCES	
1. Generating problems and tensions within the household	26.3
2. Affecting physical and mental health	23.6
2.a. Affecting mental health	23.1
3. Affecting the household economy	18.2
4. Generating improvements in living conditions and capabilities	14.1
5. Increasing exposure to risk	5.0
CLUSTERS OF STRATEGIES	
1. Using formal and informal networks of support	25.9
1.a. Using informal networks	24.5

Looking again at table 4.30, the other types of causes that relate to health, violence and economic factors account for little more than 9% each. As in the analysis of the health dimension of vulnerability (see section 4.3.2 in this same chapter), when illness as a life event was mostly related to illness as a cause, here too the crisis of the household seems to be caused principally by a pre-existent crisis of the same type. This point is controversial, because it leads to the conclusion that other important dimensions of household livelihoods, such as health and the economy, do not play a major role as a direct cause within the overall household dynamic.

As in the case of the dynamic related to health, the hypothesis is that this apparently missed link is due to the perception people have of the causes of life events, that is, of what

happens to them in life. When asked to comment upon these causes, perceptions focused on short-term direct causes because this was what they were asked about. However, there is another terrain that seems to remain almost untouched. Regardless how conceptually elaborated the answer could be in the light of the complexities of the household dynamic, answers and recalled reasons seldom make an even scant reference to a wider set of causes, like the economic situation of the household or the psychological state of a member of the household.

This does not mean at all that people or, even worse, low-income people, have a narrow understanding of their own sociological and psychological dynamics. They were just not asked to comment upon these aspects. The questionnaire did not include possible questions such as, “Could you please further elaborate the causes of this?”

However, when the consequences of life events are considered, the contrary seems to be true: the household dynamic does play a causal role in generating impacts and effects in other areas of household and people’s livelihoods, such as mental health and the utilisation of informal networks of solidarity and support in order to cope with crisis. The data clarify what was affirmed above. From table 4.30 it can be seen that the sum of the percentages of the clusters of consequences is not directly related to the household dynamic (all those numbered from 2 to 5), which stands at 60.9%. That is, far more than twice the frequency of the cluster of consequences generating further problems and tensions within the household (cluster of consequences numbered with 1 in the same table), at 26.3%.

There are a few important points implied by the data that have to be analysed. The most important one is the fact that the sub-cluster of consequences *Affecting mental health* has the highest frequency, at 23.1%; a data that has a twofold implication in terms of gender analysis. At first it seems to point to the existence of another relevant area of vulnerability where mental health consequences appear to play a key role, since they are affecting both women (with more direct evidence) and men (with a qualitative analysis of this component still to be better understood beyond the common themes of frustration and alcohol consumption). Secondly, and similarly to that found when considering the

consequences of illness and changes in health status, women are also the most affected group in this case; when distress, tensions and incomprehension within the couple are either the causes or the events most closely associated with mental health consequences.

The relevance of this result certainly does not rest on theoretical grounds and is not at all a conceptual breakthrough! In fact, there is a great deal of literature on these issues that illustrates how women are the most exposed to the consequences of the household and the family unit breaking up. This is because it is they who are generally those who have the least access to assets and economic independence as means of coping, and who bear the brunt of responsibility towards the children, creating an additional source of psychological strain. However, this does have some relevance within the analysis of vulnerability, because it adds a further dimension to that set of cross-cutting consequences indicating women as being those who bearing the highest cost of coping within the vulnerability dynamic.

Table 4.31 - Cluster of consequences of life events 'Generating Problems and Tensions within the Household' (n = 130)

Sub-cluster, 1a – Implying Tensions and Violence within the Household		N	% of cluster
		27	20.7
Items	%	Items	%
Separation	6.2	Divorce	1.5
Mistreatment by male partner	3.8	Problems between the couple	1.5
Being aggressive and anti-social	3.1	Violence within the household	0.8
End of relationship	3.1	Suffering mistreatment	0.8
Sub-cluster, 1b – Generating Problems among the Household Members		N	% of cluster
		103	79.3
Items	%	Items	%
Problems among family members	38.5	Returning to parent's home after separation	1.5
Lack of communication in the household	6.2	Illness of a relative living outside the household	0.8
Relationship problems between parents and children	5.4	Taking nephews with them whenever they can afford it	0.8
Lack of co-operation in the household	5.4	Seeking more support by parents	0.8
Looking for a job due to tensions in the household	3.8	Loss of a son due to separation	0.8
Lack of respect of a son towards the mother	2.3	ICBF took the children from the mother	0.8
Temporarily leaving the household for internal tensions	2.3	Having to resort to sending a daughter to live with grandparents	0.8
Problems with a relative outside the household	2.3	Feeling glad about the death of somebody who was very mean	0.8
Pain and difficulty coping with death of a son	1.5	Seeking support of relatives in finding a job	0.8
Illness of a member of the household	1.5	Feeling more responsible for the household	0.8
Lack of affection from both parents	1.5		

4.3.4 Analysis of Group D - Pattern No.4: Search for Capabilities

The analysis of the capability factor illustrates three points that complete the picture of the inner dynamic of vulnerability and suggest some reflection on the coping strategies of low-income groups in southern Bogotá. They are:

1. There is clear evidence of the existence of active attitudes, behaviours and actions on the part of low-income groups concerning their situations. This point firstly relates to continuing debate on the topic of the culture of poverty and, more recently, to the study of social exclusion. Secondly, it is a point that deserves to be highlighted because it calls upon the discourse on resilience as a key feature of the alleviation of poverty. Through the analysis of low-income groups' resilience within a vulnerability perspective, it can be argued that resilience is not a straightforward mechanism leading to improvements in living conditions. It is rather intertwined with the permanent threat of fall-backs. These are often unavoidable without the presence of mechanisms leading to the acquisition of capabilities seen as opportunities, and functionings seen as the material means providing those opportunities. It is a process whereby both capabilities and functionings are strongly related to the kind of control and ownership people have of different types of assets.
2. A relationship exists between a daily struggle for better opportunities through building-up capabilities, and an increase in exposure to the risk of assets loss and depletion. This point adds some context-specific understanding to Chambers's more general definition of vulnerability as a dynamic strictly related to exposure to risk in the occurrence of a negative life event; termed shock or stress, where the shock has impact and continuous effect over time.
3. The results seem to indicate that an inquiry into the processes and strategies of low-income groups shows they bear a strong relationship with key aspects of the conceptual elaboration of capability provided by Sen.

- i. Life events and their causes

In the vulnerability patterns map No. 5, based on axes 1 and 2, the capability factor is identified by Group D, in which two clusters of life events, *Improvement in living conditions* and *Capability-building and risk assumption*, articulate the dynamic of the group. The group is completed by a cluster of causes related to the improvement in the assets and capability levels, as well as a cluster of consequences of life events that more clearly relate to an improvement in living conditions.

The causes of those life events related to an improvement in capabilities, as well as to striving for better assets and livelihood sustainability, are listed below in table 4.32, which presents the items of the cluster of causes *Assets and capabilities improvement*. Items are divided into two sub-clusters, respectively referring to material and intangible assets as the determinants of some improvement. The majority of items (61. %) are in the first of the two sub-clusters. This shows that the processes through which low-income groups achieve improvements in their conditions of life are perceived as being mostly determined by material achievements. These are in turn strongly linked to an increase in material security (in income and housing above all other items). Personal and collective desire for improvement, as well as specific events (mainly births and marriages), also play a role as facts that members of interviewed household choose to mention in 39.0% of the cases as key ones.

In line with the above-mentioned circularity existing among life events, causes, consequences and strategies, already indicated to be one of the main characterises of vulnerability, the majority of the causes of improvements presented in table 7.4 are themselves strategies. As such, these strategies are proactive actions undertaken to cope with, react to or prevent other situations arising. They can also be seen as selected snapshots of processes that develop over time, such as the search for better life conditions, coping with a pre-existent crisis, and striving for greater material security. This becomes more evident when examining specific items, such as *income increase*, *investing in housing in order not to spend on rent*, *obtaining a house through a benefit scheme*, *being able to invest in working assets*, etc.

Table 4.32 – Cluster of causes ‘Assets and Capabilities Improvement’

(n = 118)

Sub-cluster, 1a – Material Assets				N	% of cluster
				72	61.0
Items	%	Items	%		
Income increase	9.3	To get a better job	2.5		
Investing in a house in order not to spend on rent	5.9	Opening a shop or small business	1.7		
Plot purchase because it was a bargain	5.9	Job stability	1.7		
Obtaining a house through a benefit scheme	5.1	Winning a lottery prize	1.7		
To have a subsidy for housing purchase	4.2	Receiving financial help from someone of the household	0.8		
Receiving financial help from parents	3.4	Making a profit from a good trade deal	0.8		
Being able to invest in working assets	3.4	Getting a loan	0.8		
Receiving an inheritance	3.4	Having a job opportunity	0.8		
Not having to pay rent	3.4	To have some interest outside Bogotá	0.8		
Income increase working as independent	2.5	To have some savings	0.8		
Both partners earn an income in the household	2.5				
Sub-cluster, 1b – Intangible Assets				N	% of cluster
				46	39.0
Items	%	Items	%		
Desiring to improve the quality of life	22.9	Finishing a curriculum of studies	0.8		
Birth of a child	4.2	Desire to educate children with love and rectitude	0.8		
Marriage of a daughter	1.7	Having an important religious experience	0.8		
Strong desire to achieve something	1.7	Get a new couple	0.8		
Union and dialogue between the couple	1.7	To have time	0.8		
Improvement in the quality of housing	0.8	Return of a child to the household	0.8		
Going back into education to improve one's skills	0.8				

Here again, the element to be pointed out is not any specific item, the relevance of which is quite relative in statistical terms, but rather the picture that they convey when taken together. This picture clearly reflects that described above.

a. Life events related to improvements in living conditions

Life events items of the cluster *Improvement in Living Conditions* (table 4.33), were reported by 28.9% of interviewed households and represent roughly 12.7% of all life events recorded during fieldwork. By the same token, life events items of the cluster *Capability-building and Risk Assumption* were reported by 16.0% of households, and account for roughly 7.0% of all life events.

Table 4.33 – Cluster of life events ‘Improvements in Living Conditions’

(N = 261)

Items	%	Items	%
Birth of a child	20.7	Improvement in the Institute of Social Security service	0.8
Birth of a child within the household	9.2	Going back to the countryside	0.8
Finding a job	8.8	Getting a pension	0.8
Children graduation	6.9	Celebrating one's birthday	0.8
Buying a plot for housing construction	6.1	Working with the elderly	0.4
Stability of the couple and within the household	5.4	Living with the actual partner	0.4
Labour stability	5.0	Graduating	0.4
Rehabilitating oneself from alcoholism	4.6	Gold wedding	0.4
Economic betterment of the household economic situation	3.8	Managing to write off part of a debt	0.4
Improvement in the expectations towards one's life	2.7	Good health status of children	0.4
Getting a health care insurance ID	2.7	Return of a son to the household	0.4
Buying consumer goods	2.3	Couple coming back together after separation	0.4
To start working	1.5	Help of the employer to pay housing quotas	0.4
Having an experience of religious character	1.5	Receiving a plot as a present	0.4
Managing to write off a debt	1.5	Having a piece of land in the countryside	0.4
To have great union within the household	1.5	Achieving a housing benefit for housing purchase	0.4
Income improvement	1.1	Good marriage of a daughter	0.4
To be able to travel	1.1	Receiving the visit of the husband who works outside Bogotá	0.4
Reconciliation of the couple	1.1	Achieving the installation of the phone	0.4
To get a partner	1.1	Going out of town for a trip	0.4
Improvement in the health status	0.8	Feeling satisfied for the good situation of one's children	0.4
Reconciliation between father and son	0.8		

The above percentages, when compared with the weights of other clusters of life events that represent great negative impacts on the livelihoods of the interviewed households,¹³¹ contribute to complete a picture where the room households have left to improve, enjoy and construct opportunities in the present and towards the future is definitely narrow. This utterly contrasts with the impacting strength of opposite dynamics of assets depletion and opportunities restraint of the ECP (see section 4.3.1). These are the worries and material difficulties households face as the result of the economic crisis, which have dramatic consequences in terms of economic problems, physical and mental deterioration in health, as well as having a negative impact on intra-household relationships, personal self-esteem and behaviour.

This was not an unexpected outcome, given that the sample used for this research was composed of low-income groups suffering continual struggle poverty, or the threat of

¹³¹ Such as those presented in the previous sections that characterise the economic and health dimensions of vulnerability.

it. Rather, what is striking here is that the items in the main “positive” cluster, *Improvement in living conditions*, are a mix between:

- 1) Common events of everyday life (although certainly a source of temporary merriment and personal fulfilment) that neither bear any specific relationship with other aspects of the dynamic of vulnerability, nor somehow reflect the presence or the absence of any ongoing process of increase or decrease in the exposure to vulnerability and its effects.
- 2) Some statistically not very relevant life events that refer to the achievement of a degree of economic security, yet certainly important to those households who mentioned them.

Leaving aside the second category for its little statistical relevance, the first category is comprised of items such as those referring to births, a renewed stability within the couple, graduations and personal feelings of improvement, as well as others describing the importance of returning to a place one loved living in, feeling happy about the children's health, or the fact of living under the same roof and in partnership with the children's other parent. All of these are very precious things which, especially in a situation of crisis, may play an extremely important role in making difficulties bearable, providing hope and mental resources which support people in managing to cope and to strive for a better future.

The impact of these factors on those baseline conditions strongly affected by vulnerability in the economic and health areas can be reasonably viewed as of lesser magnitude. This leads to the conclusion that, although personally relevant for household members, life events referring to improvements in living conditions seem neither strong nor statistically relevant enough to counteract the often dramatic effect of vulnerability in its economic, health and inner dynamics relating to households. Indirectly, this casts more than one doubt on the effectiveness of resilience, both as an analytical tool and a really effective mechanism to cope with vulnerability and the alleviation of poverty.

b. Capability-building and risk assumption

The analysis of the other cluster of life events, *Capability-building and Risk Assumption* (table 4.34), strengthens the impression of the great precariousness affecting low-income households in Bogotá when attempting to get their households on a more stable and sustainable path. At the same time, this cluster provides more elements illustrating how the link works between this dimension of vulnerability and the negative ones affecting assets and resources. The main item of the cluster is *buying a house*, mentioned in 46.9% of the cases. As in many other urban settlements in developing countries, in Bogotá home ownership is a primary asset. As Moser (1996) pointed out in her Ecuador-based study on household crisis, the house often represents a direct source of income through the renting out of rooms, and a very valuable asset when it comes to the home-based production of goods or services for households whose capacity to afford production costs is extremely limited.

However, the results presented here also contain another aspect less highlighted by Moser's studies: the fact that any step undertaken to improve the quality of life and make livelihoods more sustainable is accompanied by a parallel assumption of risk. In fact, any attempt to improve the socio-economic conditions created by households and their members, implies some investment. In the almost total absence of impacting or at least effective action by the state or NGOs, in order to be able to invest the household must either resort to presently owned and/or borrowed assets, or mortgage those future resources and assets they project they might have. This determines a greater exposure to a wide spectrum of risks, in the same way as was illustrated in chapter 4 when analysing the borrowing mechanism as a risk magnifier.

To illustrate in concrete terms what was mentioned above, it can be seen that nearly all items contained in table 4.34 reflect a search for better capabilities through the acquisition of assets or the enhancement of previously owned ones. These assets are mostly material ones, among which the house (its ownership and/or improvement) plays a central role. The predominance of a search for material assets is due to the fact that they are more immediately convertible into cash or earnings and, therefore, represent a way to rapidly

maximise functionings. On the other hand, protection of intangible assets implies either the search for better opportunities through education and training, or the selection of a different settlement and/or social environment in which to live. In this case, intangible assets may represent a strategic link between sources of better opportunities and improvements in material assets. This is the case with items such as, *moving to Bogotá, continuation of interrupted studies, learning a trade, going back to school or planning to refurbish the house*. Interestingly, both family and kinship relationships do not directly appear within these active strategies utilised to maximise the capability level, albeit some of them may hide behind those life events describing a move to another place.

Table 4.34 – Life events cluster ‘Capability-building and Risk Assumption’

(N = 145)

Items	%	Items	%
Buying a house	46.9	Problems with a tenant	2.1
Improving one's housing	12.4	Coming to live in Bogotá	1.4
Moving to Bogotá	7.6	Learning a trade	1.4
Building a house	5.5	Going back to school	1.4
Continuation of interrupted studies	5.5	Planning to refurbish the house	1.4
Purchasing a car	3.4	Purchasing a second house	0.7
Change of neighbourhood	3.4	Purchase of working tools	0.7
Opening a small business	2.8	Thinking of a change of living place	0.7
Planning to buy a house	2.1	Changing job	0.7

c. The relationship among life events, causes and consequences in the CSP

Once the clusters are analysed, this section looks at the relationships existing among them in terms of percentage associations. This is to say, how frequently different types of causes and consequences can be said to conform a direct path (cause-event-consequence) with all those life events previously described, when taken as clusters.

Table 4.35 presents these data showing in the first column the two clusters of life events of Group D, *Improvement in Living Conditions* and *Capability-building and Risk Assumption*. In the second and third columns, the table presents the clusters of causes and consequences to build a cross-tabulation of the associations between life events and consequences. There are no strategies recorded for this pattern, because it is mostly a positive one. The two latter columns are divided into two sub-columns, according to the first and second order ranking clusters of causes and consequences, respectively, which are most frequently associated with the two clusters of life events.

<i>Clusters of life events</i>	Clusters of consequences			
	Assets and capability improvement	Economic factors	Improvements in living conditions and capabilities	Affecting the household economy
Improvements in living conditions	17.4	7.5	69.4	4.9
Capability-building and risk assumption	31.3	21.8	56.5	20.4

Looking at the first part of the path (cause – life event), life events of the *Improvements in Living Conditions* cluster are associated with causes related to assets and capability improvement only in 17.4% of the cases. This confirms what was said above about the fact that those events that imply improvements in living conditions are weakly related to, and partially caused by, previous events or processes happening within the economic or socio-economic domains. They rather depend on more contingent and personally relevant events, such the above mentioned births, marriages, etc.

Economic Factors, the second order ranking clusters of causes that is most associated with the life event cluster concerned, strengthens, with a percentage of only 7.5% in this reading of the results. It has to be remembered that the causes grouped in it are very negative ones, mostly related to the loss of important assets and functionings. Therefore, the weak 7.5% association it has with the *Improvements in living conditions* cluster of life events, could suggest the hypothesis of the generation of improvements as a positive and actively determined reaction to adversities (resilience), finds no evidence within the results of this work. Therefore, regarding the dynamic of vulnerability in Bogotá, this seems to indicate that the concept of resilience is of no particular usefulness in explaining how vulnerability works.

Almost diametrically opposite is the interpretation that can be suggested about the relationship between the cluster of life events *Capability-building and risk assumption* and the causes most associated with it. In this case, the causes related to assets and capability improvements determine those investments in capabilities and functionings in 31.3% of the cases, while causes related to the economic crisis play the same role in 21.8% of the cases.

To sum up, it emerges that in 53.1% of the cases, when households adopt strategies aiming to maximise their capabilities, this is directly related in more than 50% of the cases to a dynamic originating in the economic sphere, the goal of which is the improvement of human capabilities. This indicates the existence of an interesting role for Sen's capability concept, in providing elements that allow the proposition of an analytical explanation for key aspects of the dynamic of vulnerability.

As the most likely hypothesis, depending on the life cycle of the household and the particular conjuncture in which it is found, any action undertaken with the aim of maximising capabilities can be considered as either a preventive or coping measure, taken against the crisis. Besides, considering the low asset level from which these households start those actions, there are elements to suggest it very likely any action undertaken to prevent or cope with the impacts of vulnerability, also implies a great assumption of risk. Such risks expose households and their members to the negative effects of potentially harming life events in any of the researched dimensions: economic, health status and inner dynamic of the household.

This seems to add elements that contribute validating a definition of vulnerability put forward at the beginning of this thesis. There it was described as a process that weakens the ability of individuals and households to cope with exposure to the risk of economic, social and personal loss. This has a depleting effect on their assets and capabilities to function, both within society and as individuals. Thus, as a concluding remark, this research proposes evidence that would support a call for further investigation into the relationship between vulnerability and capability, as variables that seem to have an inverse proportional effect on one another. When the level of capability is high, vulnerability is likely to be contained or reduced, whereas when vulnerability is high this is generally accompanied by a loss of capabilities and a depletion of assets.

ii. Consequences: the immediate impact of life events

The consequences most associated with the two clusters of life events presented in this section, indicate that in both cases positive consequences predominate at least in the short-term.

d. Consequences of the search for capability building and risk assumption

In fact, when the cluster of life events *Improvements in living conditions and capabilities* is considered (see the third column of table 4.36), consequences that almost symmetrically imply improvements in either living conditions or capabilities are associated with it in 69.4% of the cases. By the same token, when life events of the cluster *Capability-building and risk assumption* are examined, consequences belonging to the cluster of life events *Improvement in living conditions* are those that most often associate with it in 56.5% of the cases.

**Table 4.36 - Consequences Improvements in Living Conditions and Capabilities
(N = 356)**

SUB-CLUSTER		N	% of cluster
6a – Generating Improvements in the Living Standard		128	35.9
Items	%	Items	%
Happiness, merriment	23.9	Feeling that conditions have improved	1.1
Improvement in living conditions	5.9	Thinking of refurbishing the house	0.3
Improvement in one's mood	3.1	Miraculous healing of deadly disease	0.3
Improvement of mutual understanding with the husband	1.1	Having subsidies and social security for the children	0.3
SUB-CLUSTER		N	% of cluster
6b – Generating Improvement in the Capability Level		228	64.1
Items	%	Items	%
Improvement in what one expects materially from life	11.8	Good performance of children at school	0.8
Positive change in life style	8.7	Having the means to help the household financially	0.8
Better economic situation	5.9	Being able to sublet	0.8
Achieving more security	4.8	No negative consequences	0.6
Owning something	4.2	Being able to buy goods for daily consumption	0.6
Achieving more union within the household	4.2	Obtaining temporal economic resources	0.3
Feeling satisfaction about an achievement	4.2	Getting mortgaged good back	0.3
Stability	3.4	Changing neighbourhood	0.3
Improvement in health status	2.0	Being able to do more for the children	0.3
Labour stability	1.7	Having wider options in health care	0.3
Improvement of the space within the household	1.7	Becoming more skilled	0.3
Disposing of the economic means to provide what is necessary for the household	1.4	Being able to pay the mortgage on the house	0.3
Saving more	1.4	Feeling better as a female head of household	0.3
Managing to write a debt off	1.1	Reuniting with children after separation	0.3
No major consequences	1.1	Having a pension	0.3

The details of the items of these consequences are presented in table 4.36. They were reported by 356 of interviewed households, as the first consequence of one of the reported life events; that is by 39.5% of interviewed households. This means that within a number of reported life events per household varying between 0 and 5, almost 40% of households experienced some positive consequence over the last five years. Such consequences improved living conditions or the capabilities of some or all of the household's members. When the percentage is calculated taking as a base the totality of reported life events, the result is 17.3%, which better reflects the overall depleting effects of vulnerability. It demonstrates that the room for positive events and consequences as well as for successful coping strategies is actually restrained for low-income households.

The table divides the consequences of the cluster in two groups. The first sub-cluster groups those items indicating improvements in living standards, according to the personal point of view of the interviewed person. It is also the sub-cluster of consequences presenting the highest association of the two with the cluster of life events *Improvement in living conditions*. The items of this first sub-cluster almost represent the answers to the hypothetical question that could have been asked: "How did you feel your life conditions changed after that event?" The majority of respondents would have said they felt happy or happier.

This is in line with the interpretation of the cluster of life events *Improvements in living conditions* proposed above: overall happy and positive events such as marriages, births and personal advancement in some area, correspond to symmetrical consequences in the evaluation of one's living conditions. Without some more sophisticated analytical tools, borrowed from psychology or anthropology, it is difficult to say here what kind of relationship this may have with the socio-economic dynamic that is the main interest of this research.

The second sub-cluster provides elements for a different reading, when its association with the other cluster of life events *Capability-building and risk assumption* is considered. In this case, looking at the association between

Cluster of life events *Capability-building and risk assumption*

and

Cluster of consequences *Improvement in living conditions and capabilities*

80.7% of the consequences belong to the second sub-cluster *consequences generating improvement in the capability level.*

Its items, such as *improvement in what one expects materially from life, positive change in life style, better economic situation, achieving more security, and Improvement in the health status*, all have to do with the betterment of opportunities and the improvement in living conditions. They are more or less directly linked with assets ownership or enhancement,¹³² and are also strictly linked to one another. This shows that when Sen describes the importance of eliminating ignorance, illiteracy, remediable poverty, preventable diseases, etc., by saying that “[to] expand our freedom to lead the lives we have reason to value and these elementary capabilities are [things] of importance of their own” (Sen, 1994), he is making the same point that interviewed members of households stressed with their answers concerning what consequences were relevant to their lives.

¹³² This last difference depends very much on the wording with which people described the consequence, and not on the whether it was the assets level or the capability level which was the key variable to consider when seeking an explanation.

5. Vulnerability Analysis: Implications for the Debate and Policy

The first chapter opened by introducing the rationale of this research. It did so by presenting the relevance of research oriented towards the construction of a vulnerability approach through the analysis of existing knowledge gaps regarding two points: the first one being the operationalisation of vulnerability and the second a still open agenda concerning the improvement of social policy-oriented knowledge about the dynamics of poverty.

Presenting the relevant debates the same chapter also argued that the study of vulnerability is still a vibrant academic issue, the validity of which also rests on two conceptual pillars: firstly, as indicated by the research questions synthesised through the quotes of Chambers and Barrientos, the fact that the concept, the indicators, the patterns, and the analytical model that define different approaches are far from sufficiently defined and agreed upon within the scientific community. Secondly, the fact that these arguments were presented at roughly an interval time of a decade between reflects both the relevance of continuing to study vulnerability and that of the thesis itself.

However, the debate on vulnerability cannot be halted at the level of the academic reasoning. Even if there were achievements on that plane, they would be of little use without an effort to translate them into policy, which is perhaps the most robust of the reasons for studying vulnerability; otherwise one would incur the same dilemma signalled by Sen when analysing the concept of social exclusion asking:

“Does it contribute to our understanding of the nature of poverty? Does it help in identifying the causes of poverty that may be otherwise neglected? Does it enrich thinking on policy and social action in alleviating poverty?”¹³³
(Sen, Op.cit. 2000: 2).

¹³³ Italics as from Sen’s original.

Sen's questioning in regards to the utility of dealing with new concepts finds a possible answer in the relational nature of the concept of 'social exclusion' that helps to clarify how behind any process of well-being deprivation there are political processes within which who is excluded and, more importantly, who excludes can be identified and evaluated. In the same way, the concept of vulnerability finds its reason to be when it is stretched beyond the boundaries of academic reflection and taken to the field of applied policy with questions such as:

- 1) Where are we, in terms of policies that are oriented by an understanding of the dynamics of poverty, 10 years after Chambers first mainstreamed the issue of vulnerability as a relevant debate within the social development arena?
- 2) Has social policy managed to answer the challenge of understanding the dynamic nature of poverty, the diversity of social groups' command over assets, capitals, and resources?
- 3) Have we, as scholars often involved in the drafting of social policies, been able to successfully respond to the challenges posed by globalization and the new transnational risks generated by a restructured society (Beck, 1992)? This is a society that has transformed its macro structures, from its mode of development to its mode of production (Castells, 1996), shifting not only the social policy agenda (as indicated in section 1.7) but the very rationale of social policy transforming a population and needs-based agenda into a global one based on rights, sustainability, and access to well-being opportunities.

This chapter elaborates the results of the research against a background represented by the challenges presented by the above three questions. It has an analytical goal to contribute to the debate but has no pretension to provide any definitive answer. It does so adopting an underlying intertwined structure that merges two threads: The first one compares the main insights from the previous chapter (chapter 4) presenting the results and key elements of the conceptual debates reviewed in chapter 1. The second thread responds to the purpose of discussing the implications of the findings from a social policy perspective, while considering the relevance of the findings for social policy and poverty reduction policies in Colombia.

5.1 Implications of the International Policy and Poverty Debate for Social Policy in Bogotá

The analysis of poverty reduction policies in Latin American countries has to be framed within a broader framework where local policies at the national, regional, and city levels are better understood through the mirror of their interplay with actors that play important roles in steering global policies and agendas. In Colombia this analysis has to be carried out keeping in mind that over the last ten years social protection policies have been shaped by the constraints imposed by the IMF on macro-economic and fiscal policies as well as by the guidelines of the World Bank on sector policies, such as institutional reforms, employment and, lately, social protection. These factors all contribute to continuing a trend of policies heavily influenced by measures such as the structural adjustment programmes of the eighties and nineties (Ahumada, 1996; Garay, *op.cit.*, 2002).

Historically, the effect of the dominant policy paradigm of the eighties, known as the ‘Washington Consensus’,¹³⁴ is felt with a certain delay, only after the so-called ‘opening up’ of the economy that took place under the presidency of Gaviria, and plays a stronger and orienting role on Colombia’s public policy from the beginning of the nineties onwards. As underlined by Gore (2000), this consensus can be summarised along four major lines:

1. Macro-economic stability and adjustment.
2. Social safety nets to contain the negative effects of adjustment.
3. Investment in human capital, as a strategy to be coupled with safety nets in order to protect social gains, but one may say to boost or not to loose productive capacity (depending how well one masks a capital-centred approach to policy with people-centred rhetoric).
4. Establishment of a world ranking of accomplishing (successful) and not-accomplishing (unsuccessful) countries, against which international aid, access to

¹³⁴ It was also discussed in section 1.7.5 as far as its implications for poverty reduction policies are concerned.

international deals, commerce, financial flows, and political blessing is measured and rewards or punishments administrated at length.¹³⁵

The next section presents a reflection about what those guidelines by the International Financial Institutions (IFI) have meant for the continent and more specifically for Colombia. This will provide a more solid ground for the development of the analysis of the implications of the research results.

5.1.1 Debate on the Washington Consensus: Can anti-poverty programmes alleviate poverty?

An important voice reflecting on poverty in Latin America through his analysis focusing on macro-financial vulnerability and volatility is that of Pierre Salama (2003), according to whom macro-economic trends make poverty an insoluble problem. Salama indicates that after the end of hyper-inflation, general productive reactivation was seen as a promising step towards stable and sustainable poverty reduction. This recipe did not work for Latin America and it only produced marginal improvements in nutrition, life expectancy and schooling, without hitting the hard knot of what has been called structural poverty that, he further underlines, in spite of being strictly speaking a conceptually incorrect definition, nonetheless conveys the idea of how difficult it has been for Latin America to overcome deep-rooted trends of inequality and exclusion.

Salama notes that the linear reasoning of monetary institutions, built as if socio-economic change were to be produced by a chain of cause and effect reactions (liberalisation will lead to growth and that will produce poverty reduction), ignored the redistributive effects determined by different modes of production; as the author defines them. Dominant economic thinking, he argues, has relegated to the oblivion a number of mainstream findings (for instance those of ECLAC), among which the fact that for a same growth rate, the effect on employment, on its quality, and on the quality of life of the poor

¹³⁵ See the way capitals have been channeled or withdrawn from the country according to Moody's classification of business risk, or according to what the Department of State of the US decides on Colombia's success or lack thereof in combating drug-trafficking.

are different from one country to another. This, he points out, is because the sectors responsible for growth have different behaviours when it comes to the evaluation of how they consume goods, how they invest, and how general and specific demands for goods and services are stimulated by all this complex interaction.

Salama cites such authors as Lustig (1989) or Paes de Barros y Mendonça (1997) to argue that mainstream economic growth is highly inefficient. These authors have illustrated how with a distributional neutral growth at a fixed annual rate of 3%, for the case of Mexico for instance, the lowest tenth of the income distribution would have to wait some 64 years until its income reached the poverty line. Under these conditions the net elasticity of poverty in the face of growth is -0.94 , which means that given an annual growth of 1%, poverty is reduced by 0.94%, keeping all the rest as a constant. But the central argument for this chapter among those presented by Salama is his analysis of the GDP growth rate in different Latin American countries. As table 5.1 illustrates, the main features are a rather brisk growth in the first half of the decade, later halted by the impact of the Asian crisis and the inner difficulties of the economies to compete on the global market.

Table 5.1 - GDP growth in selected Latin American countries					
	Argentina	Brasil	Chile	Colombia	México
1991	10.6	1	7.3	1.8	4.2
1992	9.6	-0.3	10.9	3.6	3.7
1993	5.9	4.5	6.6	4.4	1.8
1994	5.8	6.2	5.1	5.9	4.4
1995	-2.9	4.2	9	4.9	-6.1
1996	5.5	2.5	6.9	1.9	5.4
1997	8	3.1	6.8	3.3	6.8
1998	3.8	0.1	3.6	0.8	5.1
1999	-3.4	0.7	-0.1	-3.8	3.7
2000	0.8	4.4	4.4	2.7	6.6
2001	-4.4	1.5	2.8	1.4	-0.3
2002	-16	1.5	2.2	1.2	1.5

Source: Salama (2003).

On this point the Economic Commission for Latin America and the Caribbean (ECLAC) has recently argued that the region's vulnerability to sudden changes "was revealed (...) by the Asian crisis, which destabilized its economy and dragged down growth in the final years of the decade" (ECLAC, 2004: 17). In this work ECLAC produces a thorough analysis of the decade of social development in Latin America between 1990 and 1999, indirectly offering more than an element for a reflection on the relationship existing between macro-economic volatility and vulnerability and, eventually, social policy measures.

According to ECLAC (op.cit.) the proportion of poor people out of the total population decreased in most of the countries throughout the 1990s, but the size of the poor within the entire population of the continent rose from 200 to 211 million. Furthermore, the relative share of urban poverty continued to increase, indicating that even the argument on the prevalence of a rural type of poverty in the continent has to be revised. It is a biased reading of the data insofar as it is based on the relative percentage of rural and urban poverty within countries that leaves aside the complementary relevance of absolute numbers for the analysis, thus underplaying the need to look at urban poverty with more robust statistical tools. Again, it is not a problem of arguing which type of poverty deserves more attention since if poverty is eventually a form of deprivation that is found in multiple dimensions of human life, than each of these dimensions deserves attention and ethical concern. Nonetheless, the fact that the incidence of poverty in rural areas in the region is 64% versus a 37% of estimated urban poverty (op.cit.) tends to generate a very biased and uncritical feedback that results in the under-consideration of comparative issues such as well-being, access, and exclusion.

ECLAC also points out that, when looking at upturns or downturns in per capita income, there is a strong correlation with parallel decreases or increases in poverty. Differences are in part explained by the differential growth of labour productivity across sectors, segments, and firms, which was accompanied by the parallel fact that "low-productivity employment, mostly in the informal sector, expanded in nearly all the countries" (op.cit.: 19).

The above debate is closely linked to the results of this research in the following way: There is an overlap between the causes of the crisis at the macro and micro level, which in both cases has an economic origin related to vulnerability and instability. At the micro level, the worst pattern of vulnerability crisis has its most proximate cause in unemployment and precarious processes of income generation. Thus, the ECP examined in chapter 4 originates within the interaction between household and their members on the one hand and, on the other, the job market, its centre being the economic difficulties experienced by households in the face of a worsening economic climate and a great impact of this on the ability to generate income. ECLAC points out that, since earned income accounts for the bulk of the household resources, low earned income is a major determinant of poverty. In this way, one of the big questions relating the results with the broader debate on social policy and social protection is displayed: is it the smoothing of income the real critical point that policies that aim to counteract vulnerability should attack?

The above questions are not merely rhetorical. On the one hand, the results invite a reflection on the role of income even within poverty dynamics, whereas on the other, it is a fact that many policy makers in Colombia and elsewhere remain anchored to a conceptualisation of poverty as a lack of income. A tangible manifestation of the latter is the fact that every relative improvement in terms of poverty incidence in Colombia is signalled as a major breakthrough by the World Bank (1994 and 2002a) and the Colombian Government (DNP, 2005). Still they have systematically downplayed the unequal and unchanging income distribution marking the whole decade; a trend that continues well into the first half of the present decade (Cornia, 2004; Graham, 2002 and Pettinato, 2002).

The fact that, as indicated by ECLAC (2006), some 75% of household in the region are unable to reach an income level even barely close to what is broadly recognised as a sufficient income average to avoid poverty, seems to be more related to a process best explained by a number of causal factors than by a single-factor explanation; the one centred on lack of income per se.

As one of the main threads of the rest of the chapter, this thesis will rather argue that on the one hand the situation of income shortage describe above must be considered

since as Sen noted on a ground that does not technically differ from that of Colombian analysts, income poverty is a factor that increases the probability of deprivation in terms of capabilities and well-being (Sen, *op.cit.*, 1999; Castaño and Núñez, 2007; and Núñez and Espinosa, 2005). However, on the other hand, it has to be analysed as an effect of vulnerability, as a dynamic whose patterns have different entry points and paths through which the final net effect of income scarceness is eventually brought about. Of the same token, it will be argued the income scarceness should be treated adopting a similar conceptualisation for policy purposes. Let us now analyse, taking once more advantage of the authoritative voice of ECLAC, how a complexity of factors, ultimately related to the volatility mentioned by Salama, can produce a context that closely interacts with and to a great extent determines the vulnerability that this work has examined at the micro-social level.

The share of total income in the bottom 40% of the distribution shrank in five countries expanded in eight and stayed steady in one between 1995 and 1999. The overall picture is that of a continent where long since-rooted inequalities do not substantially modify in spite of a mild increase in social spending and basic social development indicators (Ocampo and Franco, 2000).

ECLAC analyses four primary factors affecting income distribution, namely: education, property ownership, demographic characteristics, and employment density. Education measured in years of education is generally highly concentrated in the region and although it statistically tends to correlate with the level of income, it also has a negative impact on income distribution. Property ownership is also highly concentrated, “to the point where the average income derived from it coincides with the observed value in the seventh, eighth, and ninth income decile” (ECLAC, *op.cit.*, 2004: 21). Demographic characteristics still bear a high level of relevance for the poor pooling together a number of pressure factors such as larger households, low levels of income, and higher dependency ratios. Furthermore, when looking at the employment density, a comparison between the deciles at the extremes of the income distribution shows the capacity of the top deciles to generate income is at least twice that of the bottom one. This rather descriptive analysis carried out by ECLAC still enables us to perceive the tremendous inequality existing in

terms of opportunities that lay behind those general indicators. ECLAC's analysis of the dynamics of employment and occupational structures presents a quite bleak picture of the continent at the beginning of the century, in the face of two big policy-related problems: The intergenerational transmission of opportunities to achieve well-being, and the issue of social security and protection reform.

The economically active population (EAP) grew only 0.8% in rural areas while maintained a pace of 3.3% of average annual expansion in urban areas. This, against the background of already unfavourable socio-demographic indicators, generated great difficulties for countries and cities to absorb this new workforce. In the face of slowing GDP growth (as illustrated also by Salama) and parallel decrease of employment expansion, that according to ECLAC were 0.4% lower than in the 1980s, the net result was the increased weight of the tertiary and informal sectors.

Two thirds of all new jobs created over the decade were in the informal sector. This pattern that affected most dramatically the most populous countries such as Brazil, Colombia, and Mexico is better understood through data, indicating that 24.2% of the increase of jobs in the informal sector was on account of workers in the commerce and services sectors working as independent workers. This is followed by a 18.2% of workers (employers and employees) in the micro-entreprises, domestic workers (9.4%), unskilled own-account workers in industry and construction (8.1%), and workers engaged in primary occupations (6%). Between 1990 and 1999 the share of informal workers in urban areas rose from 41% of total urban employment to 46.3%, while the proportion of formal private-sector employees other than professionals fell from 35.9% to 29.1%.

It is particularly important to underline the quality that accompanied these changes in terms of labour conditions because it has a specific relevance for vulnerability analysis. Mirroring what was described in chapter 2 about Colombian and city-level Bogotá's trends, in Latin America the 1990s saw a sharp decline in formal employment contracts and the proliferation of temporary and part-time jobs, a lack of social security coverage, and as ECLAC points out, the expansion of permissible grounds for dismissal, the reduction of severance pay, and restrictions on the right to strike, collective bargaining, and

union membership. In Colombia these trends were also worsened by violence and the use of systematic physical elimination of journalists, trade-unionists, and politicians that fought battles to defend worker's rights and those of indigenous groups and the rights of groups and persons that politically opposed the ruling legal and illegal elites.

The increasing precariousness of employment assumes then a specific relevance for groups whose resources, capitals, and assets are already scant, given that indirect income transfers attached to labour through social security, have the utmost relevance in order to maintain a sustainable level of consumption. Households that managed to secure some kind of access to indirect transfers are less exposed to life events. Income generation from paid labour plays perhaps the most direct role in providing the means to this kind of security for almost the totality of low-income households.

In Latin America, top level earning positions in the job market are occupied by a bare 10.3% of the workforce, where the middle cadres encompass 14.5% and those at the bottom the remaining 75% of employed workers. Among the latter in Colombia a percentage between 60% and 70% is found below the poverty line.

It is striking to consider ECLAC conclusions and their deeply worrying implications:

- “The first notable feature of trends in occupational stratification in the 1990s is that the relative share of the different occupational strata remained almost unchanged, indicating that there was very little upward mobility.”
- A second observation is that the distribution of labour income is much more unequal in Latin America than in developing countries of other continents.
- Lastly, when households are classified according to the primary income earner's occupation, their average per capita income reflects fairly accurately the median incomes of the different occupational strata. (...) This factor has the strongest influence at the middle level and at the upper end of the bottom level, where the average income of households with more than one income earner is usually

significantly higher than that of households with a single income earner” (ECLAC, op. cit.: 26).

Educational opportunities and, consequently, access to more stable, better-paying jobs, are to a large extent inherited, which stands as the key reason why current socio-economic inequalities are reproduced indefinitely in successive generations.

5.2 Conceptual Implications of the Results

Against this background, that complements from the point of view of the macro processes illustrated for Colombia and Bogotá in chapter 2, what we have at the micro-social level from which the results of this work have been produced, is that the most critical life events of the five years previous to 1998 articulate vulnerability along two axes:

1. Income-generation and unemployment, and
2. Capabilities and risk assumption.

These two axes comprise four critical areas that generate four main patterns corresponding to the four different groups (A to D) analysed in chapter 4 and whose relationships are graphically represented in map 5 from the same chapter:

- A. The economic crisis pattern
- B. The health crisis pattern
- C. The pattern of the internal dynamic of the household
- D. The pattern indicating a search for better capabilities

Furthermore, when one crosses life events with consequences, that is, the direct effect of life events in terms of immediate impact for the household, which is different from what it was defined as a strategy (the way household face the consequences in the medium- and long-term), these are the main results:

1. Crises that originate within the economic sphere or in areas where the economic plays a key role¹³⁶ generate a traumatic impact in all dimensions of people's livelihood, within which the following are worth mentioning:
 - a. Cuts in consumption, often of all types of products.
 - i. Some households eat a meal just twice or even once a day.
 - b. Indebtedness, in the majority of the cases with illegal moneylenders who charge high interest rates.
 - c. Impact on the internal stability of the household.
 - d. Psychological distress associated with the impossibility of getting ahead.
2. Crises that originate within the health sphere produce the following consequences:
 - a. Increase in the load of psychological distress, expressed most of the time as depression, bad temper, lack of will, or a condition of almost permanent worrying.
 - b. Worsening of the health status either for long periods of time or even as a permanent change of health status.
 - c. Increase in the economic burden over the breadwinner or the household in general.
 - d. Difficulties to accomplish economic obligations such as the payment of public services or health insurance.
3. Crises generated by catastrophic events produce a set of consequences that are a mixture between the two sets seen above, with the specificity of consequences more similar to those generated by events happening in the health sphere, when the catastrophic event considered is the death of a household member.
4. These results confirm Chambers' argument about the perception of poverty by the poor as a social condition not determined by the lack of income but rather by defencelessness in the face of crucial life events affecting their livelihood.

¹³⁶ That is, being able to dispose of assets or resources such as employment, credit or saving to face contingencies.

The presence of four different type of patterns, together with others of lesser statistical but not of irrelevant weight for people's livelihoods, clearly demonstrates that there is more than one dimension through which poverty enters into the daily living of poor people. The statistical analysis of the data has clearly showed that the inertia, that is, the amount of variability of the whole dynamic explained by axes and clusters, has no single explaining factor and it is rather best pictured as a dynamic with a number of epicentres. Their analytical significance is explored in next section that articulates the findings related to four main vulnerability patterns with key concepts that are retaken from the multidimensional conceptualisation of poverty initially illustrated in chapter 1.

5.3 The Dynamic of Vulnerability: Multiple Patterns and Entry Points

Vulnerability does not necessarily originate within the domain of the economic; this is both one of the main results of this research and a first answer to the key question about the role of income within the different patterns of vulnerability and, more in general, the dynamics of poverty.

Empirical studies such as those carried out by Pryer (op.cit., 1989 and op.cit., 2003) and Evans (op.cit., 1989) clearly demonstrate that vulnerability originates in a domain other than the economic, in the case of those scholars' studies that of health. Chant's study of Mexican households provides key insights of how a vulnerability pattern may formulate for problems that originate within the internal dynamic of households; specifically in the power imbalance and unequal gender control over productive and monetary assets (Chant, op.cit., 1991) A similar finding is provided by the analysis of the Household Dynamic Pattern (Group C, section 4.3.3) in this research. The now classical case-studies by Moser in Budapest (Hungry), Guayaquil (Ecuador), Lusaka (Zambia) and Manila (The Philippines) show that it is the complex interaction between the capacity to enter the market of household members on the one hand and, on the other, the type of access to secure jobs that the market itself permits to household units within a given socio-economic context that determines a reduction or increase of vulnerability and hence, but only as an effect, of poverty too (Moser, op.cit., 1996). This is thus another case in which it is not

income per se but the processes that produce income deprivation that those scholars indicate we should pay attention too, as the results of this thesis confirm.

Another important and this time more recent piece of research that presents another case of empirical findings regarding the multiple entry points that a vulnerability pattern may have, although eventually ending in a number of effects that affect income, is the evaluation of the programme *Oportunidades*¹³⁷ by González de la Rocha (2006). It shows that domestic changes that originate from social policy programmes may determine changes in the way families¹³⁸ respond to critical life events. Assets such as better education for youth or more time availability for women are the origin of processes that are capable of transforming opportunities, including income generation (op.cit.).

In a market-oriented economy with few social buffers and limited coverage in terms of social protection, it should generate no surprise that so many impacts originating within vulnerability patterns have relevance for aspects of people's life more or less directly related to income; such as paying for public services,¹³⁹ food, school fees, or the purchase of new assets. Furthermore, even in recognising that the causes of poverty should be sought in spaces and factors that categorically precede income deprivation along the causal chain of explanation, it has to be reiterated that income deprivation is nonetheless extremely important.

Income deprivation strongly predisposes individuals and households to multidimensional poverty but vulnerability analysis illustrates that its deepest origin must be sought in the dimension of people's control on assets and consumption, that is, elements that, in spite of having a broad economic connotation, are ultimately linked to what Sen (op.cit., 1981) defined as the capability set of a person.

¹³⁷ Part of a family of social protection programmes based on conditioned subsidies oriented towards human capital and income smoothening such as '*Bolsa Familia*' (Family Fund) in Brazil, '*Chile Solidario*' (Chile with Solidarity) in Chile and '*Familias en Acción*' (Families in Action) in Colombia; all initially inspired to the SRM framework and promoted by the World Bank.

¹³⁸ She uses the Spanish term '*familias*' in the original text.

¹³⁹ The first items in the spending patterns for poor groups according to the Encuesta de Calidad de Vida 2007 and data disaggregated at the level of locality (Arteaga, 2008).

Each one of the patterns presented in the analysis of the results responds to the conceptual characteristics describes above, at the point that one may say that vulnerability and urban poverty do have a structural feature that includes the monetisation of impacts as one important dimension.

The ECP has an epicentre that has its immediate origin in life events related to economic difficulties and caused by problems of employment but it cannot be understood outside of the framework set by the first section of this chapter. Employment instability, precarious working conditions, and low wage levels cannot be explained by the fact that the Colombian economy is not competitive because workers have human capital deficiencies and a wage level too high to grant firms and the economy as a whole the degree of competitiveness it should have (Castaño and Núñez, *op.cit.*, 2007). At least at the city level for Bogotá, the main vulnerability pattern of the ECP represents a challenge in terms of a research capable to disentangle the implications in terms of social exclusion and failure in granting basic social and economic rights. In this same direction Sarmiento Gómez (2001) has argued that there is in Colombia, without ruling out major cities such as Bogotá, a crucial connection between quality of work, insertion in the labour market, and abilities for work on the one hand and, on the other, access to education and freedom to choose from different options in life that bears more than one echo of what the analysis of the ESP has put forward in this research.

After the worsening of the health status and the increase of the psychological distress, the HCP also presents elements that corroborates the fact that there are multiple entry points and cross-cut connections between the different dimensions from which the crisis can originate. All the processes seen in the analysis of the ECP, for instance, deeply interact with those life events that have to do with lack of income to pay for fees that condition real access to health services in a number of occasions, even within the subsidised tier of the system. Looking at another string of the pattern, that connecting health-related life events and economic impacts in terms of consequences, one finds another connection that is at the very least a bi-dimensional one (health-economic), not to bring in the whole analysis of institutional constraints and political decisions that from the macro level impinge all the time on what takes place at the micro-social level. The analysis

of the HCP highlights two further issues that deserve to be specifically analysed for their implications. The first one is the relevance of the body as an asset, to which is dedicated a further session (5.6.3) since it belongs to a short but significant list of peculiarities with an importance on their own for social policy; such as the processes leading through indebtedness to the mortgaging of future assets, the gendered aspects of vulnerability, the chronic poverty core revealed by the analysis of the patterns and the social meaning of vulnerability; section 5.6 is dedicated to these. But it is the second aspect, the use of informal networks as a main strategy to cope with the HCP that cannot be left to drift away from an analysis of the multi-dimensionality implied by the HCP of vulnerability. Formal networks, that is, the local Secretariat of Social Welfare and that of Health, but also the formal network belonging to the reformed health care system¹⁴⁰ appears almost a shadowy presences in the strategies that households adopt to confront ill-health - to cope with and recuperate from it. Too many times the results from section 4.3.2 – numeral (iii) show that people rely on their own resources or on feeble social networks capable to provide but temporarily solutions to problems that affect the long-term sustainability of households.

The inner dynamic of the household, the HDP, has shown another facet of the multiple typology of the “entry and exit” points of vulnerability. In this case gender relations, heavily influenced by a culture that still legitimates male privilege is reflected by tensions that are played around the sexual division of work within the household but also through the changing nature of sexual relations and behaviours within the couple. The traditional structure of the nuclear family often offers neither a real shelter nor the excuse for holding to an ideal type of stability in the face of the mounting tide of life events that challenge the traditional role of men as breadwinners, present family unit with youth problems that cannot be solved with limited time an competence, complicate issues such as drug addition, gangs, or “just” early sexual practices, among others - all reflections of population changes that are not merely demographic but deeply social problems as indicated by Wartenberg in her compilation on recent population trends in Colombia (Wartenberg, 2003). The enormity of the economic problems faced by women and men with economic obligations towards children and often other relatives too, the depth of the implications the HDP has for the education of children, and the opportunities the will have

¹⁴⁰ The old health centre (*Centro de Salud*) was renamed in Colombia *Entidad Promotora de Salud* (EPS) after the reform promoted by Law 100 of 1993.

as human being go well-beyond the preoccupations one may nurture for human capital and it is certainly a dimension that this thesis has just unveiled, still at least indicating it has an aspect of poverty dynamics that social policy should consider more. At least in Colombia a link between the internal household dynamic and in particular that of the couple, and anti-poverty social policy have to be still built beyond the important and already existing aspect of legality that has actually progressed significantly over the last decade with the houses of justice and the popular conciliators.

5.3.1 Patterns of Vulnerability: Coping or Reacting?

The pattern of search for better capabilities has been placed at the beginning of this section whose title poses the question about the interpretation of the patterns analysed so far: do they reflect a real capacity to cope? Or, to put it another way, despite the many structural and institutional constraints, is people's agency effective in dealing with critical life events, or are people just reacting to what it happens to them? This is not to insinuate the existence of a culture of poverty (this has been made clear enough in the conceptual chapter) but to question the power people have to control assets and resources and to steer their lives towards better opportunities.

The answer this research has been able to provide to these interrogatives is based on mixed evidence. On the one hand there is the fourth above-mentioned pattern of vulnerability of the CSP¹⁴¹ that reflects a pretty positive pattern but, on the other hand, there are groups of strategies that reflect people's withdrawal from action the show the existence of a completely different and very negative trend.

Among the limitation of the thesis, there surely is the capacity of statistically demonstrating the relation between a pattern and who exactly is affected by it, which as it is explained in section 6.2 depends on the research design. However, the careful qualitative analysis of the quantitative trends presented by the data indicates that the life cycle and the

¹⁴¹ The pattern that was presented in section 4.3.4 and corresponding to Group D in Map No. 4 depicting the vulnerability patterns.

level of assets and resilience are variables that contribute to the explanation of many of the differences encountered.

The CSP reflects a search for a better quality of life through a better and more efficient use of tangible and intangible assets. The first thing to notice is that its two clusters of life events are made up by items that reflect coping or reacting strategies; they are strategies expressed by people as life events because they either correspond to actions undertaken shortly before the interview or that preserve their character of being at the origin of a series of other events.

A first cluster contains items that relate to the capacity to assume risks and to invest in the achievement of better assets and the strengthening of human capabilities (see back table 4.32 in chapter 4). Life event items such as the *purchase of a house, purchase of working tools or assets, or, getting back into the educational system* all reflect the planning for a better quality of life and, at the same time.

The other cluster of life events *Improvement in Living Conditions* (see table 4.33 in chapter 4) contains items that indicate a struggle for the achievement of better capabilities but also that reflect on the whole a different moment in the life cycle indicating improvements that have already been achieved. Within this group of strategic life events we have on the one hand such items as *satisfaction for a trip out of town or birth of a child* that indicate achievements in the area of intangible assets. On the other hand, one finds items such as *getting a new job or achievement of a degree by a member of the household* indicating achievements in the area of tangible assets.

These two clusters are discussed here because they illustrate an important point and therefore it should not be considered as inappropriate to having them back here, within a framework that has an analytical purpose, although they strictly speaking reflect themes touched upon during the analysis of the results. They open a window onto a strong active role played by agency within the dynamics of poverty, a component that the analysis of the group lead by Chambers signalled as the key feature of the processes through which poor's people seek to secure their livelihoods, as later reiterated by Ellis (op. cit., 1998) and Scoones (1998) and more broadly by the livelihoods tradition. What a vulnerability

approach manages to add to these previous approaches is that it can disentangle both quantitatively and qualitatively these aspects from the others and perform an analysis of how life events related to a proactive aspect of agency aimed, as a final goal, at the improvement of capabilities:

- a) Develops over time and
- b) Interacts with other vulnerability patterns.

This aspect is of fundamental importance for policy because it illustrates that human and institutional priorities for poverty reduction do not necessarily overlap; whereas too often policies seek to provide people with what is considered a good material result may partly clash with what people are seeking to achieve, which is a better capability to function. The example of giving people cash, instead of job security, to generate income with autonomy and dignity, is perhaps a very clear and straightforward example of what is said above.

The analysis of the results relative to the strategies of the different patterns has presented a few more insights about the relationship between assets, vulnerability, and capabilities, which is central in this section that analyses the tension existing within the four vulnerability patterns between an active agency and a other elements indicating that there are cases of very low resilience and capacity to successfully react to life events, achieving livelihood sustainability and assets preservation among other important goals. What one would like to know is who adopts a certain kind of strategy and why, as well as under what specific conditions. As stated previously, the research design has a limitation in this sense and this last bit of analysis in this section is aimed at amend in at least partly this limit exploiting the insights coming from the previous chapter. This is done through a more in-depth analysis of key aspects of two clusters of strategies: the one containing strategies items at the *Generation of Better Assets and Capabilities* and the one that has been called *Withdrawal from Acting*.

Those two groups of strategies were given less emphasis in chapter 4, where we found a greater association of the vulnerability pattern analysed (particularly the two main ones of the ECP and the HCP) with strategies based on informal networks of support;

apparently leaving the two clusters analysed here in a secondary position. Still the two clusters of strategies *Generation of Better Assets and Capabilities* and *Withdrawal from Acting* present elements that cannot be overlooked and fit very well into the analytical perspective proposed here of coping versus reaction.

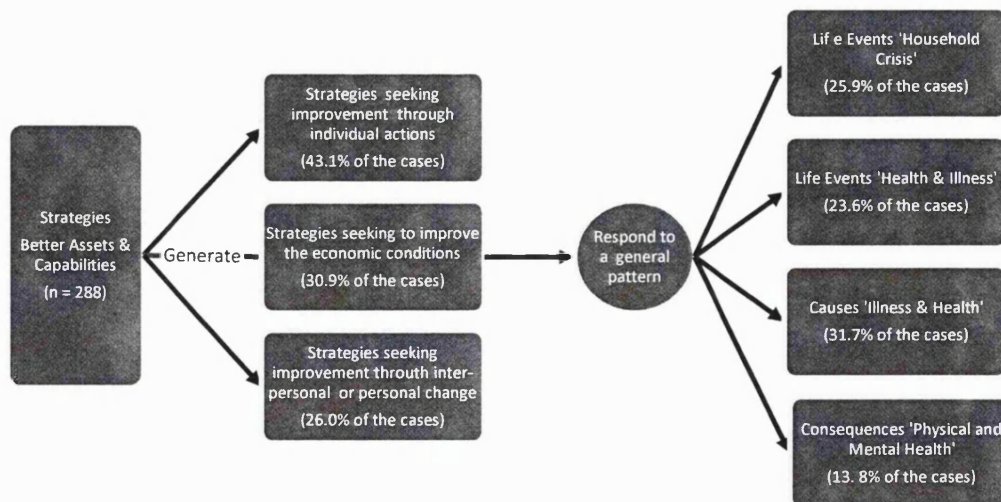
Generation of Better Assets and Capabilities can be broken down into three separate typologies:

- a. A first group that correspond to the 43.1% of all the strategies of this cluster (figure 7) indicates punctual actions such as going to the doctor or doing something specific to find a solution through dialogue, that is a protection of assets through personal initiatives. What they share with the other two types is the protection of the possibility to choose and preserve one's functioning (the possibility of being and doing) through the preservation of tangible or intangible assets.
- b. A second group (30.9%) indicates that households also try to attain the same result as the sub-cluster from the previous item but through efforts that are aimed at the improvement of economic conditions. What is not shown in figure 7 is that in this case the “string” of the pattern differs from the other two clusters because it relates more to life events that have to do with *Income and Employment* than with *Household Crisis* or *Health and Illness* like the other two sub-clusters analysed here in points (a) and (c). Households that undertake these actions as a strategy seem to be the most solid ones in terms of assets, especially human resources or monetary assets such as savings. We find here items such those indicating house-based production of goods or services, the mobilisation of members of the household into the job market, and the planning to purchase productive assets through savings.
- c. A third group of strategies (26.0%) attempt to preserve assets of improved capabilities through personal efforts, as individuals or as a household unit or family. Thus, items such as *working to pay for one's studies* or *using*

homemade remedies or searching for mutual help with one's partner, belong to this typology.

On the whole figure 7 illustrates that these strategies respond to a vulnerability path¹⁴² that seem to run throughout the patterns analysed. This is marked by a hindering of the power of agency and interestingly it is a path that originates from either the breaking down of the household or from life events having to do with illness o lack of access to health care. It seems that when life events hit the emotional and physical core of individuals, the resulting effect is a type of deprivation and dispossession of the means to cope, which is very close to the way through which chronic poverty has been conceptualised by CPRC; in both cases we have profound distress and crisis in what are the very basic elements that characterise humanity such as having basic capabilities that allow people to fulfil the fundamental needs of health and autonomy. The next cluster *Withdrawal from Action* illustrates a possibly even more extreme case according to the same analytical parameters.

Figure 7 - Main patterns of clusters leading to strategies aimed at preserving assets and generating better capabilities



¹⁴² The term 'path' is used here to mark a difference from the term 'pattern' used all throughout the research document, so as not to generate confusion.

The cluster of strategies *Withdrawal from Acting* reflects the acceptance of one's condition. The examination of this last group makes clear one important point: the acceptance of one's condition has nothing to do with the creation of a culture of poverty. Rather, items such as *doing nothing for lack of money or time, having to undergo continuous medical treatment, selling goods, not being able to see a doctor due to the lack of money, using one's savings for everyday expenses, feeling frustration for not being able to help somebody, or not being able to work because of the daily care provided to others*, when considered as a whole make up a picture of despair and no entrapment that somehow summarises the very meaning of the implications of economic vulnerability.

The next section picks up another main analytical thread stemming out from the analysis of the results; that which indicates the importance of analysing in more depth the Economic Crisis Pattern and, in particular, the relationship between vulnerability and the SRM approach.

5.4 Vulnerability and the Social Risk Management approach: a concluding remark

Vulnerability and social protection are interlocked issues within a debate that is central to development. A broad vision of social protection intended as a complex public action promoting livelihoods should include assets preservation and accumulation. As such it challenges the dominant SRM paradigm that focuses on providing short term assistance to individuals and households to cope with shocks while finding new income opportunities (Barrientos 2005).

The literature on social protection, poverty and vulnerability in Colombia (Nuñez, 2005; Rawling, 2003), as well as those recent or newly designed policies by governmental agencies (MERPD¹⁴³, 2006) have heavily drawn on the stream of analysis that fosters the SRM approach application.

¹⁴³ This is the acronym the government choose for the somehow buoyant name of *Misión para el diseño de una Estrategia para la Reducción de la Pobreza y la Desigualdad* (Mission for the design of a Strategy for Poverty and Inequality Reduction).

Reflecting a substantial support for a widened residual approach known in the jargon of development as the 'Post-Washington Consensus' (health, education, basic services and safety nets to protect human capital), they do not take on board a number of important lessons of poverty studies over the last two decades. In particular, those focusing on the dynamics of poverty and institutions (Beall, 2005; Chambers, 1989; Moser, 1998; Rakodi, 2002; Pryer, 2003), its multidimensionality (UNDP, 1997) and the centrality of the role played by assets and capitals in order to build sustainable livelihoods and attain a better quality of life.

There is little doubt about that fact that social assistance and safety nets may certainly play a role in facing some of the most critical situations. However they are not sufficient to turn policies aimed at the most critically poor, as in the "attacking poverty" strategy of the World Bank presented in WDR 2000/1, into broad processes of poverty reduction.

The construction of a bridge towards a better quality of life and a broadening of liberties and opportunities for the different groups that experience poverty requires that a number of conceptual issues are empirically tackled with research feeding back into conceptual models that present nowadays at least the following weaknesses:

- They focus on chronic or structural poverty, taking on board the insights from Africa and Asia, omitting first of all a sound definition of what chronic and structural poverty are and, second, ignoring the huge diversity of developing countries, their regional contexts as well as major processes such as urbanisation that produce new forms of poverty and exclusion.
- They consider human beings as human capital and, therefore, on the basis of methodological individualism, substantially inspired by utilitarian and neo-liberal principles, omit the reflection on social protection as a key component of social rights. In this way they dismiss the whole reflection on poverty and rights.
- They concentrate on an old-fashion income-centred conception of poverty. Switching means with end, the existence of a low-income as a characteristic of the poor, is taken as the cause of poverty whereas it is the effect of the complexity of

factors that contribute to plunge people into a number of situations and conditions define by us, as researchers, poverty.

By arguing that consumption smoothing by direct or indirect subsidies to income is the main solution this stream of thought and policy denies the importance of assets and resources accumulation and the relationship this has with inequality and institutions within a complex process of livelihood construction.

A second debate to which the thesis makes a contribution from the point of view of the conceptual implications of some empirical findings is that on the changing nature of poverty, according to the space in which we are evaluating it, that is, the discussion of poverty as capability deprivation developed by Sen (1999).

Vulnerability analysis points to the need to carry out further research the existing links between the constraints and losses vulnerability implies for different groups and their capabilities and freedoms to enjoy the life they have reasons to value; as it is clearly evident from the description of the main patterns of vulnerability found by the research: critical life events and their consequences come out as empirical context-specific cases of what Sen has defined as capability failures¹⁴⁴.

Against this background discussion, the research is relevant to other two debates feeding back one into the other in many respects, not last the fact of being very relevant for present social policy in Colombia: income-poverty approaches versus social policy measures capable of taking into account a broader livelihoods focus.

The findings resumed in this introduction indicate that sustainable livelihoods means assets and capitals accumulation, its long-term consolidation and opportunities to transform them into better capabilities and quality of life and that vulnerability analysis is a potential tool to identify critical situation, differentiate among its different impacts and provide insights for policy-makers to design assets-based policies that prevent their

¹⁴⁴ In particular refer the description of the vulnerability patterns related to unemployment, ill-health and death presented earlier.

depletion and foster their accumulation within a conceptualization of poverty as capability failure.

6. Conclusions

This chapter presents the conclusions of the research, grouping them into four sections. The first section tackles the conceptual and policy debates and reflects on how the text managed to interact with the issues and questions that were highlighted in the first two chapters of the thesis, presenting the conceptual and contextual frameworks of the whole research project. The second section concentrates on the limitations of the research. There the text retakes some of the points that were developed in chapter 3, when presenting the methodology, meanwhile introducing elements that by means of identification of those issues regarding which the thesis did not provide answers also bridges the argument towards the section in which the contribution of the thesis towards the central research question is fully examined. The third section stresses the contributions made by the thesis selecting those that seems reasonable to underline as the most relevant ones for the research question - the operationalisation of vulnerability beyond the AVF. The fourth section closes the chapter by indicating the research challenges for a further operationalisation of the vulnerability approach as well as the research questions either left unanswered or still open to debate, which are more numerous than the text will be able to convey in such a short space.

6.1. Conceptual and Social Policy Debates

The research provided a thorough debate on the issues it considered as the most important for a debate on vulnerability and also provided elements for an intellectual dialogue with them. The latter was accomplished through an original analysis of vulnerability dynamics for low-income households that can be condensed as it follows:

1. The dynamic of vulnerability articulates on a limited but key number of dimensions that have been called patterns and that often reflect critical situations that, in turn, affect the sustainability of livelihoods. They heavily depend on the scarceness of and access restrictions in terms of control over assets and capitals:
 - i. An economic pattern, centred on the difficulties in income generation and consumption.

- ii. A health pattern, impacting on human basic capabilities and potentially limiting people in other areas of human development.
 - iii. A pattern of search for better opportunities and capabilities that involves the assumption of great risks.
 - iv. A crisis related to and located within the household where the issue of gender comes out more explicitly, in spite of being present across all dimensions of the crisis.
2. While the patterns do not need further comments for having been analysed at length in chapters 4 and 5, it is worth pointing out that vulnerability reduces people's opportunities, that is, it restrains a number of instrumental liberties and forces people to make choices that impede them from functioning, as in the case of the employment and income crisis, while at the same time it limits people in basic capabilities such as those of living a life free of avoidable illness or premature death. These represent an argument in line with the reflection recently opened by both Moser (*op. cit.*, 2005) and Barrientos (*op. cit.*, 2006), on the specific role played by assets and capitals in relation to people's capabilities. The research has framed this reflection within the opposition but also complementarities existing between the concepts of 'freedom from' and 'freedom to'.
3. The fact that vulnerability presents similar dynamics across countries (IDS, *op. cit.* 1989; Moser, *op. cit.*, 1996 and Pryer, *op. cit.*, 2003), seems to indicate that the most critical dynamics for low-income groups grow out of a limited number of dimensions: employment and income generations difficulties, ill-health and limited access to health care services, the ability to accumulate assets, capitals and resources that are instrumental to a better quality of life, the relative weakness or instability of kin networks; and the extreme critical situations concerning hunger and other deprivations of basic capabilities that are paramount in the analysis of chronic poverty, all contribute to the making of an argument in favour of the scientific relevance of vulnerability analysis for the comprehension of poverty dynamics.

4. It is also very important to reiterate that these crises that make up for dynamics of vulnerability have a multi-dimensional origin. That is they may originate from non-income dimensions of people's livelihoods and have equally devastating effects. This finding shows the complexity entailed by research that seeks to disentangle the issues of coping and risk and the importance of the contribution that can come from a social development approach. The latter does not rule out the relevance of using income as a research variable (it is not the case that Moser, Pryer and this present study used income or its proxies to identify low-income households) but does illustrate the conceptual and policy traps and bias that may result from relying only on it when working on poverty dynamics.
5. On coping strategies, a crosscutting analysis of the economic dynamic of vulnerability shows that the strategies employed to react to crises and the scarceness of means to cope with them, tend to concentrate in cuts in consumption patterns, as well as the use of any means capable of providing a satisfaction of the basic needs in the short-term. Among these, a relevant place is occupied by indebtedness, which represents one of the most severe blows to the very possibility to invest in the future, because it consists in the mortgaging of the few assets and resources these household possess.

As far as the reflection on social protection is concerned, the analysis carried out on the data sets has given greater weight to Moser's reflection on the importance of informal means of social protection. It has provided insights that contribute to building a solid counter-argument in relation to the implications for policy of the key suggestions put forward by the SRM literature, concentrating interventions on:

- i. Reducing hazards.
- ii. Building buffers.
- iii. Discouraging dysfunctional behavioural responses to vulnerability.

Those, although innovative suggestions, from a World Bank perspective, do not manage to tackle the issues of access, inequality, and redistributions that are constantly present when analysing vulnerability from a capability and rights approach.

One of the key limitations of the Social Risk Management approach when confronted with vulnerability analysis is the clear difficulty it encounters on methodological grounds. Even when it proposes the reform of social protection systems in the direction of counter-cyclical tools, it gets stuck at the level of effectively reaching low-income groups. This is because even when, as in Holzmann (op. cit. , 2001) it acknowledges the importance to respond in real time to the presence of different kinds of crises, solutions are thought of in terms of safety nets and the identification of the vulnerable is operationalised in terms of income or consumption measurement across different points in time.

In light of the results, particularly remembering how little formal networks are used by interviewed households, Moser's reflection on the importance of informal means of social protection become not only a recommendation but a component that seems more and more to call for a reflection within international agencies' programmes and social policy and development programmes in general at the local level.

Particularly, diversification, certainly of income sources, but also of opportunities and access to better capabilities is a strategy to be supported, for instance, stressing gender issue with the protection of part-time and house-based work jointly with clear policies on equal opportunities and equality, not only between the poor and the non-poor but within low-income groups and low-income households as well.

The Social Risk Management approach has great limitations in effectively reaching low-income groups to respond in real time to the presence of different kinds of crises, due to its conceptual bias towards macro-economics, because growth still scores high on the agenda behind the rhetoric on risk and micro-social intervention, as well as the income-centred reasoning that prevents that approach from placing people's well-being at the centre of its policy concerns beyond a material welfare-type of analysis of vulnerability and risk that ends up too close to a circular and somehow tautological reflection - the fact

that who is vulnerable is more exposed to risk - or the reductive view of societal dynamics towards the achievement of greater well-being as a matter of purchasing goods and services, which is the landing point of most utilitarian-inspired economics thinking when it comes to its applications in social policy .

Vulnerability analysis on the contrary can be used to gather first-hand information in real time from households and to understand changing conditions over time. It can be a tool for identifying and measuring the impact of social protection interventions on the dynamics of poverty for different assets profiles and in relation with the broader context.

The flexibility of the methodology, together with the possibility to effectively combine quantitative and qualitative methods, is interesting for a renewed focus at the micro-level. This is the case for the usefulness it has for debates on chronic poverty, hunger and social exclusion where there is great room for research oriented towards the specification of patterns for particular groups.

Vulnerability analysis can find renewed energy within research on poverty dynamics because of the insights it may offer on the role of agency and on local micro dynamics. In order to achieve this there is a need to uncover the ‘black boxes’ of ‘the poor’ and ‘the household’.

6.2. Limitations of the Thesis Regards of the Research Question

Vulnerability has proved a complex matter to deal with and it made me more vulnerable than I had expected, for any multi-dimensional social dynamic tends to be a slippery object for social research since there is always something else to be understood or a new multi-causal link to be explored. But, beyond this sort of sticky net in which all type of research on complexity is somehow bound to be trapped, there are specific aspects that I have not been able to sort out and challenges I have not be able to meet.

The first one is the elaboration of a more ‘user friendly’ model to analyse vulnerability. The statistical representativeness of what is a big sample for a doctoral

research project did not compensate for the effort it required to master and process the data, leaving perhaps aside the issue of how to achieve greater empirical usefulness for policy-makers often in search of more practical tools and with no time to train and learn how to perform a multiple correspondence analysis. In this sense, the analysis of the assets profiles of the 903 households was an aspect, the importance of which I did not initially understand, of great policy relevance and methodological potential. That was, until I ran into Rakodi's paper on a capital assets framework, where she elaborated the purposes of livelihoods analysis, in which she puts forward the simple and if anything else brilliant idea of upwards and downwards moving poverty profiles. But it was too late at that point to correct my initial myopia, since I had already interviewed my households during an 11 months period between September 1997 and May 1998. The fact that later research conducted in Colombia in 2006 did manage to cross-tabulate assets profiles and vulnerability patterns has no more than anecdotal relevance here. Although the research identifies four main vulnerability patterns it does not offer more than mostly qualitative insights regarding which typologies of households are more vulnerable to what or cope better with what kind of assets, or thanks to the help of social protection programmes.

Indeed, the limited space granted to question regarding social protection in the questionnaire and, as a reflection, throughout the empirical elaboration, stand as the second 'great research sin' of the research, which would have tremendously benefitted by data capable of offering a comparative reading of vulnerability patterns and participation versus exclusion from social protection processes. Population data presented in chapter 2 and of course, the careful analysis of the demographic and socio-economic characteristics of the sample, carried out in the first part of chapter 4, partly fill this gap allowing for a number of interesting qualitative insights based on quantitative evidence. But it is not as good as having quantitative data strongly anchored to the same unit of analysis from both sides.

The gender bias if the research was underlined from a technical point of view in chapter 3. However, even there it must be stressed how little one knows and understands of a foreign context, especially going the 'biased way' from a European to a Latin American cultural background, or in other words from a developed to a developing context. It takes a certain time to rid oneself of certain unhelpful aspects of one's identity. The family versus

household debate and the whole gender issue could have been given more relevance in the research design and in the statistical processing of the data from which I would say that more disaggregation of the vulnerability data as per gender of the head of household would have given this thesis more chances of entering into a fruitful debate with scholars working on vulnerability and gender, thinking for instance of Chant and González de la Rocha.

A third limitation was not to have used the format from the National Household Survey to assess aspects related to household consumption. Doing so would have provided much more comparability and a further opportunity of cross-tabulation or statistical tests of association with results about the vulnerability patterns. Aspects such as a better assessment of consumption, spending on health and education or public services remained, thus somehow under-researched.

Two further aspects were missed from the research that would have been interesting to incorporate further. The first is the relationship between vulnerability and the spatial dimension, which was shown by the recent Human Development Report for Bogotá to be an enriching perspective (PNUD, 2008). The second is the fact of having missed the relevance of the idea of different poverties and among them the ‘chronic poverty’ aspect that so many insights offered through the results, unfortunately not fully developed due to the aforementioned limitations of the research design.

6.3. The Operationalisation of Vulnerability: Contributions towards a Vulnerability Approach

This thesis has highlighted the relevance of Moser’s AVF and has validated a number of her findings from the mid-nineties (Moser, *op.cit.*, 1996) in an urban poverty context previously not researched, as far as vulnerability and the dynamics of poverty are concerned. When one considers life events from the Economic Crisis Pattern together with their causes, consequences and related coping strategies, it emerges that vulnerability is linked to assets and consumption, whereas income shortages are a widespread consequence and impact of a processes that has multiple roots and that unfolds over time. Of the same token, previous research by Pryer (*op. cit.*, 2003) carried out at the beginning of the decade

in a similar setting, although chronologically after the fieldwork of the present research, still represent a relevant international comparison regarding the importance of assets and income generation security as key aspects for enhancing households' resilience in the face of critical life events.

In spite of the limitations indicated in the previous section, the research did manage to make an original contribution by adding new knowledge to the many insights the Assets Vulnerability Framework had left in terms of challenge and inheritance. In particular the elaboration of the concept of life event and the modelling of vulnerability along four moments, represented by the four variables of life event, cause, consequence and strategy, which unfold across the time of households' life histories, can be singled out as valuable contributions towards the research question.

The use of multiple correspondence analyses illustrates that it is viable to gather qualitative data, convert them into quantitative ones, so to be able to statistically process them and perform on them both a quantitative and qualitative interpretation. Besides the originality of the modelling related to the concept of life event, before the fieldwork was carried out within, that was a methodological design that had not been tested in vulnerability analysis either.

The research has also made a contribution towards the clarification of the difference existing between poverty and vulnerability. The idea that poverty is static and vulnerability is dynamic, expressed by Moser (op.cit. 1998) has been refined in the following way. Although it cannot be taken as an absolute point that poverty is static (the realization of a greater number of longitudinal recent research during the last decade thanks to better statistical capacity at the local level is working on poverty but in a dynamic way), this research showed that to empirically analyse vulnerability one has to embed in the conceptual design the 'time' variable and try to operationalise it in terms of methodology. Here the operationalisation consists in the possibility of working on a number of segments made by each possible couple of the four variables proposed: cause-life event; life event-consequence; life event-strategy, and so on; and of course the full patterns of vulnerability

that can be analysed in their complexity, for instance through figures graphically representing the main threads of each pattern.

6.4. The Research Agenda Ahead

The potential relevance of a vulnerability approach for social policy analysis and as an integrated part of a more operationalised capability approach cannot be overlooked. The relevance of vulnerability analysis for policies that aim to tackle assets protection and promotion as well as a number of critical situations such as problems related with unemployment, under-employment, and income generation insecurity will benefit from applications of the vulnerability approach for monitoring purposes or poverty profile assessment.

Vulnerability analysis allows the capture of inter-temporal dynamics that may link together different patterns such as an economic crisis, indebtedness, and health problems. This needs further operationalisation to create a user friendly method to assess these problems on different populations according to physical and human geographies. This implies more systematic work in terms of database construction, research design, and data processing, not leaving unexplored connections that may be taken for granted but that nonetheless require robust evidence to convince policy-makers of the importance of supporting a developing vulnerability approach.

The poor are not homogeneous, there is great diversity within them and there are at least two great 'black boxes' that have been so far little explored, at least in Colombia. One is the poor themselves. There are upwards and downwards as well as stationary poverty profiles as much as there are differences in assets and capabilities profiles and sets, and we do not know exactly when, why, and how one comes about more decisively than another, due to a change in the macro-economic context, neither do we know with some capacity to predict which coping strategies will fit better one group or the other. These are great challenges for vulnerability analysis.

UNIVERSIDAD EXTERNADO DE COLOMBIA

FACULTAD DE TRABAJO SOCIAL

FORMULARIO DE ENCUESTA

EL ACCESO A LA SALUD PÚBLICA
PARA LOS GRUPOS DE BAJOS RECURSOS EN BOGOTÁ

Dr. Andrea Lampis

Presentación del proyecto

Este estudio es adelantado por la Facultad de Trabajo Social de la Universidad Externado de Colombia. Su finalidad es evaluar la calidad del acceso a la salud para la población residente en barrios de estratos socioeconómicos 1 y 2 frente a la reforma del Sistema de Seguridad Social en Salud.

Las entrevistas son anónimas y su contenido será utilizado solamente para propósitos académicos, el entrevistador y el director del proyecto Dr. Lampis se comprometen a no hacer público su contenido en ningún caso. Este trabajo no está vinculado de ninguna manera con instituciones como Ministerios, Secretaria de Salud u otro.

El estudio será utilizado para proponer políticas sociales que permitan implementar el nivel de acceso a la salud para los grupos de bajos ingresos.

Sección 1 - Formulario Relativo a la Visita

(Debe ser llenado por el/la ENTREVISTADOR/A)

A - Sector censal:		B - Número entrevista	
C - Localidad:			
<u>Nombre persona entrevistada:</u>			
X - Dirección del hogar:		X - Teléfono:	
Visita del Entrevistador			
Nombre del Entrevistador	_____		
Fecha	____/____/____		
Resultado (*)	_____		
(*) Códigos para el resultado de la visita:			
1. Exitosa			
2. Se encontró una persona no competente para responder en el hogar			
3. Pospuesta			
4. Refutada			
5. Otro			
(especificar) _____			

SECCIÓN 02 - LISTADO DEL HOGAR
información demográfica, contribución económica y nivel de educación

Quando no le digan el nombre utilice la relación de parentesco para hacer las preguntas

1 - Por favor, **empezando por UD**, dígame los nombres de las personas que generalmente viven en esta casa, inclusive los niños/as y los bebés

EN LA 1ª COLUMNA (Nº) PONER 'X' O CIRCULO PARA INDICAR CUAL ES LA PERSONA ENTREVISTADA

2 ¿Hacen todos parte del mismo núcleo familiar? Si le contestan que NO, UD pregúntele:

¿Me podría decir a cual núcleo familiar pertenece cada persona que me ha nombrado?

3 -¿Quién es el jefe del hogar? (Si hay más de una familia preguntar si hay también más de un jefe)

Para cada persona listada, preguntar:

4- ¿Es (nombre) varón o mujer? (Donde haya una duda)

5- ¿Cuántos años tiene (nombre)? (Pedir que por favor especifiquen, si pueden, también los meses)

6 - ¿Cuál es el parentesco de (nombre) con el jefe de hogar?

7 - ¿(Nombre) contribuye económicamente al ingreso de la familia o al de toda la casa?

8 - ¿Cuál es el nivel educacional de (nombre)?

D	Pregunt a N.1	Preg. Nº 2			Preg. N.3	Pregunt a N.4		Preg. N.5	Pregunta N.6	Pregunta N.7		Pregunta N.8 (a -b - c)		
		N	o	1		2	3			Gen	Ed	Parentesc o con Jefe*	Contribución económica	
N	o	Nombr e	Núcleo familia r			Jefatur a	Gen	Ed d A M	Parentesc o con Jefe*	Contribución económica		Nivel educaciona l		Curs .
										Solo a su famili a	A toda la casa	A	B	C
01			1	2	3		M	F						
02			1	2	3		M	F						
03			1	2	3		M	F						
04			1	2	3		M	F						
05			1	2	3		M	F						
06			1	2	3		M	F						
07			1	2	3		M	F						
08			1	2	3		M	F						
09			1	2	3		M	F						
10			1	2	3		M	F						
11			1	2	3		M	F						
12			1	2	3		M	F						
13			1	2	3		M	F						

* Para los niños indicar de quien son hijos, nietos o sobrinos de quien en paréntesis EJEMPLO: Ho (04)

Listado provisional de Códigos				
Pregunta N.6		Pregunta N° 7	Pregunta N° 8	
Parentesco con jefe		Contrib. Econom.	Nivel educacional*	
Ma = Madre	To = Tio	01 Diaria	01 Ningún grado escolar	07 Universidad completa
Pa = Padre	Ta = Tía	02 Semanal	02 Primaria incompleta	08 Maestría
Eo = Esposo	Aba = Abuela	03 Quincenal	03 Primaria completa (graduado/a)	09 Estudios técnicos de especialización
Ea = Esposa	Abo = Abuelo	04 Si cada mes	04 Bachillerato incompleto	10 Cursos de capacitación
Ha = Hija	Y = Yerno	05 Cuando puede	05 Bachillerato completo (graduado/a)	11 Autodidacta
Ho = Hijo	N = Nuera	06 Nunca	06 Universidad incompleta	12 Aprendiz de trabajo familiar
Na = Nieta	Inq = Inquilino	07 Contribuye al		99 = Cursando (en 2ª columna)
No = Nieto	Nn = Nana	pago de los servicios		
Sa = Sobrina	Hu = Huésped	08 Pensión		
So = Sobrino	NP = No Pariente	99 = Ninguna		
Hmo = Hermano				
Hma = Hermana				

* Primaria va desde 1° a 5° y bachillerato va desde 6° a 11°.

Sección 03 - PROGRAMAS DE PREVENCIÓN Y PROMOCIÓN DE LA SALUD

Instrucciones:

- Cuando el entrevistado/a conteste positivamente (Si), poner un círculo sobre Si y preguntar N° 2, 3 y 4.
- Cuando el entrevistado conteste (No) o que No Sabe (NS) poner un círculo sobre los códigos correspondientes

- 1- ¿UD se ha beneficiado de algunos de los programas de prevención y promoción de la salud que le voy a enumerar?
- 2 - (Sólo para cáncer y RED): ¿De los tipo de programas que le voy a enumerar, UD se benefició de algún de ellos en particular?
- 3- ¿Entre la lista que le voy a leer me podría decir a donde o como fue que UD se benefició de este programa?
- 4 - ¿Cómo se enteró de su existencia?
- 5 - ¿Quién fue que se benefició?

Programa	Preg. N.1			Pregunta N.2						Pregunta N.3		Pregunta N.4	Pregunta N° 5
	SI	NO	NS	A	B	C	D	E	F	A	B	Como se enteró	Especificar quien
1.Preparación al parto	SI	NO	NS										
2.Alimentación	SI	NO	NS										
3.Cáncer	SI	NO	NS										
4.Crecimiento y desarrollo niños	SI	NO	NS										
5.Red de solidaridad social	SI	NO	NS										
6.Higiene	SI	NO	NS										
7.SIDA	SI	NO	NS										
8.Otro	SI	NO	NS										

**04 - AFILIACIÓN AL SISTEMA OBLIGATORIO
DE SEGURIDAD SOCIAL EN SALUD**

1 - ¿UD está afiliado a un seguro de salud o vinculado al SISBEN?
 2 - ¿Hay otras personas en el hogar que estén afiliadas a un seguro de salud?
 Si ha contestado afirmativamente a 1 y/o 2:
 3 - ¿De las personas que UD ha mencionado a qué entidad se encuentran afiliadas y por parte de quién?
 4 - ¿Cuánto vale, al mes o al año, la cuota que cada persona paga por su seguro de salud en este hogar?

X	Pregunta N.1			Pregunta N° 3		Pregunta N.4	
	A			B	A	B	
Miembros hogar	Afiliado (SI - NO - NS)			Poner una X si está Vinculado al SISBEN	Entidad de afiliación 1 2	Por parte de quien	Costo UPC*
Entrevistado/a	SI	NO	NS				
Pregunta N.2 (Otros afiliados) Preguntar si hay otros afiliados y quienes están cubiertos gracias a otro miembro del hogar que tenga seguro de salud y reportar la información en los espacios a bajo							
	SI	NO	NS				
	SI	NO	NS				
	SI	NO	NS				
	SI	NO	NS				
	SI	NO	NS				
	SI	NO	NS				

*En la prima columna escribir el costo en \$ o Salarios Mínimos (SM).

*En la segunda A (Año) o M (Mes)

SECCIÓN 05 - AFILIACIÓN Y CONOCIMIENTO DEL SISBEN

1 - ¿UD ha recibido la visita de los entrevistadores del SISBEN?	SI	NO	NS	Si contesta <u>SI</u> ir a 3, si NO seguir
2 - ¿UD ha solicitado que le apliquen la encuesta del SISBEN?	SI	NO	NS	9

	Código	Si contesta que <u>NO SABE</u> ir a pregunta N°		
3 - ¿Cuántas veces han pasado por entrevistarla?		4		

4 - ¿UD ha recibido el carné?					Si contesta <u>NO</u> ir a pregunta N°
No porque ya estaba afiliado a un seguro de salud		SI	NO	NS	4a
4a - ¿UD. ha recibido algún documento substitutivo del carné?		SI	NO	NS	6

	Código	Si contesta que <u>NO SABE</u> ir a pregunta N°		
5 - ¿Después de cuánto tiempo le entregaron el carné?		7		
6 - ¿Cuánto tiempo lleva UD esperando el carné?		7		
7 - ¿UD sabe que puntaje o nivel de SISBEN le asignaron?	SI	NO	Si contesta No ir a N° 9	
Si contesta si, escribir a lado el puntaje o nivel del SISBEN	(7a)			

					Si contesta <u>NO</u> ir a pregunta N°
8 - ¿UD sabe si el puntaje que le asignaron le da derecho a un subsidio?	SI	NO	NS	En cualquier caso ir a N° 9	
9 - ¿De acuerdo a su estrato socioeconómico, UD cree que tiene derecho al SISBEN?	SI	NO	NS	En cualquier caso ir a N° 10	
10 - ¿Sabe UD cuál es el porcentaje que debe pagar por cada visita	SI	NO	NS	En cualquier caso ir a N° 11	

Preguntar sólo se ha dicho que tiene carné	No = No vigente	Si contesta que <u>NO SABE</u> ir a pregunta N°		
11 - ¿UD sabe si su carné está vigente?	SI	NO	NS	En cualquier caso ir a N.12

	Código	Si contesta <u>NO</u> ir a pregunta N°		
12 - ¿UD fue atendido sin problemas la última vez que se presentó con el carné a un hospital o centro de salud?		Sección 6		

**SECCIÓN 06 - UTILIZACIÓN DE LOS SERVICIOS DE SALUD
- A - UTILIZACIÓN HOSPITALES**

		Ir a pregunta N°
1 - ¿En el último año UD o alguien del hogar tuvo que ir a un hospital por razones de salud?	SI	2
	NO	Sección B

Preguntar para cada persona mencionada	Ver Códigos				
	Persona	Motivo			Cirugía
	A	1	2	3	B
2 - ¿Me podría decir por que motivo y cuantas veces UD o cada una de las personas que mencionó asistió al hospital?					

		Ir a pregunta N°
3 - ¿La última vez que UD o uno de los miembros del hogar asistió a un hospital, lo atendieron?	SI	4
	NO	6

	Ver Códigos		
4 - ¿Cómo fue la forma de pago?	A	B	C
4a - ¿Tuvo que pagar por los medicamentos o los exámenes?	1 - Medicamentos		2 - Exámenes

	Ver Códigos	
5 - ¿Cómo fue la calidad de la atención que recibió por parte de los médicos y de las enfermeras?	1 - Médicos	2 - Enfermeras

	Ver Códigos	
6 - ¿Por que motivo NO fue atendido en el hospital?	A	B

B - UTILIZACIÓN CENTROS de SALUD (CdS)

		Ir a pregunta N°
7 - ¿En el último año UD o alguien del hogar tuvo que ir a un puesto de salud (PdS) por razones de salud?	SI	8
	NO	Eventos de vida

Preguntar para cada persona mencionada	Ver Códigos					
	Persona	Motivo			Cirugía	
		A	1	2	3	B
8 - ¿Me podría decir por que motivo y cuantas veces UD o cada una de las personas que mencionó asistió al puesto de salud (PdS)?						

		Ir a pregunta N°
9 - ¿La última vez que UD o uno de los miembros del hogar asistió a un centro o puesto de salud, lo atendieron?	SI	10
	NO	12

	Ver Códigos		
10 - ¿Cómo fue la forma de pago?	A	B	C
10a ¿Tuvo que pagar por los medicamentos o los exámenes?	1 - Medicamentos		2 - Exámenes

	Ver Códigos	
11 - ¿Cómo fue la calidad de la atención que recibió por parte de los médicos y de las enfermeras?	1 - Médicos	2 - Enfermeras

	Ver Códigos
12 - ¿Por que motivo no fue atendido en el centro de salud?	

C - UTILIZACIÓN SERVICIOS DE MÉDICOS PARTICULARES

		Ir a pregunta N°
13 - ¿En el último año UD o alguien del hogar tuvo asistir a un médico particular por razones de salud?	SI	14
	NO	Sección B

Preguntar para cada persona mencionada	Ver Códigos					Cirugía
	Persona	Motivo				
	A	1	2	3	4	B
14 - ¿Me podría decir por que motivo y cuantas veces UD o cada una de las personas que mencionó asistió al médico particular?						

		Ir a pregunta N°
15 - ¿La última vez que UD o uno de los miembros del hogar asistió a un médico particular, lo atendieron?	SI	16
	NO	18

	Ver Códigos		
16- ¿Cómo fue la forma de pago?	A	B	C
16a ¿Tuvo que pagar por los medicamentos y los exámenes?	1 - Medicamentos		2 - Exámenes

	Ver Códigos	
17 - ¿Cómo fue la calidad de la atención que recibió por parte del médico y de las enfermeras?	1 - Médicos	2 - Enfermeras

	Ver Códigos	
18 - ¿Por que motivo no fue atendido por el médico particular?	A	B

SECCIÓN 07 - AUTOEVALUACIÓN DEL ESTADO DE SALUD Y CONCEPTO DE SALUD

1 es siempre MUY MALO o MUCHO PEOR y 10 es siempre EXCELENTE o MUCHO MEJOR

	Poner X									
1 - ¿De 1 a 10, cómo juzga UD su presente estado de salud?	1	2	3	4	5	6	7	8	9	10

2- ¿De 1 a 10, cómo es su estado de salud con respecto a 12 meses antes? Aquí 5 significa que el estado de salud se ha mantenido igual	Peor					Mejor				
	1	2	3	4	5	6	7	8	9	10

	Poner X									
3 - ¿De 1 a 10, cómo juzga UD su estado de salud durante los últimos 12 meses?	1	2	3	4	5	6	7	8	9	10

	Poner X									
4- ¿De 1 a 10, cómo juzga UD su estado de salud hace 5 años?	1	2	3	4	5	6	7	8	9	10

5 - ¿UD se preocupa por su futuro estado de salud?	Nunca	A veces	A menudo
5a Si contesta a veces: ¿Por qué a veces, cuándo?	A	B	C

6 - ¿Qué significa para UD. sentirse enfermo/a?	7 - ¿Qué es lo que cambia en la vida de uno cuando se siente o está enfermo?					
A	B	C	A	B	C	

8 - ¿UD se ha enfermado alguna vez en los últimos 3 meses?	Si	Ir a P. 9
	No	Siguiente sección

9 - ¿De qué se enfermó, qué padeció?	A	B	C	D
--------------------------------------	---	---	---	---

10 - ¿UD ha atendido a un médico/hospital o puesto de salud por este problema?	Si	Ir a P. 11
	No	Ir a P. 13

11 - ¿UD pudo seguir las recomendaciones que le hicieron o la terapia que le dieron?	Si	Ir a P. 14
	No	Ir a P. 12

12- ¿Por qué no pudo seguir las recomendaciones o la terapia?	A	B	C	D
---	---	---	---	---

13- ¿Por qué no pudo asistir al médico, hospital o puesto de salud? Anotar respuesta en seguida:			
A	B	C	D

14 - ¿En su vida nunca atendió a un médico naturista, un homeópata, acupunturista, o utilizó medicina de tipo alternativo? Cuando, como, por qué razón, se quedó satisfecho/a						Anotar respuesta en el espacio blanco
Si	No	2 = Tiempo	3 = Tipo	4 = Razón	5 = Costo	6 = Calidad

08 - EVENTOS DE VIDA

1 - En los últimos 5 años ¿hubo eventos importantes que le afectaron UD o a otro miembro del hogar o al hogar en general? Me gustaría que me contara tanto los eventos positivos, como los eventos negativos.		Ir a preg. N°
	SI	3
	NO	2

2 - ¿Me puede decir cuáles de estos eventos han afectado UD, otros miembros del hogar o el hogar en general? (Leer lista de áreas de eventos de vida anotados en la página siguiente)

Para cada evento mencionado es fundamental que UD pregunte:

- 3 - ¿A quién afectó el evento? (A uno o más de los miembros o al hogar en general)
- 4 - ¿Qué consecuencia produjo este evento?
- 5 - ¿Cómo enfrentaron UD o el hogar este evento?
- 6 - ¿En su opinión que fue lo que causó este evento o situación?

Preguntas N° 1 y 2		Pregunta N° 3			Pregunta N° 4					Pregunta N° 5					Pregunta N° 6	
Evento		Afectado			Consecuencias					Estrategias					Causa	
X		A	B	C	A	B	C	D	E	A	B	C	D	E	A	B
1																
2																
3																
4																

Sugerencia de tipologías de eventos de vida que es importante investigar:

Fallecimientos	Problemas de pareja	Enfermedad	Empeñar bienes
Problemas económicos	Violencia en el hogar	Endeudamiento	Educación
Problemas en/con el trabajo	Violencia afuera del hogar	Venta de bienes	Disminución Consumo

09 - EVALUACIÓN ACTITUDINAL

Sección para completar

**La idea es saber que piensa o como se siente la gente frente a su futuro y su vida,
y como enfrenta la oportunidad**

1 - ¿De 1 a 10 UD piensa en el futuro como una cosa mejor o peor del presente? ¿Qué voto, qué nota le daría al futuro de 1 a 10?	1	2	3	4	5	6	7	8	9	10
--	---	---	---	---	---	---	---	---	---	----

2 - ¿De 1 a 10, cuánto se siente satisfecho UD de la vida en Bogotá?	1	2	3	4	5	6	7	8	9	10
--	---	---	---	---	---	---	---	---	---	----

3 - ¿De 1 a 10, cuánto se siente realizado UD frente a su vida UD?	1	2	3	4	5	6	7	8	9	10
--	---	---	---	---	---	---	---	---	---	----

4 - ¿De 1 a 10, cuánto siente UD que en cualquier momento le puede pasar algo grave o peligroso en Bogotá?	1	2	3	4	5	6	7	8	9	10
--	---	---	---	---	---	---	---	---	---	----

5 - ¿De 1 a 10, cuánto es justo aprovechar de una oportunidad por uno mismo si hace daño a los demás?	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

6 - ¿De 1 a 10, si UD escucha en televisión o radio que alguien ha robado algo para una necesidad urgente, cuanto lo juzga culpable?	1	2	3	4	5	6	7	8	9	10
--	---	---	---	---	---	---	---	---	---	----

7 - ¿De 1 a 10, cuánto es importante la dignidad en la vida de una persona frente al ingreso?	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

8 - ¿De 1 a 10, cuánto miedo le tiene UD al salir por la calle en Bogotá?	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

9 - ¿De 1 a 10, cuánto piensa UD que sus hijos o los jóvenes de hoy tendrán un futuro mejor del suyo?	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

10 - ¿De 1 a 10, cuánto miedo le tiene UD a los médicos?	1	2	3	4	5	6	7	8	9	10
--	---	---	---	---	---	---	---	---	---	----

11 - ¿De 1 a 10, cuánto es verdadero que ir donde un médico no sirve?	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

12 - ¿De 1 a 10, cuánto piensa UD que una cosa que vale mucha plata es buena?	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

13 - ¿Cuando UD. se enferma cuáles son los lugares donde va, la personas que consulta o las medidas que toma?		
A - En caso de una cosa no grave	B - En caso de una cosa bastante seria	C - En caso de una cosa muy grave
1	1	1
2	2	2
3	3	3

10 - TRABAJO, INGRESO y CONSUMO

PREGUNTAR 1 Y 3 TAMBIÉN PARA LOS OTROS MIEMBROS DEL HOGAR

1 - ¿UD tuvo un trabajo en el último mes?	SI	NO	Si contesta NO ir a Preg. N° 3
2 - ¿Qué tipo de trabajo tuvo UD en el último mes?	Llenar con código en la tabla A "Codificación"		

3 - ¿UD tuvo un trabajo en el último año?	Si	NO	Si contesta NO ir a Preg. N° 7
4 - ¿Qué tipo de trabajo o trabajos hizo en el último año?	Llenar con código en la tabla A "Codificación"		

5 - ¿De 1 a 10, en comparación con el año pasado su ingreso ha empeorado o mejorado?
EXPLICAR: 1 significa que se ha empeorado mucho y 10 que ha mejorado mucho,

6 - ¿Cuál es la dificultad mayor que cada miembro que aporta económicamente al hogar encuentra en encontrar trabajo?
--

TABLA - A- "CODIFICACIÓN"				
Miembro hogar	Pregunta N° 2 Tipo trabajo último mes	Pregunta N.4 Tipo trabajo último año	Pregunta N° 5 Comparación ingreso	Pregunta N° 6 Dificultad en encontrar trabajo
Entrevistado/a				

Códigos por el tipo de trabajo (Preguntas N° 2 y 4)	
01 - A jornada informal en propio	07 - Trabaja en la casa produciendo algo
02 - A jornada informal para un patrón	08 - Tiene una tienda informal (gaseosas - cositas)
03 - Venta ambulante por la calle - informal	09 - Tiene una tienda regular
04 - Venta puerta a puerta	10 - Tiene trabajo formal con empresa en sect. publ.
05 - Trabajo informal de tipo regular sin contrato	11 - Trabaja en propio en sector formal - profesional
06 - Trabajo informal de tipo regular con contrato	12 - Tiene trabajo formal con empresa en sect. privado

7 - ¿Si quiere, me puede decir por favor cuál es el ingreso mensual del hogar? <u>Escribir</u>	respuesta a lado
--	------------------

Averiguar por cada núcleo familiar que habite la casa				Preg. 8 - Bienes que poseen								Preg. 9 - Bienes que empeñaron							
A				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
8 - ¿Cuáles de estos electrodomésticos posee el núcleo familiar?				Familia 1															
9 - ¿En el último año Uds. tuvieron que empeñar algunos de estos bienes?				Familia 2															
				Familia 3															
				Familia 4															
01 - Nevera	02 - Lavadora	03 - Cocina	04 - Licuadora	05 - Televisión	06 - Radio	07 - Imp. sonido	08 - Celular												

10 - ¿De acuerdo al presupuesto del hogar, cuáles de estos alimentos se encuentran siempre sobre su mesa, cuáles solo a veces y cuáles solo en ocasiones especiales?																												
S = Siempre AV = A veces OE = Ocasiones especiales																												
1 - Arroz	2 - Papa	3 - Yuca	4 - Ensalada	5 - Carne res	6 - Pollo	7 - Pescado	8 - Queso	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE
9 - Huevos	10 - Sopa	11 - Leche	12 - Verduras	13 - Pasta	14 - Jugos	15 - Granos	16 - Fruta	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE	S	AV	OE

SECCIÓN 11 - DATOS SOCIOECONÓMICOS Y NBI

Observar, cuando se le permita entrar en la vivienda, o preguntar:				Códigos			Anotaciones
0 - ¿Cuántos cuartos hay en la casa para su hogar?	A - N° cuartos	B - Sala	C - Comedor	D - Cocina			
0 bis - ¿Cuántas personas duermen en cada cuarto?	1 - Cuarto N.1	2 - Cuarto N.2		3 - Cuarto N.3			
4 - Cuarto N.5	5 - Cuarto N.6	6 - Sala		7 - Comedor			
1 - ¿Cuál es el tipo de material predominante en las paredes internas?							
2 - ¿Cuál es el material predominante en el piso de la vivienda?							
3 - ¿Cuál es el material predominante en el techo de la vivienda?							
4 - ¿Cuál es el servicio sanitario que utilizan?							
5 - ¿Cuáles de los servicios de (A) agua, (B) luz y (C) alcantarillado han sido legalizados?				A	B	C	
6 - ¿Cuántas personas comparten el mismo baño en la casa? N° personas x baños				A	B		
7 - ¿La vivienda que Uds. ocupan es: (enumerar códigos)							
8 - ¿Cómo juzga UD la calidad del transporte en el barrio (leer lista)							
9 - ¿Cuánto tiempo se demora UD para desplazarse al trabajo? (leer lista)							
10 - ¿Hay algún niño/a que ayuda el hogar con una actividad de trabajo?				Si	No		
11 - ¿Con quién se quedan los niños cuando los padres trabajan?							

Listado provisional de Códigos				
Pregunta N. 1	Pregunta N.2	Pregunta N. 3	Pregunta N. 4	Pregunta N.5
Material predominante en las paredes internas	Material predominante en el piso	Material predominante en el techo	Tipo de sanitario	Legalización servicios
01 Sin paredes	01 Tierra	01 Desechos (cartón, lata, sacos, etc.) 02 Teja de barro - Zinc -Asbesto-cemento sin cielo raso 03 Teja de barro - Zinc - Asbesto-cemento con cielo raso 04 Otro	01 No tienen el servicio	01 Agua potable
02 Cemento	02 Madera/tablón		02 Letrina	02 Energía eléctrica
03 Madera	03 Cemento		03 Inodoro sin conexión a alcantarilla o pozo séptico	03 Alcantarillado
04 Bloque	04 Baldosa/vinilo			
05 Ladrillo	05 Alfombra - tapete		04 Inodoro conectado a pozo séptico	
06 Prefabricado	06 Mármol - parqueté			
07 Guadua/caña	07 Cerámica		05 Inodoro conectado a alcantarilla	
08 Otro	08 Otro			
Pregunta N. 7	Pregunta N. 8	Pregunta N.9	Pregunta N.10	
Tenencia de la vivienda	Calidad del transporte	Tiempo para ir al trabajo	Cuidado niños	
01 De propiedad	01 Muy buena	01 Menos de 30 minutos	01 Padre	
02 Arrendada	02 Buena	02 Entre 30 mins y 1 hora	02 Madre	
03 Arriendan parte/cuartos	03 Regular	03 Entre 1 hora y 1 hora y media	03 Hermano/a mayor	
04 Están pagando crédito	04 Pobre		04 Pariente en la casa	
05 Invadida	05 Muy pobre	04 Entre 1 hora y media y 2 horas	05 Pariente afuera de la casa	
06 Otro			06 Donde madre comunitaria	
		05 Más de 2 horas	07 Solos	
			08 Señora servicio	
			09 Vecina	

SECCIÓN - 12 - OBSERVACIONES SOBRE VIVIENDA Y ENTORNO

Al terminar la entrevista detenerse afuera de la vivienda y llenar esta tabla con los códigos apropiados			
Características	Códigos		Observaciones del entrevistador
1 - Tipo de vivienda			
2 - Material paredes externas			
3 - Material puerta de ingreso			
4 - Alumbrado público			
5 - Pavimentación	Hay	No hay	

Observaciones generales sobre la entrevista

Annex 2 Codes for the data processing

Sección 1 - Formulario relativo a la visita

Códigos de las localidades

01 San Cristóbal	04 Ciudad Bolívar	07 Bosa
02 Rafael Uribe	05 Tunjelito	08 Antonio Nariño
03 Usme	06 Kennedy	

Sección 2 - Listado del hogar, contribución económica y nivel educacional

Núcleo familiar	Parentesco		Contribución económica	Nivel Educativo
01 núcleo 1	01 Madre	18 Nuera	01 Diaria	01 Ningún
02 núcleo 2	02 Padre	19 Inquilino	02 Semanal	02 Primaria incompleta (1-4 años)
03 núcleo 3	03 Esposo - Compañero	21 Huésped	03 Quincenal	03 Primaria completa (5 años)
04 núcleo 4	04 Esposa - Compañera	22 No pariente residente	04 Mensual	04 Bachillerato incompleto (6-10 años)
05 núcleo 5	05 Hijo	23 Hijastro-a	05 Ocasional	05 Bachillerato completo (11 años)
Jefatura	06 Hija	24 Sobrino-a 2° grado	06 Nunca contribuye	06 Universidad incompleta (12-14 años)
01 Hombre jefe	07 Nieto	25 Prima	07 Sólo a los servicios	07 Universidad completa (15 años)
02 Mujer jefe	08 Nieta	26 Suegro	08 Pensionado/a	08 Maestría (16-17 años)
Genero	09 Sobrino	27 Primo	10 Tiene sólo por los gastos personales	09 Estudios técnicos
01 Masculino	10 Sobrina	28 Cuñado	33 En servicio militar	10 Cursos capacitación
02 Femenino	11 Hermano	29 Hijo adoptivo	44 Desempleado/a en fuerza laboral	11 Autodidacta
	12 Hermana	30 Suegra	888 No se encuentra en la fuerza de trabajo en el mercado laboral	12 Aprendiz
	13 Tío	31 Cuñada		13 Jardín
	14 Tía	32 Bisnieto		14 Preescolar
	15 Abuelo	33 Bisnieta		15 Seminario
	16 Abuela	34 Primo-hermano		99 Cursando
	17 Yerno	99 Jefe de hogar		

Sección 3 - Programas de Prevención y Promoción de la Salud

Pregunta 2 - Tipo de Programa de prevención			
Tipo de programa de prevención del cáncer		Tipo de programa de acuerdo a la institución que lo ofrece	
01 Autoexamen seno	05 Endoscopia anual	08 ISS	15 Niños Sanos (Centros de Salud)
02 Examen anual seno	06 Tacto rectal >40	09 Profamilia- ICBF - FAMI	16 En control hasta el 1er año de edad
03 Mamografía >49	07 Próstata >39	10 EPS - ESS	17 Programa de fundación privada
04 Citología anual		11 SISBEN	18 Instituto de Canceróloga
		12 Liga contra el cáncer	19 Programa del Alcaldía
		13 Revivir de la RdSS	20 Programa de la UNAL 'Calidad Alimentación
		14 'Buscando empleo' de la RdSS	99 No se preguntó porque hombre/no sabía

Pregunta 3 - Como se benefició de programas de Pr. y Prom. Códigos suplementarios			
01 Visita de un promotor de salud	07 Centro del Centro de Salud	13 ISS	19 Seguro Militar
02 Curso (al centro de salud, EPS, etc.)	08 Médico particular	14 En el colegio	20 Profamilia - CAMI - FAMI
03 Reunión con promotor de salud	09 No sabe	15 Programa de la Policía	21 Programa de la empresa
04 Folleto	10 No recuerda	16 Liga contra el Cáncer	22 Jardín infantil
05 Programa de radio	11 Por medio de una EPS - ESS - ARS	17 Programa del Ejercito	23 En el hogar
06 Programa del Hospital	12 Vigilias en el colegio	18 Instituto de Canceróloga	24 Seguro de Policía

Pregunta 4 - Como se enteró de la existencia del programa de prevención			
01 Personalmente	06 Contacto en el hospital	11 A través de un programa de radio	16 A través de una EPS - ARS - ESS
02 Amigo/a	07 Contacto en Centro Sal.	12 A través de un programa de televisión	17 A través de un programa de la UNAL
03 Pariente	08 Patrón	13 Otro	18 Profamilia - CAMI - FAMI - ICBF
04 Médico	09 Al trabajo	14 En el colegio	
05 Promotor de salud	10 A través del periódico	15 En un centro de atención de la Policía	

Sección 4 - Afiliación al Sistema de Seguridad Social en Salud

Pregunta N.1 - Afiliación al SGSSS y/o SISBEN

	Si	No
Afiliado al SGSS	1	2
Afiliado al SISBEN	1	2

Pregunta N.3 - Códigos de EPS - ARS - ESS

(Entidad Promotora de Salud - Administradora del Régimen Subsidiado - Empresa Solidaria de Salud)

01 = ISS	13 = SALUD COLMENA	28 = SEGURO FERROVIARIO	41 = MEDISALUD
02 = ASFAMILIAS	14 = SALUD TOTAL	29 = RESALUD - CAJANAL	42 = ANALMED
03 = CAFAM	15 = SALUDCOOP	30 = SERVIMED	43 = SUSALUD
04 = COLSUBSIDIO	16 = ECOOPSOS	31 = COLPATRIA	44 = MEDICOS ASOCIADOS
05 = COMCAJA	20 = SALUD NORTE	32 = COLSANTITAS	45 = SENSA
06 = COMPENSAR	21 = FAMISANAR	33 = Afiliado por parte familiar afuera hogar	46 = MEDICOS VOLUNTARIOS
07 = UNICAJAS	22 = CRUZ BLANCA	35 = SURAMERICANA	47 = INSPONAL
08 = BONASALUD	23 = COPISANAR	36 = ECOOPSALS	48 = COFENALCO
09 = CAFESALUD	24 = SEGURO DE POLICIA	37 = UNIMED	
10 = CAPRECOM	25 = COLSEGUROS	38 = CAJA PREVENCION UNAL	99 = NO SABE
11 = COOMEVA	26 = CONFASEGURADORES	39 = COVIDA	
12 = HUMANA VIVIR	27 = FONDO SOLIDARIO	40 = COLFONSA	

Pregunta N.4 - Costo Unidad de Pago por Capitación (UPC)

01 Menos de \$10.000	04 entre \$ 30.000 y \$39.000	66 Paga sólo cuotas moderadoras
02 entre \$10.000 y \$19.000	05 entre \$40.000 y \$49.000	99 No sabe
03 entre \$20.000 y \$29.000	06 \$50.000 o más	

Sección 5 - Afiliación y conocimiento SISBEN

Preguntas N. 1, 2, 4, 4ª, 8, 9, 10, 11		
Si	No	No sabe
1	2	3

Pregunta N.7	
Si	No
1	2

Pregunta N. 3 - No de entrevistas realizadas por el personal del SISBEN al hogar			
01 Una	02 Dos	03 Tres	04 Más de tres

Pregunta N. 5 - Tiempo de espera para la consignación del carnet (para los que lo recibieron)		
01 Menos de 1 mes	04 Entre 2 y 3 meses	07 6 meses o más
02 Un mes	05 Entre 3 y 4 meses	
03 Entre 1 y 2 meses	06 Entre 4 y 5 meses	

Pregunta N. 6 - Tiempo de espera del carnet (para los que NO lo recibieron todavía)			
01 Entre 0 y 2 semanas	04 Entre 1 y 2 meses	07 Entre 4 y 5 meses	10 Más de 1 año
02 Entre 2 y 3 semanas	05 Entre 2 y 3 meses	08 Entre 5 y 6 meses	
03 Entre 3 y 4 semanas	06 Entre 3 y 4 meses	09 Entre 6 meses y 1 año	

Pregunta N.7 - Conocimiento del nivel de SISBEN		
Código	Puntaje	Nivel
1	De 0 a 36	1
2	De 36.1 a 48.3	2
3	De 48.4 a 58	3
4	De 58.1 a 69	4
5	De 69.1 a 86	5
6	De 86.1 a 100	6

Sección 6 - Utilización de los servicios de salud y morbilidad

Secciones: A (Hospitales), B (Centros de Salud), C (Médicos particulares)

Preguntas N. 1,3,7,9,13,15 - Atención

Si	No
1	2

Preguntas N. 4, 10 y 16 - Forma de pago por atención en hospitales, centros de salud y médicos particulares

1 - Fue atendido sin ningún cobro	8 - El seguro de salud cubrió los medicamentos	15 - Le cobraron un copago o cuota moderadora
2 - El hospital le cobró por los servicios	9 - El seguro de salud cubrió la hospitalización	16 - Seguro Obligatorio de Accidentes de Transito
3 - Pudo pagar todo lo que le cobraron	10 - El seguro de salud cubrió el costo del transporte	17 - Clientelismo o amistad
4 - Pudo pagar sólo parte de lo que le cobraron	11 - El seguro de salud cubrió los gastos de consulta	18 - Estratificación operada por el centro médico
5 - El seguro de salud pagó todos los costos	12 - Otro, no especificado	19 - Pago con donación de sangre
6 - El S. pagó sólo parte y la persona el resto	13 - Pudo pagar gracias a recolecta	
7 - La persona pudo pagar sólo una parte del costo	14 - Se benefició de un descuento de la Trab. Social	

Preguntas N.4ª, 10ª, 16ª - Pago de medicamentos y exámenes de laboratorio

1	2
Tuvo que pagar por medicamentos a parte de la consulta	Tuvo que pagar por exámenes de laboratorio a parte de la consulta

Preguntas N. 5 (1 y 2), 11 (1 y 2), 17 (1 y 2) - Calidad de la atención por parte de médicos y enfermeras

1 Excepcionalmente buena	4 Regular	7 Pésima
2 Muy buena	5 Mala	
3 Buena	6 Muy mala	

Preguntas N.2, 8 y 14

Morbilidad y razón para atender médicos. centros de salud y hospitales

01 Control prenatal	30 Osteoporosis	59 Mareos y/o malestar	588 Quemadura
02 Parto	31 Tensión alta	60 Problemas nerviosos -	89 Dolor menstrual
03 Citología vaginal	32 Dolor en la espalda - cintura	61 Cansancio- agotamiento	90 Graves problemas mentales
04 Control de crecimiento y desarrollo	33 Ginecología	62 Dolores en general	91 Apendicitis
05 Infección respiratoria	34 Ganglios	63 Edad- prob. relac. a la edad	92 Problemas de la matriz
06 Infección respiratoria aguda	35 Problemas del seno	64 Paperas	93 Esterilidad
07 Exámenes de laboratorio y rayos X	36 Cáncer	65 Hemorragia vaginal	94 Problemas psicológicos
08 Problemas de la piel	37 Artritis y reumatismo	66 Problemas relacionados al bajo peso	95 Intoxicación alimenticia
09 Trauma, heridas y fracturas	38 Problemas de circulación	67 Tiroides	96 Planificación familiar
10 Problemas del estómago	39 Diarrea y deshidratación	68 Gastritis	97 Herpes
11 Problemas del corazón	40 Purgantes	69 Asma	98 Hepatitis
12 Problemas genitales y urinarios	41 Aborto - legrado	70 Prob. nutrición niños	101 Infección genérica
13 Problemas estéticos	42 Vitaminas	71 Hemorroides	102 Parálisis
14 Úlcera	43 Problemas del embarazo	72 Hemorragia nasal	103 Control de deporte
15 Oídos, nariz, garganta y ojos	44 Problemas del hígado	73 Quiste a los ovarios	104 Vértigo
16 Odontología	45 Otros (tembladera, joroba, náuseas, etc.)	74 Insolación	105 Hipoglicemia
17 Problemas de riñones	46 Problemas de la columna	75 Infección en la boca	106 TBC
18 Dolores de cabeza - Migraña	47 Trombosis - derrame cerebral	76 Anemia	107 Hipoglicemia
19 Cáncer cuello uterino	48 Enfermedad neurológica (meningitis, etc.)	577 Pérdida de calcio	109 Trifilitis
20 Alergia	49 Enfermedad de los pies	78 Colesterol alto	
21 Problemas a los ovarios	50 Menopausia	79 Aborto	
22 Gripe	51 Desnutrición	80 Problemas postoperatorios	
23 Hernia	52 Efectos de Doña Juana	81 Tromboflebitis	
24 Lunar	53 Artritis o problemas articulares	82 Quiste a los huesos	
26 Enfermedad de la sangre	54 Problemas del colon	83 Cálculos	
27 Control general	55 Fiebre genérica	84 Depresión	
28 Diabetes	56 Parásitos del estómago	85 Tendinitis	77 Mala atención médica
29 Venas varices	57 Cirugía	86 Epilepsia	88 Atención niños (controles, etc.)
	58 Controles preparación	87 Vesícula	99 Fueron porque había colas al ISS

Sección 7 - Autoevaluación del estado de salud - Descripción de la percepción de la enfermedad - Morbilidad en los últimos 3 meses y utilización servicios de salud

Pregunta 5a - Razón para preocuparse de la salud

1 Cuando está o se siente enfermo	13 Porque no hay tiempo para ir donde el médico	25 No hay plata para ir donde el médico
2 Porque la salud es lo fundamental en la vida	14 Porque hay que trabajar	26 Cuando puede económicamente y/o por el tiempo
3 No se pueden hacer las cosas bien	15 Se preocupa a pesar que no hay dinero para ir donde el médico	27 No hay plata para comprar la droga
4 Cuando es grave	16 Se preocupa por el hijo/a pero no por ella	28 Porque es importante mantener la salud
5 Decaimiento	17 Por estar solo/a y no tener quien lo/a cuide	29 Por haber estado enfermo/a uno/a desea la salud
6 Por prevenir enfermedades	18 Para no causar problemas a los demás	30 Por ya no ser más joven
7 Sólo cuando se siente extremadamente mal	19 Porque casi no se enferma	31 Hay chequeos obligatorios al trabajo
8 Está enfermo/a y por lo tanto se preocupa siempre por su salud	20 Por ser joven	32 Uno no sabe lo que puede tener
9 Porque siempre se ha preocupado, considerado importante	21 Por descuido	33 Porque el ISS no atiende a causa de las colas
10 Por miedo a las enfermedades	22 Por el trabajo	34 Porque toma remedios caseros
11 Porque hoy en día hay muchas enfermedades	23 Para el bienestar de los niños	
12 Porque es importante para el hogar	24 Cuando el centro de salud ofrece controles	

Preguntas 6 y 7 - Descripción del concepto de enfermedad

Pregunta N.6 - Significado de la enfermedad		Pregunta N. 7 - Lo que cambia con la enfermedad	
01 No poder hacer las normales actividades - Estar incapacitado	27 No tener quien haga las cosas para uno	01 Sentirse triste	27 Se adquiere más responsabilidad
02 No tener fuerza para hacer cosas (agobiamiento - acomplejado)	28 Todo, todo lo malo, lo peor	02 Sentirse sin ánimo o decaído	28 No tener la misma habilidad física
03 Sentirse mal	29 Tener desmayos	03 No sentirse bien	29 Cambio en la normal rutina
04 Como si uno muriera	30 Sentir tristeza y depresión	04 Estar de mal genio	30 No cambia nada, hay que seguir...
05 Preocuparse por bienestar de niños	31 Dolor de cabeza	05 No poder hacer las labores de la casa	31 Tener que estar acostado/a
06 No poder sustentar económicamente el hogar	32 Algo terrible, grave	06 Verse afectado en las relaciones con los demás	32 Volverse dependiente
07 No poder trabajar	33 Molestia, incomodidad, aburrimiento	07 Tener que hacer las cosas porque no hay quien las haga	33 Sentirse inútil, sentirse una nada
08 No poder atender el oficio del hogar	34 Preocupación, preocuparse	08 Estar preocupado porque no hay plata para el médico	34 El aspecto físico, todo
09 Disfunción orgánica - mal funcionamiento organismo	35 No poder cumplir con los deberes	09 Lo económico - No trabaja - No hay dinero	35 El estado físico
10 Una persona sin salud no vale nada	36 Volverse un peso para el hogar	10 Casi nada si no es grave	36 La noción del tiempo
11 Dolores en el cuerpo	37 No poder hacer las cosas bien	11 Pérdida capacidad productiva	37 Preocuparse por el hogar y los niños
12 No ser autosuficiente	38 No poder trabajar pero hacerlo igual para los niños	12 Pérdida capacidad de movilizarse	38 Falta de tranquilidad
13 Tener un accidente	39 No poderse mover	13 Todo se le viene encima	39 No poderse levantar
14 Estrés emocional	40 Sentirse diferente debido a la edad	14 Probar desesperación, ponerse a llorar	40 Cambia el bienestar
15 Preocuparse por conseguir medicamentos frente a escasez de dinero	41 Estar en una situación de riesgo	15 Cambio en el estado de ánimo	41 La vida se vuelve triste
16 No poderse levantar de la cama	42 No poder salir	16 No poder hacer las cosas bien	42 El esposo se queja por todo
17 Cuando uno tiene dolor de cabeza	43 Tener mala suerte	17 La vida en el hogar	43 No hay ánimo para superarse, hacer las cosas bien o mejor
18 Se derrumba el mundo	44 Pensar en cuidarse más	18 Dolor de cabeza	
19 Cuando uno tiene que ir donde el médico	45 No hay derecho a enfermarse a causa del dinero	19 Lo psicológico, hay depresión y aburrimiento	
20 No estar bien física y mentalmente	46 Tener fiebre	20 El cuidado de los niños	
21 Dolor constante	47 Algo normal en la vida	21 Sentirse mirado con lástima	
22 Cuando es algo grave, entonces uno se preocupa	48 Problemas cuando uno/a es jefe de hogar	22 Generar preocupación en la familia	
23 Sin salud no es posible sobrevivir	49 No poder comer	23 No poder hacer nada	
24 Estar enfermo es dejarse morir de hambre	50 No poder hacer nada	24 No querer hacer nada	
25 La enfermedad es un cambio en toda la persona	51 Algo que depende del estado psíquico	25 No tener la misma energía que siempre	
26 No poder sacar los niños adelante		26 Que hay que quedarse quieto/a	

Pregunta N. 5 - Preocupación por futuro estado de salud

Nunca	A veces	A menudo
1	2	3

Pregunta N. 10 - Utilización servicios médicos o consulta de médicos en caso de enfermedad en los últimos 3 meses

Si	No	Utilizó medicina alternativa
1	2	3

Pregunta 12 - Razón por no poder seguir las recomendaciones o la terapia

1 Inquietud	6 Temor de los exámenes o respecto al tomar medicamentos	11 No le dieron terapia
2 Falta de recursos para pagar exámenes médicos o terapia	7 Falta de presupuesto, de plata	12 El medico le regañó, maltrato por parte del personal
3 Falta de recursos para comprar droga	8 El seguro no le cubrió todas las drogas	13 Por las colas muy largas
4 El organismo no asimiló - toleró la droga	9 Falta de tiempo	14 Porque el médico le dio un diagnóstico que cree no correcto
5 Necesidad de cuidar a alguien en el hogar (ancianos, enfermos)	10 Falta de permiso al trabajo	15 No hay drogas, no dan las drogas que uno necesitaría

Pregunta N.13 - Razón por no poder atender consulta en caso de enfermedad en últimos 3 meses

1 Demasiadas colas	10 La familia está en desacuerdo, presiona en contra de la terapia	19 Por falta de tiempo (tenía que trabajar, atender a alguien)
2 Consulta demasiado cara	11 No tener seguro médico/ de salud	20 No sirven los remedios que le dan, no confía en los médicos
3 Inútil ir a causa del alto costo de los medicamentos	12 No tiene interés por su salud	21 Porque ya sabe lo que tiene que tomar
4 Falta de dinero	13 Por no ser grave	22 Le molesta tomar drogas, va donde el médico solo si es grave
5 Se sintió mejor	14 Por no ponerle atención	23 Utiliza remedios caseros
6 Los tratamientos son demasiado largos y no hay tiempo para ir	15 Por el mal trato por parte del personal	24 Por la misma enfermedad
7 No tener con quien dejar los niños	16 Desempleo	25 Dificultad personal en seguir con la terapia
8 Miedo a que le digan que tiene algo grave	17 Se autorecetó, se fue a la droguería	26 Quitaron el centro de salud del barrio
9 No le había llegado nuevo carnet del seguro de salud	18 No le gusta ir donde el médico	27 Falta de permiso al trabajo

Pregunta 14 - Utilización medicina alternativa

Tipo de medicina utilizada	Tiempo	Motivo	Calidad	Costo
01 Naturista	99 A veces	Ver Sección 6	1 Se sintió mucho mejor que antes	1 Más caro
02 Homeópata	900 = menos de 1 mes	Preg. 2 - 8 - 14	2 No le sirvió	2 Costo igual a lo de la medicina tradicional
03 Acupuntura	901 = 1 mes		3 Empeoró	3 Más barato
04 Bioenergético	902 = 2 meses		4 Le curó	4 Medicamentos muy caros
05 Hierbatero	9..= 3 mese, etc.		5 Es mejor por ser natural no tiene químicos	5 La droga es más barata
	1 = 1 año		6 A veces funciona	6 La consulta es más barata
	2 = 2 años		7 Confía más en la medicina tradicional	7 La droga es muy cara
	etc.		8 Sirve hasta que uno atiende, después se vuelve mal	

Sección 8 – Eventos de vida y códigos de vulnerabilidad

Evento	Causa	Consecuencia	Estrategia
01 Muerte padre	01 Asesinato	01 Moral - dolor	01 Deuda (cancelada) amigos o familiares
02 Muerte madre	02 Atraco por robo	02 Falla contrib. ec. principal.	02 Deuda (no cancelada) amigo o familiares
03 Muerte hermano-a	03 Maltrato	03 Deuda	03 Aumento carga trabajo
04 Muerte hijo-a	04 Infidelidad	04 Cortes todo gasto	04 Utilizar medicina alternativa
05 Muerte partner	05 Compra casa	05 Cortes part. en salud	05 Ayuda económ. x entierro
06 Problemas económicos	06 Bajo salario/ingreso	06 Cortes part. en comida	06 Uso de centro especializado
07 Problemas con/en el trabajo	07 Desempleo	07 Corte part. en vestuario	07 Nada por falta tiempo o plata
08 Problemas de pareja	08 Pago entierro	08 Cortes part en diversión	08 Terapia temporal
09 Violencia en el hogar	09 Enfermedad	09 Incapacidad por trabajar	09 Apoyo moral en el hogar
10 Enfermedad	10 Policía no deja trabajar	10 Perdida bienes consumo	10 Ayuda parientes
11 Endeudamiento	11 Nietos a cargo	11 Perdida de ingreso	11 Ayuda barrio o compañero trabajo
12 Venta de bienes	12 Niños dé otros a cargo	12 Mejoró comp. esp.-comp.	12 Préstamo banco (cancelado)
13 Empeñar bienes	13 Compra de lote	13 Falta de respeto x hijo	13 Préstamo banco (no cancelado)
14 Abandono escolar	14 Separación	14 Perdida matriz	14 Préstamo usurero (cancelado)
15 Dificultad x pagar matricula escuela	15 Abandono	15 Empeoramiento estado salud	15 Préstamo usurero (No cancelado)
16 Dificultad x pagar servicios	16 Robo	16 Dificultad económica	16 No sale de noche
17 Dificultad x pagar arriendo	17 Mala atención médica	17 Cirugía	17 Apertura negocio o venta en la casa
18 Problemas de relación con hijo/a	18 Muerte por enfermedad	18 Cambio estilo de vida en positivo.	18 Utilización ahorros
19 Aborto	19 Problemas durante parto	19 Mejoró situación económica	19 Subsidio a la vivienda por parte empresa
20 Compra casa	20 Vivir en zona/casa fria	20 Mejoró condiciones de vida	20 Tener calma y control
21 Graduación hijos	21 Descuido de la salud	21 Mejoró expectativas de vida	21 El seguro cubrió todos los gastos
22 Mejora expectativas de vida	22 Alcoholismo del Esposo	22 Consecuencias psicológicas	22 El seguro cubrió sólo parte de los gastos
23 Conseguimiento de un trabajo	23 Incomprensión	23 Sigue dieta alimenticia	23 Deuda con empresa (No cancelada)
24 Problemas relacionados al parto	24 Accidente de transito	24 Necesita operación - no recursos.	24 Utilización servicios de salud
25 Mejora en el ingreso	25 Nacimiento hijo-a	25 Mejoramiento estado animo	25 Deuda con empresa (Cancelada)
26 Accidente	26 Aumento del ingreso	26 Compra casa	26 Contribución económica a familiares
27 Muerte de otro pariente	27 Hijo en servicio militar	27 Perdida activos monetarios	27 Reducción del gasto del hogar
28 Servicio Militar	28 No tener quien cuide niños	28 Problemas familiares	28 Empeñar bienes
29 Perdida del trabajo	29 Problemas económicos en el trabajo	29 Necesidad de tratamiento médico continuado	29 Cortes en comida
30 Separación	30 Ayuda por parte de parientes	30 Perdida / quiebra de negocio	30 Trabajar
31 Viajes	31 Costo de la vida/crisis	31 Tuvo que seguir trabajando a pesar de....	31 Trabajar más duro, más horas
32 Graduación de pariente afuera del hogar	32 Quedar huérfano	32 Incapacidad por hacer deporte	32 Compartir casa con otro hogar
33 Convivir con parientes	33 No poder pagar arriendo	33 Dejar niños solos en casa	33 Deuda para alimentación con tienda
34 Enfermedad de pariente afuera hogar	34 Compra lote porque barato	34 Incapacidad temporal	34 Pago informal de la vivienda a parientes o amigos u otro
35 Comprar lote	35 Problemas familiares	35 Enfermedad de pariente no cohabitante	35 Ayuda psicológica
36 Violación - abuso sexual	36 Violación - abuso sexual	36 Inasistencia escolar	36 Tener que asumir carga económica del hogar

37 Embarazo	37 Falla de método contraceptivo	37 Frustración por no poder ver resultados a pesar del trabajo	37 Visitar diariamente a pariente
38 Problemas con familiar afuera del hogar	38 Problemas en el trabajo	38 Asumir responsabilidad económica con hijo o pariente	38 Pago a instit. de salud a medio SISB.
39 Matrimonio de hija	39 Intromisión de familiar	39 Mejora del estado de salud	39 Recibir ayuda material pero no económica por parte de parientes
40 Atraco	40 Falta contribución económica de ex-esposo	40 Tener algo propio (activo)	40 Pago de entierro por parte empresa
41 Desplazamiento por violencia	41 Embarazo	41 Falta de ayuda en las labores del hogar y con los niños	41 Actual compañero ayuda económica. para gastos de hijo-a
42 Mejora económica en el hogar	42 Pésima atención médica	42 No tener que pagar arriendo	42 Tratamiento continuo
43 Estabilidad de pareja y hogar	43 Persecución de la policía	43 Tener deuda de arriendo	43 Tener que visitar pariente por enfermedad frecuentemente
44 Construir casa	44 Trabajo informal y desempleo	44 Resignación	44 Volver al hogar paterno
45 Hija/o menor abandonó el hogar	45 Mejora del ingreso en cuanto trabajador independiente	45 Tener aborto	45 Cursos de capacitación
46 Alcoholismo	46 Incompatibilidad con familiar	46 Alegría	46 Tener que conseguir documentos
47 Migración a Bogotá	47 Inversión en activos de trabajo	47 Maltrato por parte del esposo - compañero	47 Usar cadena de ahorro informal
48 Venta del negocio	48 Venta de la casa en donde vivía	48 Lesiones físicas como consecuencia de cirugía	48 Recibir ayuda económica por parte de parientes
49 Hechar de la casa a un menor de edad	49 Problemas económicos	49 Atraso en pago de impuesto de la casa	49 Poder comprar solamente y únicamente lo necesario para el hogar
50 Rehabilitación como consecuencia de alcoholismo	50 Deuda por pago de atención médica debido a enfermedad	50 Volver más temprano a casa	50 Resignación frente a evento de vida
51 Asumir crianza de menor de edad	51 Perdida del empleo	51 No poder completar casa	51 Trabajar para pagarse estudios
52 Planificar compra de la casa	52 Deuda por compra de lote	52 No poder hacer labores de la casa y tener que hacerlas igual	52 Ayuda económica por parte de ex-esposo
53 Mejora/arreglos de la vivienda	53 Intento de conseguir mejor negocio	53 Perder capacidad de movilizarse	53 El hospital reconoció haberse equivocado y no le cobro servicio
54 Cirugía u operación	54 Ser presionada a abortar	54 Persecución de la policía	54 Recolecta por parte de la JAL o del barrio
55 Compra del carro	55 Bajo nivel de ingreso	55 Contagio por enfer. viral	55 Tener un hijo con una mujer que no sea la esposa
56 Nacimiento de hijo	56 Mejoras en la calidad de la vivienda	56 Tener subsidio y Seguridad Social para los hijos	56 Trabajar en el rebusque informal
57 Continuación de estudios	57 Deuda por construcción de la casa	57 No poder mejorar nivel de vida	57 Venta de bienes
58 Robo en la casa	58 Regreso al estudio para mejorar nivel de capacitación	58 Falta colaboración económica por parte de ex-esposo.	58 No recibir ayuda económica parientes
59 No tener casa propia	59 Problemas psicológicos	59 Ninguna consecuencia	59 Quedar en embarazo
60 Desempleo	60 Asumir crianza de un menor de edad no perteneciente a la familia (ahijado)	60 Nervio y temor	60 Deuda por comprar lote (cancelada)
61 Mudanza de pariente en la casa	61 Perdida de dinero por estafa	61 Pérdida del seguro de salud y de la pensión	61 Atraso en el pago del arriendo
62 Problemas con rendimiento escolar niños	62 Tener buen trabajo y remuneración	62 Tener que trabajar en la casa por razones de salud	62 Uso de remedios caseros
63 Problemas económicos de PAH	63 Deudas	63 Tener que pagar entierro	63 Búsqueda de solución a problema económico
64 Nacimiento hijo/a minusvalido/a	64 Deseo de mejorar el nivel de vida	64 No poder curar enfermedad por falta de dinero	64 Tomar deuda/préstamo para establecer negocio informal
65 Salida de los hijos de la casa	65 Gasto para la educación	65 Disminución de la capacidad de trabajo	65 Tener que empezar a trabajar

66 Abandono por otra mujer	66 Muerte en combate con ejercito	66 Deuda contraida por pago de atención médica	66 Poner los hijos a trabajar
67 Abandono por mujer emparentada	67 Heridas y traumas físicos	67 Adquirir más seguridad	67 Trabajar en el arreglo de la casa en propio
68 Abandono	68 Falta de controles médicos	69 Tener que mudarse a una casa más barata y pequeña	68 No poder atender centro especializado para curar enfermedad porque demasiado caro
69 Disminución del consumo	69 Falta de controles médicos	70 Dolor particular por muerte de hijo varón	69 EL ISS no pagó gastos de atención médica
70 Estrés y temor por violencia/inseguridad	70 Parto después de los 40 años	71 Graves consecuencias económicas	72 Arrendar la casa para aumentar ingreso
71 Estrés y temor por violencia/inseguridad	71 Ser la única fuente de ingreso	72 Poder comer sólo 1 o 2 veces al día	73 Necesidad de operación pero falta de plata
72 Estrés y temor por violencia/inseguridad	72 Ser la única fuente de ingreso	73 No recibir el pago de un bien vendido	74 Pago de entierro por parte de pariente/amigo
73 Estabilidad laboral/tener buen empleo	73 Impuestos	74 Tener que llevar hijo-a al trabajo consigo	75 Ejercer presión para irse de la casa
74 Estabilidad laboral/tener buen empleo	74 Exito negativo de cirugía	75 Quedarse sin recursos/plata por inversión	76 Tener beca
75 Nacimiento de hijo	75 Presencia pandillas en le barrio	76 Tener que gastar todo el ingreso en atención médica	77 Visitas diarias de padre a hijos
76 Enfermedad de ambos los padres	76 Enfrentar sola situaciones de riesgo	77 Buen rendimiento de hijo-a en el colegio	78 Secretaria de Salud cubrió gasto hospital
77 Enfermedad de PAH	77 Trabajo peligros, con fuertes riesgos	78 Tener beca del colegio	79 Esperar que empresa pague remuneración
78 Compra de bien de consumo/electrodom.	78 Tener que dejar el trabajo por embarazo	79 Sentirse aislado y sin amigos	80 Ineficaz intervención de la policía
79 Problemas con inquilino/a	79 Tener que dejar el trabajo por embarazo	80 Sentirse discriminado-a a causa de enfermedad	81 Utilizar ayuda de rezanderos hierbateros
80 Mejora de las condiciones de salud	80 Ser obligado a vender la casa	81 Tener que pagar arreglo a causa de accidente transito	82 Falta de atención en EPS por carnet vencido
81 Nacimiento de un niño en el hogar	81 Ser obligado a vender la casa	82 Encontrarse incapacitado para el trabajo por enfermedad	83 Tener que pagar arriendo
82 Embarazo de menor en el hogar	82 Renovación contrato de trabajo	83 Sufir de malgenio y amargura	84 Corte particular del gasto en salud
83 Empezar a trabajar	83 El sueldo mínimo no alcanza	84 Manifestar agresividad y asocialidad	85 Búsqueda de empleo por desempleo
84 Experiencia de tipo religioso	84	85 Pérdida del trabajo	86 Demandar legalmente a ex-esposo
85 Vencimiento del seguro de salud	85 No querer gastar en arriendo e invertir en casa	86 Estabilidad laboral	87 Deuda con usurero (no cancelada)
86 Drogadicción de hijo/a	86 Incapacidad laboral	87 Tener la posibilidad de ayudar económicamente el hogar	88 Utilización de activos heredados o dejados por otros para generar ingresos
87 Maltrato por parte de pariente (no padres)	87 Trabajo en condiciones de inseguridad	88 Tener problemas en relación a la edad avanzada	89 Ayuda económica a pariente afuera del hogar
88 Robo en el hogar	88 Trabajo en condiciones de inseguridad	89 Tener menos tiempo por dedicar al hogar	90 /91 Pago atención médica con descuento TS
89 Separación de la hija	89 Trabajo en condiciones de inseguridad	90 Alcoholismo del esposo	92 Verse obligado a entrar en el circulo de la deuda
		91 Sentirse inseguro-a por no tener casa de propiedad	93 Tener que abandonar temporalmente la residencia
		92 Perder privacidad a consecuencia de...	94 Tener que enfrentar sólo/a las dificultades

91 Nacimiento prematuro		93 Obtención de recursos económicos temporales	95 Tener miedo que pueda pasar algo y rezar
92 Mudarse a Bogotá	100 Malas amistades	94 Deuda causada por falta de recepción de pago de algo	96 Limitar la actividad de los niños afuera de la casa
93 Aprender un trabajo/capacitarse	101 Edad	95 Tener que sostener gasto judicial	97 Volver a separarse y reunirse con esposo/compañ.
94 Salida de una deuda	102 Problemas con el ser anciano	96 Pérdida de año escolar	98 Tener que ponerse a trabajar a servicio por día
95 Abandono del estudio	103 Falta de trabajo	97 Asumir carga de niños no propios	99 No poder asistir al médico por falta de plata
96 Retiro del trabajo x embarazo/enfermedad	104 Falta de trabajo	98 Problemas en el estudio para los niños	100 Compra de un lote
97 Venta de negocio	105 Esposa no cuida a los niños	99 Enfermedad de otro miembro del hogar	101 Hijo mayor empezó a trabajar
98 Rescatar niño desde el padre	106 Pago educación superior hijo/a	100 Tener que limitar educación hijos (libros. etc.)	102 Intentar ahorrar más
99 Conseguir carnet de salud	107 Demasiado trabajo	101 Tener temor al salir por la calle	103 Dialogar en el hogar entre la pareja
100 Tener mucha unión en el hogar	108 Alcoholismo	102 Lesión por arma de fuego	104 No salir sin compañía por miedo
101 Problemas con familiar en el hogar	109 Separación	103 Correr un riesgo de muerte	105 Entintar fiar con las tiendas cercanas
102 Fuerte crisis económica en el hogar	110 Incomprensión	104 Vivir permanentemente bajo la inseguridad	109 Tener que pagar por gasto médico de PAH
103 Ser mujer jefe de hogar	111 Suicidio	105 Tener que pagar por atención médica	110 Demandar legalmente a inquilino
104 Doña Juana	112 Falta de espacio entre un parto y otro	106 Verse afectado en las relaciones por el sospecho	111 Comer una vez al día
105 Volver a estudiar	113 No poder trabajar por cuidado niños	107 Interrupción de los estudios	112 Comer tan solo 1 o 2 veces al día
106 Pago de atención médica	114 Muerte de otro pariente (no padres/hermanos)	108 Estado de tensión nerviosa	113 Comer 2 veces al día en lugar de 3
107 Estado de malestar	115 Prestar plata que sea de otros	109 Pérdida de más de 1 año escolar	114 Recurrir a la iglesia o convertirse (evangélicos)
108 Reconciliación de la pareja	116 Crisis en el sector laboral donde trabaja	110 Atraso en el pago de los servicios	115 Búsqueda de mejor trabajo
109 Reconciliación entre padre e hijo/a	117 Pago de servicios de estrato 3 y 4	111 Más unión en el hogar	116 Poder pagar gasto educación hijos
110 Enfermedad de hijo/a(s)	118 Falta de dinero x pago matrícula	112 Tener medios económicos para garantizar lo necesario	117 Poner mayor atención al cuidado de uno mismo/a
111 Enfermedad hermano/a (s)	119 Falta contribución económica del padre	113 Tener que trabajar más duro, más horas	118 Espera - resignación
112	120 Matrimonio de una hija	114 Sentir satisfacción por un logro	119 Recurso a la fe - orar
113 Mejoras en el servicio del ISS	121 Fuerte deseo de conseguir algo	115 Perder el buen humor	120 No se pudo hacer nada
114	122 Falta de unión en el hogar	116 Trabajar en algo peligroso para la salud	121 Hija mayor tuvo que empezar a trabajar
115 Cuidar niño/a de hogar más pobre	123 Falta de unión en el hogar	117 Dejar temporalmente el hogar	122 Seguir juntos con la pareja por los hijos
116 Enfermedad de uno de los padres	124 Venta casa en el campo	118 Comer 1 vez al día	123 Ayuda económica por parte del colegio
117 Quiebra del negocio	125 Falta de servicios básicos	119 Seguir trabajando a pesar de...	124 Tener que recomprar los bienes perdidos por robo
118 Compra de una segunda casa	126 Utilización de los ahorros	121 Recibir los sobrinos en la casa cuando puede	125 Seguir trabajando a pesar de...
119 Trabajar con ancianos	127 No poder/lograr ahorrar	122 Pensar en mejorar la vivienda	129 Seguir trabajando a pesar de...
120 Apertura de negocio	128 Salida de un hijo de la casa	124 Problemas en la relación hijos-padres	130 Volver al hogar de los padres

121 Recibir amenazas	129 Ayuda económica al interior del hogar	125 Irse temporalmente de la casa	131 Falta de ayuda económica por parte de ex-esposo
122 Muerte de ambos los padres	130 Obtener vivienda por concesión	126 Estabilidad	132 Volver al hogar paterno
123 Vivir sola y abandonada por la familia	131 Recibir una herencia	127 Atraso en el pago del arriendo	133 Empezar a trabajar
124 Trabajar en el sector informal	132 Terminación del contrato de trabajo	128 Falta de comunicación (en hogar, entre pareja)	134 Pensar de poner los hijos a colaborar con el hogar
125 Cuidar niño/a de pariente	133 Inestabilidad del trabajo	129 Apoyar políticamente a un candidato	135 No operarse por miedo
126 Vivir en arriendo	134 Drogadicción	130 Mala atención por parte del ISS	136 Subarrendar parte de la casa/piezas
127 Vivir con la pareja actual	135 No tener seguro de salud	131 Tener que quedarse en la cama	137 Conseguir empleo temporal
128 Separación de los padres	136 Falta de papeles para obtener trabajo	132 No poder colaborar al hogar por razones de salud	138 Planear la toma de un préstamo
129 Graduarse	137 Los padres tienen que trabajar muy duro	133 Internar a alguien en una institución	139 Pasividad - no hacer nada - esperar que pase
130 Homosexualidad del hijo	140 Venta de tierra	134 Separación - terminación relación	140 Apoyarse en el esposo y en los hijos
131 Prohibición uso de la pólvora en Bogotá	141 Desplazamiento por paramilitares	135 Divorcio	141
132 Abandono hogar x parte hermano	142 Desplazamiento por guerrilla	136 Empeoramiento de la nutrición	142 Compartir economía en el hogar con las demás familias
133 Preocuparse por las dificultades de los niños	143 Celos por parte esposa/compañera	137 No poder cuidar los niños debido al trabajo	143 Hacer lo posible para mantener nivel de alimentación de los hijos
134 Tener que ayudar los padres en el campo	144 Celos por parte esposo/compañero	138 Mejora del espacio al interior del hogar	144 No poder ni siquiera empeñar porque no hay nada
135 Cambio de barrio	145 La edad	139 Deuda constante -quedar en un estado de deuda continua	145 Hacer planificación familiar
136 Salida de los hijos de la casa	146 Conseguir pareja	140 Cancelar deudas	146 Corte en diversión
137 Separación de PAH	147 No poder pagar el arriendo	141 Recuperar bienes empeñados	147 Padecer consecuencias de Doña Juana sin ayuda instit.
138 Bodas de oro	148 Empresa no tenía seguro de salud	142 Falta de colaboración al interior del hogar	148 Seguir trabajando a pesar de las consecuencias
139 Lograr cancelar parte de una deuda	149 Facilidad de pago (generalmente casa)	143 Buscar más ayuda por parte de los padres	149 Esposa empezó a trabajar
140 Esterilizarse	151 Muerte esposo/a	145 Abandono del trabajo	150 Venta de todo lo que tenían
141 Muerte de un trabajador	152 Quiebra de la empresa en donde trabajaba	146 No recuperarse de un choque	151 Perder la esperanza
142 Matrimonio de pariente		147 Tener que ayudar económicamente a PAH	152 Hechar esposo de la casa
143 Alcoholismo de los hijos		148 Tener gastos continuos por atención médica	153 Despedir a un trabajador que se había empleado
144 Problemas en la relación madre/hijos/as		149 Dificultad en el pago de la matrícula	154 No poder trabajar a causa de ser lo que cuida alguien
145 Familiar en la cárcel	91 Infarto	150 Perdida de hijo a causa de separación	155 Hacer vida social
146 Abandono del trabajo	92 Incontinencia	151 Cambio de barrio	156 Recibir ayuda económica por parte de los padres
147 Esposo no deja trabajar a la esposa	93 Infección respiratoria	152 Perdida de la habilidad física (total o parcial)	157 Abrir venta informal en la casa
148 Buen estado de salud de los hijos	94 Diabetes	153 Poder subarrendar	158 Vivir de limosna
149 Falta de medios para mejorar negocio/empresa	95 Circuncisión	154 Poder hacer más por los hijos	159 Utilizar medicina alternativa

150 Separación de PIH	96 Enfermedad de la sangre	155 Poder comprar bienes de consumo (TV, etc.)	160 Dejar el alcohol
151 Regreso de hijo al hogar	97 Cáncer	156 Vender comida por la calle	161 Optar para el cierre temporal del negocio
152 Reunión de la pareja después de separación	98 Infección respiratoria aguda	157 Embarazarse - tener un bebé	162 Empresa pagó el atención médica
153 Desempleo del hijo/a	99 Derramen cerebral	158 Tener que pagar deudas contraídas	163 Utilizar la liquidación para los gastos diarios
154 Criarse como hijo menor responsable x hogar	911 Anemia	159 Graves lesiones físicas	164 Emigrar - cambiar de ciudad
155 Compra herramientas de trabajo	912 Úlcera o gastritis	160 Tener más opciones en los servicios de salud	165 Empresa no quiso pagar atención médica
156 Consecuimiento de pareja	913 Problemas de circulación	161 Recibir amenazas	166 Deuda para compra de materiales o herramientas
157 Pérdida año escolar	914 Vejez	162 Guerra en el barrio entre pandillas	167 Tener buena red de solidaridad en el barrio
158 Embarazo de la novia del hijo	915 Oídos, nariz, garganta, ojos	163 Presencia de limpieza social en el barrio	168 Llevar al hijo donde el cura
159 Problemas en la pareja del hijo/a	916 Artritis	164 Fuerte pérdida de dinero	169 Emigrar a otro país
160 Ayuda empresa x pago cuotas casa	917 Problemas ortopédicos	165 Un empeoramiento económico aun peor que lo de antes	170 Intentar obtener más capacitación
161	918 Vena varices	166 No poder cuidar los niños	171 Estudiar privadamente
162 Recibir lote en regalo	919 Enfermedad viral	167 Venta de la casa	172 Sentirse en dificultad siendo que el esposo trabaja af.
163 Hijo en servicio militar	920 Muerte natural	168 Separación	173 Falta de ayuda económica por parte de ex- esposo
164 Tener un terreno en el campo	921 Problemas del hígado	169 Quedarse sin bienes de consumo	174 Frustración para no poder ayudar a alguien
165 Obtener subsidio a la vivienda	922 Enfermedad relacionada al embarazo	170 Trabajar más	175 Ayuda discontinua por parte de ex-esposo
166 Graves problemas estructurales vivienda	923 Menopausia	171 Falta de afecto por parte de los padres	176/177 Conseguir nueva pareja
167 Padre/esposo tiene un segundo hogar	924 Malformaciones genéticas	172 No poder comprar la casa	178 Falta de atención por parte del ISS
168 Aparición hermanastro/a	925 Nacimiento de bebé prematuro	173 Vivir en una situación de hacinamiento	179 Venta del lote
169 Abuso sexual	926 Hernia	174 Lesiones por arma blanca	180 Irse de la casa para vivir con la pareja
170 Aumento del costo del transporte	927 Problemas de la matriz y del cuello uterino	175 Traumas y fracturas	181 Tener una forma de seguro con los familiares
171 Estrés a cause del demasiado trabajo	928 Problemas del estómago	176 Niños se fueron con el padre después separación	182 Salirse temporalmente de la ciudad
172 Abandono escolar de todos los niños del hogar	929 Problemas a los riñones	177 Adquirir más capacitación	183 Producir algo en la casa
173 Utilizar medicina alternativa	930 Mal funcionamiento del vaso	178 Vivir en casa de madera/cartón/desechos	184 Falta de ayuda por parte del actual compañero
174 Problemas post-parto	931 Problemas del corazón	179 Verse obligado a hacer más de un trabajo	185 Hospital no prestó atención médica
175 Problemas con la escritura de la casa	932 Tensión arteriosa alta	180 Ahorrar más	186 Salir adelante gracias al trabajo de los hijos
176 Buen matrimonio de una hija	933 Dolores en el cuerpo	181 Problemas de pareja	187 No poder cuidar los niños
177 Empeoramiento estado de salud	934 Hemorroides	182 No poder pagar por atención médica	188 Falta de ayuda en el hogar por parte de los hijos

178 Restricción de la posibilidad de ver a pariente	935 Leucemia	183 No poder atender especialista por falta de recursos	189 Pagar a alguien para que siga con el negocio
179 Volver al campo	936 Problemas nerviosos	184 Hipotecar la casa	190 Dialogo y cuidado emocional especial para niños
180 Asumir crianza de pariente menor de edad	937 Migraña	185 Abandono del hogar por parte de la hija	191 Hacer lo posible para mantener los hijos en educación
181 Separación de parientes residentes en hogar	938 Problemas de la viscicula	186 ICBF quitó los niños a la madre	192 Utilizar ahorros
182 Inseguridad	939 Problemas de próstata	187 violencia en el hogar	193 Seguro médico cubrió los gastos
183	940 Tuberculosis	188 No hubo mayores consecuencias	194 Decidir de tomar a cargo niño de parientes
184 Pensar en un cambio de casa	941 Inflamación pélvica	189 Nacimiento de hijo/a minusalido/a	195 Apoyo moral de amigo/a muy cercano/a
185 Expulsión del colegio	942 Amebas	190 Ser madre soltera	196 Ayuda del seguro médico por pago de entierro
186 Recibir visita esposo afuera por trabajo	943 VIH-SIDA	191 Sentirse humillado/a	197 Enfrentar problema per no poderlo resolver
187 Desempleo de PAH	944 Efectos de Doña Juana	192 problemas con familiar afuera del hogar	198 Cambiar en positivo el estilo de vida
188 Niño/a no aceptado/a en la escuela	955 Infección de los ojos	193 Alcoholismo	199 SOAT pagó el gasto médico y no médico
189 Perdida de años pensionables	956 Intoxicación	194 Criarse sin padres o parientes	200 No atender servicios de salud por temor al maltrato
190 Recibir pensión	957 Estrés y/o preocupación	195 Volver al hogar de los padres por separación	205 Poder traer el hogar a Bogotá
191 Conseguir instalación teléfono	958 Problemas de colon	196 No poder realizar un pago importante	206 Poder mejorar la casa
192 Sufrir por depresión	959 Desnutrición	197 Problemas en el trabajo	207 Pelear para que se acabe la infidelidad
193 Problemas económicos por ser indep./inf.	960 Apendicitis	198 No sentirse bien en Bogotá	208 Tener pensión de pariente fallecido
194 Pasear	961 Choque psicológico	199 Tener que criar sola los niños	209 No atender hospital por mala atención urgencias
195 Satisfacción x nivel bienestar de los hijos	962 Quemadura	200 Quedar como el único adulto en el hogar	210 Ayuda discontinua por parte del esposo
196 Exito negativo de un negocio	963 Tromboembolia pulmonar	201 Terminar en la cárcel	211 No poder ahorrar porque el esposo se lleva la plata
197 Problemas con el patrón	964 Embolia	202 Tener que mandar la hija a vivir con los abuelos	212 Intentar, pero no lograr conseguir crédito
198 Ser madre soltera	965 Aborto espontáneo	203 Alegrarse por la muerte de alguien muy malo	213 Mejorar la administración de los recursos
199 Cumplir años	966 Osteoporosis	204 Padre en la cárcel por maltrato	214 Realizar conexión pirata
200 Problemas con el ISS	967 Meningitis	205 Perder red de apoyo en el barrio	215 Perder tiempo de trabajo a causa enfermedad niños
201 Parto	968 Problemas ginecólogos	206 Gastar lo poco que hay en el cotidiano	216 Formar pareja con pariente
202 Tener a un familiar preso	969 Tromboflebitis	207 Perder importante apoyo moral	217 Deuda por atención médica y compra de drogas
	970 Asma	208 Criar sola los niños	218 Tener dos trabajos
	971 Hidrocefalia	209 Poder pagar las cuotas de la casa	220 Mudarse a una casa más pequeña

	972 Histerectomía	210 Sentirse mejor como mujer jefe de hogar sin esposo	222 Enfriar relaciones con el padre
	973 Rinitis	211 Maltrato	223 Tutelar la escuela
	974 Problemas psicológicos y nerviosos	212 Curación milagrosa por enfermedad mortal	224 Tener que pagar por entierro
	975 Problemas neurológicos	213 Vivir cerca de fuente de fuerte contaminación	225 Tener solo la pensión para cubrir todos los gastos
	976 Enfermedad a transmisión sexual	214 ICBF quiere privar la mamá de los niños	226 Trabajar y estudiar
	977 Problemas de infidelidad	215 Muerte de pariente por pena moral	227 No poder arreglar un problema
	978 Morbo de Parkinson	216 Perder la seguridad del trabajo/en el trabajo	228 Vender sangre para pagar comida
	979 Quiste al seno	217 No lograr conseguir trabajo por falta de estudios	229 No utilizar al ISS por las colas
	980 Amputación de una pierna	218 No poder comprar ropa de moda (jóvenes)	230 Tener que recurrir a un abogado
	981 Mareos	219 Desnutrición de niño/a	231 Hechar el hijo de la casa
	982 Trauma, fractura	220 No poder atender las necesidades de los niños	232 Utilizar el SISBEN
	983 Problema muscular	221 Empeoramiento del rendimiento escolar	233 Dar ayuda moral a PAH
	984 Cirugía	222 No poder arreglar la casa	234 Enfriar las relaciones y alejarse
	985 Diarrea	223 Pérdida de bienes por robo	236 Prestar dinero
	986 Artritis	224 Necesitar de cuidados especiales	237 Tomar acción legal en contra de la esposa
	987 Colesterol alto	225 Esposo no deja trabajar la esposa	238 Empeoramiento de las perspectivas de vida
	988 Asfixia	226 Inseguridad de la tenencia	240 No cuidar enfermedad para el bienestar del hogar
	989 Estrés	227 Reempezar a estudiar	241 Liderar organización de barrio anti-violencia
	990 Peritonitis	228 No poderse operar a causa del papeleo	242 Solidaridad entre las mujeres del hogar
	153 Retiro del trabajo	229 No poder trabajar bien por el ánimo	243 Comprar casa
	154 Accidente de trabajo	230 Mala atención de la EPS	244 Tener que cuidar PAH
	155 Abuso de poder por parte del patrón	231 Problema económicos por gasto médico	245 Denunciar al esposo
	156 Oferta de droga x parte profesor	232 Quedar sólo/a	246 Quedar solo y desamparado/a
	157 Desempleo temporal	233 Tener que acudir diariamente a pariente	
	158 Abandono por parte de hijos y parientes	234 Perder todos los activos (lo que se tiene)	
	159 Apertura de tienda/negocio	235 Encontrarse sin amparo	
	160 Muerte del principal contribuyente hogar	236 Obtener apoyo por parte ex-esposo	
	161 Unión y dialogo entre la pareja	237 Reunirse con los hijos después separación	
	162 Bajo nivel de educación	238 Necesitar escuela especial	
	163 Estrés y/o preocupación	239 Problemas con el trabajo	
	164 Infidelidad del hombre	240 Tensiones con gente, inimizades	

	165 Muerte de niño/a durante el parto	241 Apoyarse a los parientes para conseguir trabajo	
	166 Falta de respons. padre x hijos + hogar	242 Tener pensión	
	167 Abandono por parte del esposo	243 Perdida del seguro de salud	
	170 Vivir con parientes	244 Buscar un médico privado	
	171 Terminar estudios	245 Vivir en estado de pobreza	
	172 Muerte de la madre	246 Sentirse más responsable	
	173 Brujería	247 Buscar un trabajo	
	174 Secuestro	248 Quedar desamparado/a	
	175 Deseo educar hijos con amor + rectitud	249 Afiliarse a un seguro de salud	
	176 Realizar permuta	250 El ISS no quiere afiliar alguien en hogar	
	177 Estabilidad del trabajo	251 Quedar ciego	
	178 Inseguridad en el hogar (estufas, etc..)	252 Normalización relaciones en el hogar	
	179 Hogar sin condiciones mínimas de salubre.	253 Padre en la cárcel por homicidio	
	180 Trabajo con policia secreta		
	181 Conseguir préstamo		
	182 Inquilinos morosos		
	183 Infidelidad con pariente o con familiar		
	184 Nacimiento de hijo a causa de infidelidad con pariente		
	185 Gasto por pago de servicios		
	186 Arreglos de la casa		
	187 Asistir al asesinato del padre		
	188 Enfermedad del esposo		
	189 Corte de personal en la empresa		
	190 Experiencia religiosa		
	191 Verse obligado a cambiar vida o ciudad		
	192 Perpetrar atraco		
	193 Ser mujer jefe de hogar		
	194 Tener compañero criminal		
	195 Puede trabajar sólo el esposo		
	196 Tabaquismo		
	197 Separación de la hija		
	198 Tráfico de droga		
	199 Falla terapia rehabilitación por crimen		
	200 Falta de crédito		
	201 Infidelidad de la mujer		
	202 Comprar casa en barrio ilegal		
	203 Regreso del hijo al hogar		
	204 No pagar arriendo		
	205 No utiicar contracepción		
	206 Problemas con el compañero de la hija		
	207 Ganar lotería		
	208 Bajo nivel de capacitación		

	209 El compañero de la hija le exigía la plata del trabajo		
	210 Tener que pagar por entierro		
	211 Estilo de vida irregular, no sano		
	212 Pelear físicamente con el patrón		
	213 Accidente/disgracia		
	214 Pensionamiento		
	215 Desempleo de los hijos		
	216 Trabajar los dos en el hogar		
	217 Tener la oportunidad de conseguir empleo		
	218 Aumento del tamaño del hogar		
	219 Problemas legales con la tenencia		
	220 Tener que cubrir los gastos básicos del hog.		
	221 Conseguiamiento de pareja		
	223 Compra del carro		
	224 Pobreza		
	225 Amigos peligrosos		
	226 Muerte como escolta		
	227 Tener tiempo		
	236 Ser minusvalido		
	237 Le cobraron una deuda		
	238 Baja calidad de los servicios públicos		
	239 Compra activos/herramientas trabajo		
	240 Tener un interés a fuera de Bogotá		
	241 Reestructuración de la empresa		
	242 Alcohólico de la esposa/compañera		
	243 Tener ahorros		
	244 Hijos no logran ayudar en el hogar		
	245 Participar a actividad criminal		
	246 No recibir pagos		
	247 Pariente embarazada se vino a vivir allí		
	248 Enfrentar dificultades buscando empleo		
	249 Mala alimentación		
	250 Pago de impuestos		
	252 Cometer asesinato		

Sección 9 - Evaluación de actitudes frente a valores

Pregunta N. 13 - Estrategia frente a la enfermedad		
1 Remedios caseros	8 Consultar esposo/a, compañero/a	14 Confiar en la fé
2 Droguería	9 EPS - ARS - ESS	15 Clínica
3 Médico	10 Autocuración, autorecetación, automedicación	16 Especialista
4 Consultar a pariente	11 Pedir préstamo a familiar o endeudarse	17 Consultar persona mayor de edad
5 Aguantar, descansar en la casa	12 Ir donde el médico cuando se puede	18 Utilizar ahorros
6 Centro de salud	13 Ir al centro de salud o al centro médico por ser	19 Consultar amigo/a
7 Hospital	remitido/a a un centro de atención más compleja	

Sección 10 - Trabajo, ingreso y consumo

Preguntas N.2 y 4 - Tipo de trabajo	
01 A jornada informal en propio	09 Tiene tienda regular
02 A jornada informal para un patrón	10 Tiene trabajo formal en sector público
03 Venta ambulante por la calle - informal	11 Profesional
04 Venta porta a porta - informal	12 Tiene trabajo formal con empresa en sect. privado
05 Trabajo informal de tipo regular sin contrato	13 Profesional trabajando en empresa formal
06 Trabajo informal de tipo regular con contrato	14 Pensionado
07 Trabaja en la casa produciendo algo	99 Discontinuidad en el trabajo
08 Tiene tienda informal (gaseosas - cositas)	

Pregunta N. 6 - Dificultad para encontrar trabajo	
01 Por la edad	08 Enfermedad
02 Falta de experiencia	09 No tener quien cuide los niños
03 No hay trabajo	10 Medios de generación de ingreso dañado o indisponible
04 No tener documentos (libreta militar, etc.)	11 El esposo no la deja trabajar
05 Falta de capacitación y estudio	12 Pago por jornada, inestabilidad del trabajo
06 Falta de información	13 No tener quien cuide familiar enfermo
07 Incapacidad laboral	

Pregunta N.7 - Ingreso mensual del hogar	
99 No sabe	11 Más de \$551.000 y hasta \$600.000
01 Bajo	12 Más de \$601.000 y hasta \$650.000
02 Menos de 1 salario mínimo (\$172.000)	13 Más de \$651.000 y hasta \$700.000
03 Un salario mínimo (Hasta \$202.000)	14 Más de \$701.000 y hasta \$750.000
04 Más de \$202.000 y hasta \$250.000	15 Más de \$751.000 y hasta \$800.000
05 Más de \$251.000 y hasta \$300.000	16 Más de \$801.000 y hasta \$850.000
06 Más de \$301.000 y hasta \$350.000	17 Más de \$851.000 y hasta \$900.000
07 Más de \$351.000 y hasta \$400.000	18 Más de \$901.000 y hasta \$950.000
08 Más de \$401.000 y hasta \$450.000	19 Más de \$951.000 y hasta \$1.000.000
09 Más de \$451.000 y hasta \$500.000	20 Más de \$1.000.000
10 Más de \$501.000 y hasta \$550.000	

Pregunta N. 9 - Bienes empeñados				
1 Nevera	2 Lavadora	3 Estufa	4 Licuadora	5 TV
6 Radio/grabadora	7 Equipo sonido	8 Celular	9 Joyas	10 VHS
11 Olla a presión	12 Plancha	13 Bicicleta	14 Cilindro de gas	15 Maquina de escribir
16 Brilladora	17 Vendieron todo	18 Maquina de coser		

Sección 11 - Datos socioeconómicos y NBI

Pregunta N. 1 - Material predominante en las paredes internas

1 Sin paredes	3 Madera	5 Ladrillo	7 Guadua/caña
2 Cemento	4 Bloque	6 Prefabricado	8 Otro

Pregunta N. 2 - Material predominante en el piso

1 Tierra	3 Cemento	5 Alfombra, tapete	7 Cerámica
2 Madera, tablón	4 Baldosa, vinilo	6 Mármol, parqué	8 Otro

Pregunta N. 3 - Material Predominante en el techo

1 Desechos (cartón, lata, sacos, etc.)	2 Teja de barro, zinc, asbesto, cemento sin cielo raso	3 Teja de barro, zinc, asbesto, cemento con cielo raso	4 Otro
--	--	--	--------

Pregunta N. 4 - Tipo de sanitario

1 No tienen el servicio	2 Letrina	3 Inodoro sin conexión a alcantarilla o pozo séptico	4 Inodoro conectado a pozo séptico	5 Inodoro conectado a alcantarilla
-------------------------	-----------	--	------------------------------------	------------------------------------

Pregunta N. 5- Servicios legalizados de acuerdo a la información del entrevistado/a

Agua	Electricidad	Alcantarillado
1	2	3

Pregunta N. 7- Tenencia de la vivienda de acuerdo a la información del entrevistado/a

1 De propiedad de alguien del hogar	3 Arriendan parte de la vivienda, cuartos, etc.	5 Invasión
2 En arriendo	4 Están pagando cuotas	6 Otro

Pregunta N. 8 Calidad del transporte

1 Muy buena	3 Regular	5 Muy pobre
2 Buena	4 Pobre	

Pregunta N. 9 - Tiempo promedio del recorrido desde la casa al lugar de trabajo

1 Menos de 30 minutos	3 Entre 1 hora y 1 hora y media	5 Más de 2 horas
2 Entre 30 minutos y 1 hora	4 Entre 1 hora y media y 2 horas	

Pregunta N.10 - Trabajo de menor de edad en ayuda al hogar

Si hay un niño/a que trabaja	No hay ningún menor de edad que trabaje	A veces hay un menor que ayuda
1	2	3

Pregunta N.11 - Cuidado de los niños

1 Padre	4 Pariente en el hogar	7 Solo(s)	10 Lo(s) llevan consigo al trabajo
2 Madre	5 Pariente afuera del hogar	8 Con la señora/muchacha	11 Jardín
3 Hermano/a mayor	6 Donde madre comunitaria	9 Con una vecina	

Sección 12 - Vivienda y entorno**Pregunta N. 1 - Tipo de vivienda**

1 Casa	3	5	7
2 Apartamento	4	6	8

Pregunta N. 2 - Material predominante en las paredes externas

1 Cemento	3 Bloque	5 Guadua/caña	7 Otro
2 Madera	4 Ladrillo	6 Prefabricado	

Annex 3 Clusters

EVENTO		CAUSA		CONSECUENCIA		ESTRATEGIA	
EV010-Empleo y trabajo		CA01-Salud y enfermedad		CO01-De tipo económico		ES01-Conservar funcionamiento o capacidades	
EV010001	Problemas con/en el trabajo	CA011-Relacionadas a salud		CO011-Que afectan el consumo		ES011-Deuda	
EV010002	Servicio Militar	CA011001	Muerte	CO011001	Falla contribución económica principal.	ES011001	Deuda amigos o familiares
EV010003	Perdida del trabajo miembro del hogar	CA011002	Problemas durante parto/con embarazo	CO011002	Cortes o disminución en todo gasto	ES011002	Préstamo amigo o familiares
EV010004	Venta del negocio	CA011003	Vivir en zona/casa fría	CO011003	Cortes part. en salud	ES011003	Préstamo banco
EV010005	Desempleo jefe/conyuge/en todo el hogar	CA011004	Descuido/Mal cuidado de la salud	CO011004	Cortes part. en comida	ES011004	Deuda banco
EV010006	Quiebra/cierre del negocio	CA011005	Falla de método contraceptivo	CO011005	Cortes part. en vestuario	ES011005	Deuda otra persona
EV010007	Prohibición uso de la pólvora en Bogotá	CA011006	Embarazo no planeado	CO011006	Cortes part. en diversión/lujos/hogar	ES011006	Préstamo otra persona
EV010008	Abandono/retiro del trabajo	CA011007	Problemas psicológicos	CO011007	Asumir responsabilidad econ. con hijo/pariente	ES011007	Pedir préstamo
EV010009	Desempleo del hijo/a	CA011008	Falta de controles médicos	CO011008	Poder comer sólo 1 o 2 veces al día	ES011008	Deuda con empresa/clínica
EV010010	Hijo en servicio militar	CA011009	Parto después de los 40 años	CO011009	Tener que gastar todo el ingreso en aten. médic	ES011009	Préstamo con empresa/clínica
EV010011	Éxito negativo de un negocio	CA011010	Éxito negativo de cirugía	CO011010	Un empeoramiento económico	ES011010	Contribución económica a familiares
EV010012	Problemas con el patrón	CA011011	Trabajo peligros, con fuertes riesgos	CO011011	Quedarse sin bienes de consumo	ES011011	Empeñar bienes
EV010013	Inestabilidad laboral	CA011012	Embarazo planeado	CO011012	Gastar lo poco que hay en el cotidiano	ES011012	Deuda para alimentación/Fiar con tienda cercan
		CA011013	Incapacidad laboral	CO011013	No poder comprar ropa	ES011013	Deuda por comprar lote (cancelada)
EV020-Fallecimientos		CA011014	Trabajo en condiciones de inseguridad	CO011014	Vivir en estado de pobreza	ES011014	Tomar deuda/préstamo para establecer negocio
EV020001	Muerte padre del jefe o conyugue	CA011015	Edad	CO011015	Gasto o pérdida de ahorros	ES011015	Tener que pagar o atraso en arriendo/servicio
EV020002	Muerte madre del jefe o conyugue	CA011016	Problemas con el ser anciano	CO012-Que afectan los ingresos y el trabajo		ES011016	Endeudamiento
EV020003	Muerte hermano-a del jefe o conyugue	CA011017	Demasiado trabajo	CO012001	Perdida o disminución de ingreso	ES011017	Verse obligado a entrar en círculo de la deuda
EV020004	Muerte hijo-a del jefe y/o conyugue	CA011018	Alcoholismo	CO012002	Dificultad económica	ES011018	Planear la toma de un préstamo
EV020005	Muerte compañero	CA011019	Suicidio	CO012003	Perdida activos monetarios	ES011019	Deuda para compra de material o herramientas
EV020006	Muerte de otro pariente	CA011020	Falta de espacio entre un parto y otro	CO012004	Falta colaboración econ. x parte de ex esposo	ES011020	Deuda/gasto por atención médica y compra de droga
EV020007	Muerte de ambos los padres	CA011021	Drogadicción	CO012005	Tener que pagar entierro	ES011021	Planear abrir negocio o adquirir/mejorar casa
EV020008	Muerte de un trabajador	CA011022	Accidente de trabajo	CO012006	Graves consecuencias económicas	ES012-Cortes en el consumo	
EV020009	Muerte de una persona muy cercana	CA011023	Estrés y/o preocupación/depresión	CO012007	No recibir el pago de un bien vendido	ES012001	Reducción del gasto del hogar
		CA011024	Muerte de niño/a durante el parto	CO012008	Tener que pagar arreglo a causa de accidente tránsito	ES012002	Cortes en comida
EV030-Violencia y derechos humanos		CA011025	Brujería	CO012009	Tener que sostener gasto judicial	ES012003	Poder comprar/pagar solamente y únicamente lo necesario para el hogar
EV030001	Violencia en el hogar	CA011026	Inseguridad en el hogar (estufas, etc.)	CO012010	Asumir carga de niños no propios	ES012004	Comer una vez al día
EV030002	Violación	CA011027	Hogar sin condiciones mínimas de salubre.	CO012011	Tener que pagar por atención médica o medicamentos	ES012005	Comer tan solo 1 o 2 veces al día
EV030003	Atraco/estafa/robo	CA011028	Trabajo con policía secreta	CO012012	Tener que ayudar económicamente a PAH	ES012006	Comer 2 veces al día en lugar de 3

EV03 0004	Desplazamiento por violencia	CA011029	Enfermedad del esposo/hijo/padres	CO01 2013	Tener gastos continuos por atención médica	ES01 2007	Corte en diversión y/o vestuario / lujos
EV03 0005	Estrés y temor por violencia/inseguridad	CA011030	Tabaquismo	CO01 2014	Tener que pagar deudas contraídas	ES01 2008	Mudarse a una casa más pequeña
EV03 0006	Maltrato por parte de pariente (no padres)	CA011031	No utilizar contracepción	CO01 2015	Perdida de dinero/económica	ES01 2009	Tener que pagar por entierro
EV03 0007	Robo en el hogar	CA011032	Estilo de vida irregular, no sano	CO01 2016	Problemas en el trabajo	ES01 2010	Tener solo la pensión para cubrir los gastos
EV03 0008	Violencia barrial/pandillas	CA011033	Accidente/desgracia	CO01 2017	Inseguridad laboral o del trabajo/en el trabajo	ES013-Trabajo y activos	
EV03 0009	Recibir amenazas	CA011034	Ser/Quedar minusválido	CO01 2018	Aumento o incremento en gastos	ES01 3001	Aumento carga trabajo/trabajar más hora/duro
EV03 0010	Abuso sexual	CA011035	Alcoholismo de la esposa/compañera	CO01 2019	Desplazamiento	ES01 3002	Trabajar
EV03 0011	Restricción de la posibilidad de ver a pariente	CA011036	Mala alimentación	CO01 2020	Desempleo	ES01 3003	Trabajar como independiente
EV03 0012	Inseguridad	CA011037	Tratamiento enfermedad	CO013-Que afectan los activos		ES01 3004	Miembro del hogar tiene que asumir solo la carga económica
EV03 0013	Apuñalamiento/disparo/lesión personal	CA012-Instituciones		CO01 3001	Deuda o endeudamiento	ES01 3005	Trabajar de informal o en el rebusque informal
EV03 0014	Desmovilización	CA01 2001	Mala atención médica	CO01 3002	Perdida bienes consumo/activos	ES01 3006	
		CA01 2002	Pésima atención médica	CO01 3003	Compra casa	ES01 3007	Poner los hijos a trabajar
EV040-Hogar		CA01 2003	No tener seguro de salud	CO01 3004	Perdida / quiebra de negocio	ES01 3008	Hijo mayor empezó a trabajar
EV04 0001	Problemas de pareja	CA01 2004	Empresa no tenía seguro de salud	CO01 3005	Tener deuda de arriendo	ES01 3009	Tener que recomprar bienes perdidos
EV04 0002	Problemas de relación con hijo/a	CA01 2005	Baja calidad de los servicios públicos	CO01 3006	Deuda contraída por pago de atención médica	ES01 3010	Seguir trabajando/tener que trabajar a pesar de
EV04 0003	Separación/divorcio	CA013-Relacionadas a la enfermedad		CO01 3007	Deuda causada x falta de recibir pago de algo	ES01 3011	Hacer lo posible para rendir los ingresos
EV04 0004	Convivir con parientes	CA01 3001	Enfermedad	CO01 3008	Atraso en el pago del arriendo	ES01 3012	Seguir trabajando a pesar de las consecuencias
EV04 0005	Hija/o menor abandonó el hogar	CA01 3002	Muerte esposo/a	CO01 3009	Deuda constante/quedar en est. deuda continua	ES01 3013	Optar x el cierre temporal/definitivo de negoci
EV04 0006	Alcoholismo	CA01 3003	Infarto/Paro cardiaco	CO01 3010	Hipotecar la casa	ES01 3014	Hacer lo posible por sacar los hijos adelante
EV04 0007	Hechar de la casa a un menor de edad	CA01 3004	Incontinencia	CO01 3011	Nacimiento de hijo/a minusválido/a	ES01 3015	Utilizar ahorros
EV04 0008	Asumir crianza de menor de edad	CA01 3005	Infección respiratoria//Problemas respiratorios	CO01 3012	No tener para solventar los gastos diario/comi	ES01 3016	Tener dos trabajos
EV04 0009	Mudanza de pariente en la casa	CA01 3006	Diabetes	CO01 3013	Perdida de bienes por robo	ES014-No hacer o poder, tener que hacer y gastos activos	
EV04 0010	Salida de miembro del hogar de la casa	CA01 3007	Circuncisión	CO01 3014	Perder todos los activos (lo que se tiene)	ES0141-Renunciar personalmente a actuar	
EV04 0011	Abandono por otra mujer	CA01 3008	Enfermedad de la sangre	CO01 3015	Credito/prestamo	ES01 4101	Nada por falta tiempo o plata
EV04 0012	Abandono por mujer emparentada	CA01 3009	Cáncer/Tumor			ES01 4102	Terapia temporal
EV04 0013	Abandono	CA01 3010	Infección respiratoria aguda	CO02-Que afectan la salud física y psicologica		ES01 4103	No sale de noche
EV04 0014	Embarazo de menor en el hogar	CA01 3011	Derrame cerebral	CO021-Que afectan la salud psicologica		ES01 4104	Resignación frente a evento de vida
EV04 0015	Drogadicción de miembro del hogar	CA01 3012	Anemia	CO02 1001	Verse afectado moralmente/dolor/tristeza	ES01 4105	Tener miedo que pueda pasar algo
EV04 0016	Separación de la hijo/a	CA01 3013	Úlcera o gastritis	CO02 1002	Consecuencias psicológicas	ES01 4106	Limitar actividad de los niños afuera de la casa
EV04 0017	Rescatar niño del padre	CA01 3014	Problemas de circulación	CO02 1003	Frustración x no poder ver resultados a pesar del trabajo	ES01 4107	No operarse por miedo p riesgo
EV04 0018	Vivir sola y abandonada por la familia	CA01 3015	Vejez	CO02 1004	Resignación	ES01 4108	No poder ni siquiera empeñar porque no hay
EV04 0019	Separación de los padres	CA01 3016	Oídos, nariz, garganta, ojos	CO02 1005	Altera equilibrio nervioso y/o temor/desconfía	ES01 4109	Sentirse en dificultad siendo que el esposo trabaja afuera
EV04 0020	Homosexualidad del hijo	CA01 3017	Artritis	CO02 1006	Trabajar en la casa x motivo de salud	ES01 4110	Frustración para no poder ayudar a alguien
EV04 0021	Abandono hogar x parte hermano	CA01 3018	Problemas ortopédicos	CO02 1007	Sentirse aislado y sin amigos	ES01 4111	Enfrentar problema per no poderlo resolver
EV04 0022	Preocuparse x las dificultades niños del hogar	CA01 3019	Vena varices	CO02 1008	Sentirse discriminado-a a causa de enfermedad	ES01 4112	Intentar, pero no lograr conseguir crédito
EV04 0023	Detención compañero o/e hijos	CA01 3020	Enfermedad viral/Infección por animal	CO02 1009	Sufrir de mal genio y amargura	ES01 4113	No poder arreglar un problema
EV04	Matrimonio de pariente	CA01	Muerte natural	CO02	Sentirse inseguro-a x no	ES01	Empeoramiento de las

0024		3021		1010	tener casa propia	4114	perspectivas de vida
EV04 0025	Alcoholismo de los hijos	CA01 3022	Problemas del hígado	CO02 1011	Irse temporalmente de la casa	ES01 4115	Quedar en embarazo
EV04 0026	Problemas en la relación madre/hijos/as	CA01 3023	Enfermedad relacionada al embarazo	CO02 1012	Tener que quedarse en la cama	ES01 4116	Mirar al futuro con desilusión
EV04 0027	Desinterés/abandono económico del padre	CA01 3024	Menopausia	CO02 1013	No poder colaborar en/al hogar x razón salud	ES0142-Renunciar debido a la falta de apoyo de los demás o instituciones	
EV04 0028	Padre/esposo tiene un segundo hogar	CA01 3025	Malformaciones genéticas	CO02 1014	No recuperarse de un choque	ES01 4201	El seguro cubrió sólo parte de los gastos
EV04 0029	Aparición hermanastro/a	CA01 3026	Nacimiento de bebé prematuro	CO02 1015	No sentirse bien en Bogotá	ES01 4202	No recibir ayuda de parientes
EV04 0030	Separación de parientes residentes en hogar	CA01 3027	Hernia	CO02 1016	Quedar como el único adulto en el hogar	ES01 4203	No poder atender centro especializado para curar enfermedad porque demasiado caro
EV04 0031	Perdida de animal/ maltrato animal	CA01 3028	Problemas de la matriz y del cuello uterino	CO02 1017	No poder trabajar bien por el ánimo	ES01 4204	Ineficaz intervención de la policía
EV04 0032	Perder actividad lúdica	CA01 3029	Problemas del estómago	CO02 1018	Quedar sólo/a/soledad	ES01 4205	Tener que abandonar temporalmente la residencia
		CA01 3030	Problemas a los riñones	CO02 1019	Estrés familiar o individual	ES01 4206	Tener que enfrentar sólo/a las dificultades
EV050-Ingreso, activos y consumo		CA01 3031	Mal funcionamiento del vaso	CO022-Que afectan la salud física		ES01 4207	No poder ir al médico x falta de plata o seguro
EV05 0001	Problemas económicos	CA01 3032	Problemas del corazón	CO02 2001	Perdida matriz	ES01 4208	Falta de ayuda económica x parte de ex-esposo
EV05 0002	Venta de bienes	CA01 3033	Tensión arteriosa alta/Hipertensión	CO02 2002	Empeoramiento estado salud/desgaste físico	ES01 4209	Padecer consecuencias de Doña Juana sin ayuda institucional
EV05 0003	Abandono escolar	CA01 3034	Dolores en el cuerpo o huesos	CO02 2003	Cirugía	ES01 4210	Empresa no quiso pagar atención médica
EV05 0004	Dificultad x pagar matrícula escuela	CA01 3035	Hemorroides	CO02 2004	Necesidad de tratamiento médico continuado	ES01 4211	
EV05 0005	Dificultad x pagar servicios	CA01 3036	Leucemia	CO02 2005	Incapacidad por hacer deporte	ES01 4212	Ayuda discontinua por parte de ex-esposo
EV05 0006	Dificultad x pagar arriendo	CA01 3037	Problemas nerviosos	CO02 2006	Tener aborto	ES01 4213	Falta de atención por parte del ISS
EV05 0007	Robo en el negocio	CA01 3038	Migraña	CO02 2007	Lesiones físicas como consecuencia de cirugía	ES01 4214	Falta de ayuda e interés x parte del actual compañero
EV05 0008	No tener casa propia	CA01 3039	Problemas de la vesícula	CO02 2008	Perder capacidad de movilizarse	ES01 4215	Hospital no prestó atención médica
EV05 0009	Disminución del consumo	CA01 3040	Problemas de próstata	CO02 2009	Contagio por enfermedad viral	ES01 4216	No poder cuidar los niños/atender el hogar
EV05 0010	Vencimiento del seguro de salud	CA01 3041	Tuberculosis	CO02 2010	Lesión por arma de fuego	ES01 4217	Falta de ayuda en el hogar x parte de los hijos
EV05 0011	Abandono del estudio	CA01 3042	Inflamación pélvica	CO02 2011	Perder el buen humor	ES01 4218	No atender servicios de salud x temor a maltrato
EV05 0012	Venta de negocio	CA01 3043	Amebas	CO02 2012	Empeoramiento de la nutrición	ES01 4219	No atender hospital por mala atención urgencia
EV05 0013	Fuerte crisis económica en el hogar	CA01 3044	VIH-SIDA	CO02 2013	Perdida de la habilidad física (total o parcial)	ES01 4220	No poder ahorrar x que el esposo se lleva plata
EV05 0014	Pago de atención médica	CA01 3045	Efectos de Doña Juana	CO02 2014	Embarazarse - tener un bebé/hijos	ES01 4221	No utilizar al ISS por las colas
EV05 0015	Corte de servicios	CA01 3046	Infección de los ojos	CO02 2015	Graves lesiones físicas	ES01 4222	Quedar/sentirse solo y desamparado/a
EV05 0016	Trabajar en el sector informal	CA01 3047	Intoxicación/Envenenamiento	CO02 2016	Lesiones por arma blanca	ES0143-Verse obligado a actuar en una determinada manera	
EV05 0017	Vivir en arriendo	CA01 3048	Problemas de colon	CO02 2017	Traumas y fracturas	ES01 4301	Tratamiento continuo
EV05 0018	Falta de medios para mejorar negocio/empresa	CA01 3049	Desnutrición	CO02 2018	Alcoholismo	ES01 4302	Tener que conseguir documentos
EV05 0019	Criarse como hijo menor responsable x hogar	CA01 3050	Apendicitis	CO02 2019	Vivir cerca de fuente de fuerte contaminación	ES01 4303	Venta de bienes
EV05 0020	Perdida año escolar	CA01 3051	Choque psicológico	CO02 2020	Desnutrición de niño/a	ES01 4304	Tener que ponerse a trabajar por día/temporalmente
EV05 0021	Graves problemas estructurales vivienda	CA01 3052	Quemadura	CO02 2021	Hospitalización	ES01 4305	Tener que pagar por gasto médico de PAH
EV05 0022	Aumento del costo del transporte o servicios	CA01 3053	Trombosis	CO023-Que afectan el acceso a salud		ES01 4306	Devolución de bien x falta de pago/reembolso
EV05 0023	Abandono escolar de todos los niños en hogar	CA01 3054	Embolia	CO02 3001	Necesita operación - no recursos.	ES01 4307	Venta de todo lo que tenían
EV05 0024	Problemas con la escritura/ubicación de la casa	CA01 3055	Aborto espontáneo	CO02 3002	Utilizar servicios de salud	ES01 4308	No poder trabajar o estudiar causa de que cuida alguien
EV05 0025	Asumir crianza de pariente menor de edad	CA01 3056	Osteoporosis	CO02 3003	Perdida del seguro de salud y de la pensión	ES01 4309	Utilizar la liquidación para los gastos diarios
EV05 0026	Expulsión del colegio	CA01 3057	Meningitis	CO02 3004	No poder curar enfermedad por falta de dinero	ES01 4310	Venta del lote

EV05 0027	Niño/a no aceptado/a en la escuela	CA01 3058	Problemas ginecólogos	CO02 3005	Mala atención por parte del ISS	ES01 4311	Decidir de tomar a cargo niño de parientes
EV05 0028	Perdida de años pensionales	CA01 3059	Tromboflebitis	CO02 3006	No poder cuidar la salud de los niños	ES01 4312	Perder trabajo o tiempo de trabajo a causa enfer. niños o embarazo
EV05 0029	Problemas económicos por ser indep./inf.	CA01 3060	Asma	CO02 3007	No poder pagar por atención médica	ES01 4313	Tener que cuidar PAH
EV05 0030	Falta de dinero para pagar estudios	CA01 3061	Hidrocefalia	CO02 3008	No poder atender especialista x falta de diner	ES01 4314	Utilización de activos heredados o dejados por otros para generar ingresos
EV05 0031	Difícil para estudiar x por hijos o trabajo	CA01 3062	Histerectomía	CO02 3009	Necesitar de cuidados especiales/tratamientos	ES01 4315	Tener que llevar hijo/a consigo al trabajo o estudio
EV05 0032	Perdida o demora subsidio/beneficio salarial	CA01 3063	Rinitis/Sinusitis	CO02 3010	No poderse operar		
		CA01 3064	Soledad	CO02 3011	Mala atención de la EPS		ES02-Que utilizan la ayuda de redes informales o formales de apoyo
EV060-Deuda		CA01 3065	Problemas neurológicos	CO02 3012	Problema económicos por gasto médico		ES021-Formales
EV06 0001	Endeudamiento	CA01 3066	Enfermedad a transmisión sexual	CO02 3013	Encontrarse sin amparo	ES02 1001	Subsidio a la vivienda por parte empresa
EV06 0002	Empeñar bienes	CA01 3067	Problemas de infidelidad	CO02 3014	Perdida del seguro de salud	ES02 1002	El seguro cubrió todos los gastos
EV06 0003	Embargo	CA01 3068	Morbo de Parkinson	CO02 3015	El ISS no quiere afiliar alguien en hogar	ES02 1003	Recibir ayuda o atención psicológica o psiquiátrica miembro del hogar
		CA01 3069	Quiste al seno	CO02 3016	Quedar ciego	ES02 1004	Pago de gastos médicos por el SISBEN
EV070-Parientes y barrio		CA01 3070	Amputación de una pierna			ES02 1005	Pago de entierro por parte empresa
EV07 0001	Graduación de PAH	CA01 3071	Mareos	CO03-Que implican un aumento de riesgo a la pérdida de activos y disminución de capacidades		ES02 1006	Secretaria de Salud cubrió gasto médico
EV07 0002	Enfermedad de PAH	CA01 3072	Trauma, fractura	CO031-Carga de trabajo y riesgos		ES02 1007	Pago atención médica con descuento TS
EV07 0003	Problemas con PAH	CA01 3073	Problema muscular	CO03 1001	Tuvo que seguir trabajando a pesar de....	ES02 1008	Ayuda por parte del colegio
EV07 0004	Problemas con rendimiento escolar niños	CA01 3074	Cirugía	CO03 1002	Dejar niños solos en casa	ES02 1009	Apoyarse en el esposo y/o en los hijos
EV07 0005	Problemas económicos de PAH	CA01 3075	Diarrea	CO03 1003	Falta de ayuda en las labores del hogar y/o con los niños	ES02 1010	Empresa pagó la atención médica
EV07 0006	Enfermedad de ambos los padres	CA01 3076	Artritis	CO03 1004	Hacer labor doméstica a pesar de inhabilidad	ES02 1011	Seguro médico cubrió los gastos
EV07 0007	Problemas con familiar en el hogar	CA01 3077	Colesterol alto	CO03 1005	Empezar a trabajar en sector informal/indepen	ES02 1012	Ayuda del seguro médico por pago de entierro
EV07 0008	Cuidar niño/a de hogar más pobre	CA01 3078	Asfixia	CO03 1006	Tener que mudarse a casa más barata y pequeña	ES02 1013	SOAT pagó el gasto médico y/o no médico
EV07 0009	Tener que ayudar los padres en el campo	CA01 3079	Peritonitis	CO03 1007	Tener que llevar hijo-a al trabajo consigo	ES02 1014	Tener/esperar pensión de pariente fallecido
EV07 0010	Separación de PAH	CA01 3080	Muerte de la madre/padre	CO03 1008	Tener problemas en relación a la edad avanzada	ES02 1015	Utilizar el SISBEN
EV07 0011	Familiar en la cárcel	CA01 3081	Enfermedad que afecta la capacidad mental	CO03 1009	Correr un riesgo de muerte		ES022-Informales
EV07 0012	Problemas en la pareja del hijo/a	CA01 3082	Epilepsia	CO03 1010	Estado fuerte de estrés nervioso x trabajo dur	ES02 2001	Ayuda económica x entierro
EV07 0013	Desempleo de PAH			CO03 1011	Tener que trabajar más duro, más horas	ES02 2002	Apoyo/ayuda en el hogar o unión hogar/familia
EV07 0014	Nacimiento PAH	CA02-Hogar		CO03 1012	Trabajar en algo peligroso para la salud	ES02 2003	Ayuda o apoyo parientes/familiar
EV07 0015	Problemas con persona no pariente	CA021-Pareja		CO03 1013	Comer 1 vez al día	ES02 2004	Ayuda barrio o compañero trabajo
EV07 0016	Drogadicción/ alcoholismo PAH	CA02 1001	Infidelidad	CO03 1014	Seguir trabajando a pesar de...	ES02 2005	Pago informal vivienda a parientes/amigos/otro
		CA02 1002	Separación, división pareja	CO03 1015	Vender comida por la calle	ES02 2006	Ayuda/apoyo económico/moral x parte de hijo
EV080-Enfermedad y salud		CA02 1003	Abandono	CO03 1016	Trabajar más	ES02 2007	Recibir ayuda material pero no económica
EV08 0001	Enfermedad jefe o compañero	CA02 1004	Alcoholismo del Esposo	CO03 1017	Vivir en situación de hacinamiento/incomodame	ES02 2008	Actual compañero ayuda econ. para gastos hijo
EV08 0002	Aborto/perdida de bebe	CA02 1005	Dificultad de la relación/Incomprensión/Problemas de pareja	CO03 1018	Vivir en casa de madera/cartón/desechos	ES02 2009	
EV08 0003	Problemas relacionados al parto	CA02 1006	Celos por parte esposo/compañero	CO03 1019	Ser madre soltera	ES02 2010	Usar cadena de ahorro o prestamo informal
EV08 0004	Accidente	CA02 1007	Conseguir pareja	CO03 1020	Terminar en la cárcel	ES02 2011	Recibir ayuda econ. x parte de familia/pariente
EV08	Embarazo	CA02	Infidelidad del conyugue	CO03	Criar sola los niños	ES02	Ayuda económica por parte

0005		1008		1021		2012	de ex-esposo o padre de hijo
EV08 0006	Cirugía u operación de miembro del hogar	CA02 1009	Demanda a pareja o miembro de hogar	CO03 1022	No poder atender las necesidades de los niños	ES02 2013	Recolecta/donación x parte de JAL o de barrio
EV08 0007	Nacimiento hijo/a minusvalido/a	CA02 1010	El padre no queria tener mas hijos	CO03 1023	Tener que acudir diariamente a pariente	ES02 2014	Pago de entierro por parte de pariente/amigo
EV08 0008	Nacimiento prematuro	CA022-Interaccion entre miembros		CO03 1024	Verse obligado a hacer más de un trabajo	ES02 2015	Ayuda económica a parientes afuera del hogar
EV08 0009	Retiro del trabajo x embarazo/enfermedad/edad	CA02 2001	Problemas familiares	CO03 1025	No poder trabajar por cuidar familiar	ES02 2016	Solicitar plazos o facilidades en pago
EV08 0010	Doña Juana	CA02 2002	Intromisión de familiar	CO032-Activos materiales		ES02 2017	Poner mayor atención cuidado de uno mismo o de la familia/seguir indicaciones médicas
EV08 0011	Estado de malestar	CA02 2003	Incompatibilidad con familiar	CO03 2001	Atraso en pago de impuesto/pago de la casa	ES02 2018	Volver al hogar de los padres
EV08 0012	Enfermedad de hijo/a(s) o nietos	CA02 2004	Esposa no cuida a los niños	CO03 2002	No poder completar casa	ES02 2019	Volver al hogar paterno
EV08 0013	Enfermedad hermano/a (s)	CA02 2005	Muerte de otro pariente (no padres/hermanos)	CO03 2003	Quedarse sin recursos/plata por inversión	ES02 2020	Compartir econ. en hogar con las demás familia
EV08 0014	Enfermedad de uno de los padres	CA02 2006	Falta de unión en el hogar	CO03 2004	Atraso en el pago de los servicios	ES02 2021	Recibir ayuda econ x parte de uno o los padres
EV08 0015	Esterilizarse	CA02 2007	Abandono por parte de hijos y parientes	CO03 2005	Venta de la casa	ES02 2022	Ayuda o solicitar auxilio a red de solidaridad o ONG
EV08 0016	Embarazo de la hija o novia del hijo	CA02 2008	Vivir con parientes	CO03 2006	No poder comprar la casa	ES02 2023	Tener una forma de seguro con los familiares
EV08 0017	Estrés a causa de demasiado trabajo	CA02 2009	Infidelidad con pariente o con familiar	CO03 2007	No poder arreglar la casa	ES02 2024	Apoyo/ayuda de amigo/a
EV08 0018	Utilizar medicina alternativa	CA02 2010	Nacimiento hijo a causa infidelidad con pariente	CO03 2008	Inseguridad de la tenencia	ES02 2025	Dedicarse al hogar
EV08 0019	Problemas post-parto	CA02 2011	Separación de la hija/p	CO03 2009	Problemas con o en la casa	ES02 2026	Visitar diariamente a pariente
EV08 0020	Empeoramiento estado de salud	CA02 2012	Problemas con el compañero de la hija/o	CO033-Activos intangibles		ES02 2027	Vivir de limosna o de la caridad
EV08 0021	Sufrir por depresión	CA02 2013	Pariente embarazada se vino a vivir allí	CO03 3001	No poder mejorar o disminuir nivel de vida		
EV08 0022	Problemas con el ISS	CA02 2014	No tener la figura paterna	CO03 3002	Tener menos tiempo por dedicar al hogar	ES03-Generar capacidades y activos	
EV08 0023	Parto	CA02 2015	No tener privacidad o independencia	CO03 3003	Alcoholismo del esposo	ES031-Mejorar personalmente como hogar	
EV08 0024	Enfermedad de parienta dentro del hogar	CA023-Genero		CO03 3004	Perder privacidad a consecuencia de...	ES03 1001	Cursos de capacitación
EV08 0025	Problemas o sin alcantarillado	CA02 3001	No tener quien cuide niños	CO03 3005	Criarse sin padres o parientes	ES03 1002	Trabajar para pagarse estudios
		CA02 3002	No poder trabajar por cuidado niños	CO03 3006	Tener que criar sola los niños	ES03 1003	Uso de remedios caseros
EV090-Inversion/riesgo		CA02 3003	Falta responsabilidad de padre x hijos + hogar	CO03 3007	Perder red de apoyo en el barrio	ES03 1004	Tener beca
EV09 0001	Compra casa	CA02 3004	Abandono por parte del esposo	CO03 3008	Perder importante apoyo moral	ES03 1005	Compra de un lote
EV09 0002	Construir casa			CO03 3009	Quedar desamparado/a	ES03 1006	Dialogar en el hogar entre la pareja
EV09 0003	Migración a Bogotá	CA03-Violencia				ES03 1007	Recurrir a la iglesia o convertirse
EV09 0004	Planificar compra de la casa	CA031-En contra de la persona		CO04-Que afectan el nivel de capacidades		ES03 1008	Poder pagar gasto educación hijos
EV09 0005	Mejora/arreglos de la vivienda	CA03 1001	Asesinato	CO041-Educación		ES03 1009	Mudarse al hogar de los padres/suegros
EV09 0006	Compra de carro	CA03 1002	Atraco o robo	CO04 1001	Inasistencia escolar	ES03 1010	Hijos a colaboran en el hogar
EV09 0007	Continuación de estudios miembro del hogar	CA03 1003	Maltrato/Venganza/Discusión/Amenaza	CO04 1002	Perdida de año escolar	ES03 1011	Hacer planificación familiar
EV09 0008	Problemas con inquilino/a	CA03 1004	Policia/Gobierno no deja trabajar	CO04 1003	Problemas en el estudio para los niños	ES03 1012	Echar esposo de la casa/separación
EV09 0009	Obtención cupo escolar/ entrar a estudiar	CA03 1005	Accidente de transito	CO04 1004	Tener que limitar educación hijos (libros, etc.)	ES03 1013	Hacer vida social/Unión vecinos/salir
EV09 0010	Aprender un trabajo/capacitarse	CA03 1006	Violación - abuso sexual	CO04 1005	Interrupción o abandono de los estudios	ES03 1014	Dejar el alcohol
EV09 0011	Volver a estudiar miembro del hogar	CA03 1007	Persecución de la policia	CO04 1006	Perdida de más de 1 año escolar	ES03 1015	Intentar obtener más capacitación o estudio
EV09 0012	Compra de una segunda casa	CA03 1008	Ser presionada a abortar	CO04 1007	Dificultad en el pago de la matricula	ES03 1016	Conseguir/buscar nueva pareja o compañía
EV09 0013	Apertura de negocio	CA03 1009	Muerte en combate con ejercito	CO04 1008	Necesitar escuela especial	ES03 1017	Planear irse/irse de casa para vivir con la pareja
EV09 0014	Cambio de barrio/ vivienda	CA03 1010	Heridas y traumas físicos	CO04 1009	Empeoramiento del rendimiento escolar	ES03 1018	Cambiar en positivo el estilo de vida/compra de electrodomesticos o beneficios
EV09 0015	Compra herramientas de trabajo	CA03 1011	Abuso de poder por parte del patrón	CO04 1010	No poder estudiar por trabajar	ES03 1019	Poder traer el hogar a Bogotá

EV09 0016	Planear mejoras a la vivienda	CA03 1012	Oferta de droga		CO042-Trabajo	ES03 1020	Poder mejorar la casa
EV09 0017	Pensar en un cambio de casa	CA03 1013	Secuestro	CO04 2001	Incapacidad para trabajar	ES03 1021	Pelear para que se acabe la infidelidad
EV09 0018	Cambiar trabajo	CA03 1014	Asistir al asesinato del padre	CO04 2002	Incapacidad temporal	ES03 1022	Realizar conexión pirata
EV09 0019	Poder pagar estudios	CA03 1015	Violencia intrafamiliar	CO04 2003	Disminución de la capacidad de trabajo	ES03 1023	Formar pareja con pariente
EV09 0020	Mejora del negocio	CA032-En contra de hogar y persona		CO04 2004	Perdida del trabajo o oportunidad de trabajo	ES03 1024	Solidaridad entre las mujeres del hogar
		CA03 2001	Robo en la casaa o negocio	CO04 2005	Abandono del trabajo	ES03 1025	Adquirir/tener responsabilidad o seguridad
EV100-Eventos que implican mejoras		CA03 2002	Presencia pandillas en le barrio	CO04 2006	No lograr conseguir trabajo x falta de estudios	ES03 1026	Retiro de actividad para evitar problemas de pareja
EV10 0001	Graduación bachiller hijo	CA03 2003	Desplazamiento por paramilitares	CO04 2007	Problemas con el trabajo	ES032-Mejorar la condición económica	
EV10 0002	Mejora expectativas de vida	CA03 2004	Desplazamiento por guerrilla	CO04 2008	Tensiones con gente, inamistades	ES03 2001	Apertura/Reapertura negocio o venta
EV10 0003	Conseguir trabajo miembro del hogar	CA03 2005	Muerte como escolta			ES03 2002	Búsqueda de empleo/pasar hoja de vida
EV10 0004	Mejora en el ingreso/ subsidio económico	CA03 2006	Inseguridad/Problemas del barrio o zona	CO05-Que implican problemas y/o tensiones en el hogar		ES03 2003	Ahorrar más
EV10 0005	Viajes	CA033-Perpetrada por los actores		CO051-Pareja, tensiones y violencia		ES03 2004	Búsqueda de mejor trabajo/mayores ingresos
EV10 0006	Comprar lote	CA03 3001	Malas amistades	CO05 1001	Maltrato por parte del esposo/compañero	ES03 2005	
EV10 0007	Matrimonio de hija	CA03 3002	Perpetrar/Ser acusado de atraco	CO05 1002	Manifiestar agresividad y insociabilidad	ES03 2006	Empezar a trabajar miembro del hogar
EV10 0008	Mejora económica en el hogar	CA03 3003	Tener compañero criminal	CO05 1003	Terminación relación	ES03 2007	Arrendar/Subarrendar parte de la casa/piezas
EV10 0009	Estabilidad de pareja y hogar	CA03 3004	Tráfico de droga	CO05 1004	Divorcio/separación	ES03 2008	Conseguir empleo miembro del hogar
EV10 0010	Rehabilitación como conse. de alcoholis.	CA03 3005	Falla terapia rehabilitación por crimen	CO05 1005	Abandono	ES03 2009	Mejorarar/Invertir en el negocio/local
EV10 0011	Nacimiento de hijo	CA03 3006	Pelear físicamente	CO05 1006	Problemas de pareja	ES03 2010	Abrir venta informal en la casa
EV10 0012	Estabilidad laboral/tener buen empleo	CA03 3007	Amigos peligrosos	CO05 1007	Violencia en el hogar	ES03 2011	Emigrar - cambiar de ciudad
EV10 0013	Compra de bien de consumo/electrodom.	CA03 3008	Participar a actividad criminal	CO05 1008	Padre en la cárcel por maltrato	ES03 2012	Emigrar a otro país
EV10 0014	Mejora de las condiciones de salud	CA03 3009	Cometer oser acusado de asesinato	CO05 1009	Maltrato	ES03 2013	Estudiar privadamente
EV10 0015	Nacimiento de un niño en el hogar			CO05 1010	Esposo no deja trabajar la esposa	ES03 2014	Producir algo en la casa
EV10 0016	Empezar a trabajar un miembro del hogar	CA04-Causas relacionadas factores economico		CO05 1011	Demanda (causión)	ES03 2015	Salir adelante gracias al trabajo de los hijos
EV10 0017	Experiencia de tipo religioso	CA041-Inversion en activos		CO052-Familiares		ES03 2016	Mejorar la administración de los recursos
EV10 0018	Salida de una deuda	CA04 1001	Compra casa	CO05 2001	Falta de respeto x parte o con el hijo	ES03 2017	Prestar dinero
EV10 0019	Conseguir carnet de salud	CA04 1002	Compra de lote	CO05 2002	Problemas familiares	ES03 2018	Ayuda discontinua por parte del esposo
EV10 0020	Tener mucha unión en el hogar	CA04 1003	Gasto para la educación	CO05 2003	Enfermedad de pariente no cohabitante	ES03 2019	Pagar deudas o cuotas u obligación/Abonar
EV10 0021	Reconciliación de la pareja	CA04 1004	Arreglos de la casa	CO05 2004	Dolor y dificultad x muerte hijo varón o padre	ES033-Enfrentar eventos	
EV10 0022	Reconciliación entre padre e hijo/a	CA04 1005	Aumento del tamaño del hogar	CO05 2005	Enfermedad de otro miembro del hogar	ES03 3001	Utilizar medicina alternativa
EV10 0023	Mejoras en el servicio del ISS	CA04 1006	Compra del carro	CO05 2006	Dejar temporalmente el hogar por tensiones	ES03 3002	Uso de centro especializado
EV10 0024	Trabajar con ancianos	CA04 1007	Compra activos/herramientas trabajo	CO05 2007	Recibir los sobrinos en la casa cuando puede	ES03 3003	Tener calma y/o control/segurida
EV10 0025	Vivir con la pareja actual/matrimonio	CA04 1008	Mejoras al negocio	CO05 2008	Problemas en la relación hijos- padres	ES03 3004	Utilización servicios de salud/operación/ir a médico
EV10 0026	Graduarse	CA042-Empleo e ingreso		CO05 2009	Falta de comunicación (en hogar, entre pareja)	ES03 3005	Tener un hijo con una mujer que no sea la esposa
EV10 0027	Bodas de oro o plata	CA04 2001	Bajo salario/ingreso	CO05 2010	Falta de colaboración al interior del hogar	ES03 3006	Búsqueda solución a problema/Análisis riesgo
EV10 0028	Lograr cancelar parte de una deuda	CA04 2002	Desempleo	CO05 2011	Buscar más ayuda por parte de los padres	ES03 3007	Ejercer presión para ir de la casa
EV10 0029	Buen estado de salud en el hogar	CA04 2003	Pago	CO05 2012	Perdida de hijo a causa de separación	ES03 3008	Demandar a ex-esposo/padre de hijo
EV10 0030	Regreso de hijo al hogar	CA04 2004	Nietos a cargo	CO05 2013	Falta de afecto por parte de los padres	ES03 3009	Reunirse con esposo/compañero
EV10 0031	Reunión de pareja después de separación	CA04 2005	Niños dé otros a cargo	CO05 2014	Niños se fueron con padre después separación	ES03 3010	Demandar legalmente a inquilino
EV10 0032	Conseguir una pareja	CA04 2006	Problemas económicos en el trabajo	CO05 2015	Abandono del hogar por parte de la hija/o	ES03 3011	Espera

EV10 0033	Ayuda empresa x pago cuotas casa	CA04 2007	Costo de la vida/crisis económica	CO05 2016	ICBF quitó los niños a la madre	ES03 3012	Recurso a la fe - orar
EV10 0034	Recibir lote en regalo/heredar lote	CA04 2008	Problemas en el trabajo	CO05 2017	Problemas de o con familiar afuera del hogar	ES03 3013	Afrontar evento/Salir adelante
EV10 0035	Tener un terreno en el campo	CA04 2009	Falta contribución económica de ex-esposo	CO05 2018	Volver al hogar de los padres	ES03 3014	Pasividad - no hacer nada - esperar que pase
EV10 0036	Obtener subsidio a la vivienda	CA04 2010	Trabajo informal/en otro lugar/independiente	CO05 2019	Tener que mandar la hija a vivir con los abuelos	ES03 3015	Despedir a trabajador que se había empleado
EV10 0037	Buen matrimonio de una hija	CA04 2011	Problemas económicos	CO05 2020	Alegrarse por la muerte de alguien muy malo	ES03 3016	Mediar para solución de problema
EV10 0038	Volver al campo	CA04 2012	Perdida del empleo/Despido	CO05 2021	Muerte de pariente por pena moral	ES03 3017	Llevar al hijo donde el cura
EV10 0039	Recibir visita esposo afuera por trabajo	CA04 2013	Bajo nivel de ingreso	CO05 2022	Apoyarse a los parientes	ES03 3018	Salirse temporalmente de la ciudad
EV10 0040	Recibir pensión	CA04 2014	Asumir crianza de un menor de edad	CO05 2023	Sentirse más responsable/más responsabilidad	ES03 3019	Pagar a alguien para que siga con el negocio
EV10 0041	Conseguir instalación teléfono	CA04 2015	Ser la única fuente de ingreso	CO05 2024	Buscar un trabajo/mas opciones	ES03 3020	Dialogo y/o cuidado especial para hijo
EV10 0042	Pasear/vacaciones	CA04 2016	El sueldo o ingresos no alcanza	CO05 2025	Padre en la cárcel por homicidio	ES03 3021	Enfriar relaciones con el padre
EV10 0043	Satisfacción x nivel bienestar de los hijos	CA04 2017	Falta de trabajo/Situación del país	CO05 2026	No poder cuidar niños/familia debido a trabajo	ES03 3022	Tutelar la escuela
EV10 0044	Cumplir años/celebración	CA04 2018	Pago educación superior hijo/a	CO05 2027	Miembro del hogar anda con malas amistades	ES03 3023	Trabajar y estudiar
EV10 0045	Subsidio escolar o alimentario o salud	CA04 2019	Crisis en el sector laboral donde trabaja			ES03 3024	Tener que recurrir a un abogado
EV10 0046	Graduación universitaria miembro del hogar	CA04 2020	Terminación/No renovar contrato de trabajo/Culminación de servicios	CO06-Que generan mejoras o el aumento de las capacidades		ES03 3025	Ida/Echar el hijo de la casa
EV10 0047	Ascenso laboral	CA04 2021	Inestabilidad del trabajo			ES03 3026	Dar ayuda moral a PAH
EV10 0048	Actividades ludica de un miembro del hogar	CA04 2022	Falta de papeles para obtener trabajo	CO061-Mejoras personales		ES03 3027	Enfriar las relaciones y alejarse
EV10 0049	Cambio positivo en el compañero o hijo/a	CA04 2023	Quiebra/Cierre/Venta de empresa en donde trabajaba	CO06 1001	Mejoró comprensión/realación con miem. hogar	ES03 3028	Tomar acción legal en contra de otro/denunciar
EV10 0050	Buen desempeño escolar	CA04 2024	Retiro del trabajo	CO06 1002	Cambio estilo de vida en positivo.	ES03 3029	Liderar organización o proyecto de barrio
EV10 0051	Fondo de ahorros/ ahorro o cadena	CA04 2025	Abuso de poder por parte del patrón	CO06 1003	Mejoró condiciones de vida	ES03 3030	Comprar casa/lote
EV10 0052	Ayuda de familiar o vecino	CA04 2026	Desempleo temporal	CO06 1004	Mejoramiento estado animo/ganas salir adelan	ES03 3031	Denunciar al esposo
EV10 0053	Participar o gestionar proyectos civiles o local	CA04 2027	Muerte del principal contribuyente hogar	CO06 1005	Alegría/felicidad/tranquilida d	ES03 3032	Compartir casa/bien con otro hogar
EV10 0054	Recibir obsequio/ visita	CA04 2028	Inquilinos morosos	CO06 1006	Tener subsidio y Seguridad Social para los hijos	ES03 3033	Organización/distribución tiempo o espacio
		CA04 2029	Gasto por pago de servicios	CO06 1007	Pensar en mejorar la vivienda	ES03 3034	Cobrar deuda
EV110-Genero		CA04 2030	Corte de personal en la empresa	CO06 1008	Curación milagrosa por enfermedad mortal	ES03 3035	Otras formas de enfrentar evento
EV11 0001	Ser mujer jefe de hogar	CA04 2031	Puede trabajar sólo el esposo	CO062-Capacidades		ES03 3036	Busqueda de auxilio econ. y/o oportunidades
EV11 0002	Cuidar niño/a de pariente	CA04 2032	Tener que pagar por entierro	CO06 2001	Mejoró situación económica/aumento ingreso	ES03 3037	Buscar ayuda en amigos y/o familiares/pariente
EV11 0003	Esposo no deja trabajar a la esposa	CA04 2033	Pensionamiento	CO06 2002	Mejoró expectativas de vida	ES03 3038	Cumplir con su deber/Buena actitud
EV11 0004	Ser madre soltera	CA04 2034	Desempleo de los hijos	CO06 2003	Mejora del estado de salud	ES03 3039	Cambiar de casa
		CA04 2035	Pobreza	CO06 2004	Tener algo propio (activo)	ES03 3040	Cambio alimentario/Asumir dieta
		CA04 2036	Reestructuración de la empresa	CO06 2005	No tener que pagar arriendo	ES03 3041	Alegría/celebrar
		CA04 2037	Buscar empleo/Pasar hoja de vida/Bolsa empleo	CO06 2006	Ninguna consecuencia negativa	ES03 3042	Buscar u obtener subsidio/Ayuda estatal
		CA04 2038	Pago de impuestos	CO06 2007	Adquirir más seguridad	ES03 3043	Aprovechar recursos y/o oportunidades
		CA04 2039	Fracaso/quiebra del negocio	CO06 2008	Buen rendimiento de hijo-a en el colegio		
		CA04 2040	Problemas con el patrón	CO06 2009	Tener beca del colegio		
		CA04 2041	Éxito negativo de negocio	CO06 2010	Estabilidad laboral/económica		
		CA04 2042	Falta de tiempo	CO06 2011	Tener la posibilidad de ayudar econ. al hogar		
		CA04 2043	Competencia en el trabajo	CO06 2012	Obtención de recursos económicos temporales		

		CA043-Deuda y factores de corte de activos	CO06 2013	Más unión o organización en el hogar/familiar	
		CA04 3001	Hijo en servicio militar o con problemas con este	CO06 2014	Tener medios econ. para garantizar lo necesario
		CA04 3002	Quedar huérfano	CO06 2015	Sentir satisfacción por un logro
		CA04 3003	No poder pagar arriendo	CO06 2016	Dejar temporalmente el hogar para mejorar
		CA04 3004	Venta de la casa en donde vivía	CO06 2017	Estabilidad
		CA04 3005	Deuda por pago de atención médica	CO06 2018	Apoyar políticamente a un candidato
		CA04 3006	Deuda por compra de lote	CO06 2019	Mejora del espacio al interior del hogar
		CA04 3007	Intento de conseguir mejor negocio	CO06 2020	Cancelar deudas
		CA04 3008	Deuda por construcción de la casa	CO06 2021	Recuperar bienes empeñados
		CA04 3009	Perdida de dinero por estafa	CO06 2022	Cambio de barrio/casa
		CA04 3010	Deudas/Endeudamiento/Hipoteca	CO06 2023	Poder arrendar o subarrendar
		CA04 3011	Tener que dejar el trabajo/estudio por embarazo/niño	CO06 2024	Poder hacer más por los hijos o bienestar hijos
		CA04 3012	Ser obligado a vender/hipotecar la casa	CO06 2025	Poder comprar bienes de consumo (TV, etc.)
		CA04 3013	Prestar plata/fiar	CO06 2026	Tener más opciones en serv. de salud o trabajo
		CA04 3014	Pago de servicios de estrato 3 y 4	CO06 2027	Adquirir más capacitación
		CA04 3015	Falta contribución económica del padre/conyugue	CO06 2028	Ahorrar más/disminución gastos
		CA04 3016	Venta casa en el campo	CO06 2029	No hubo mayores consecuencias
		CA04 3017	Falta de dinero x pago matrícula	CO06 2030	Poder pagar cuotas de la casa/servicios/deuda
		CA04 3018	Falta de servicios básicos	CO06 2031	Sentirse bien como mujer jefe hogar sin esposo
		CA04 3019	Utilización de los ahorros	CO06 2032	Reempezar a estudiar
		CA04 3020	No poder/lograr ahorrar	CO06 2033	Reunirse con la familia después separación
		CA04 3021	Los padres tienen que trabajar muy duro	CO06 2034	Tener pensión
		CA04 3022	Venta de tierra/bienes	CO06 2035	Normalización de las relaciones en el hogar
		CA04 3023	Mal manejo de dinero o activos en el hogar	CO06 2036	Cambio positivo de miembro del hogar
		CA04 3024	Bajo nivel de educación	CO06 2037	Mejoras en el negocio
		CA04 3025	Verse obligado a cambiar vida o ciudad	CO06 2038	Algún tipo de apoyo o ayuda (económica, moral) o subsidio de cualquier tipo
		CA04 3026	Ser mujer jefe de hogar	CO06 2039	Comenzar a trabajar/obtención de trabajo
		CA04 3027	Falta de crédito	CO06 2040	Mayor tiempo para compartir con familia o colaborar en el hogar
		CA04 3028	Comprar casa en barrio ilegal	CO06 2041	Obtener algún servicio público
		CA04 3029	Bajo nivel de capacitación	CO06 2042	Conocer o vivir con pareja actual
		CA04 3030	El compañero de la hija retiene plata	CO06 2043	Meta o experiencia espiritual
		CA04 3031	Problemas legales con la tenencia	CO06 2044	Cambio hábitos alimenticios/dieta
		CA04 3032	Tener que cubrir los gastos básicos del hogar	CO06 2045	Mejora en relaciones familiares o con pariente
		CA04 3033	Le cobraron una deuda		
		CA04 3034	Hijos no logran ayudar en el hogar	CO070-Impactos por violencia fuera del hogar	
		CA04 3035	No recibir pagos/subsidios	CO07 0001	Volver más temprano a casa
		CA04 3036	Perdida de activos monetarios	CO07 0002	Persecución de la policía
		CA04 3037	Irresponsabilidad/Descuido/Confianza/Falta de valores	CO07 0003	Tener temor al salir por la calle

	CA04 3038	Apoyo a familiar/pariente/amigo/con ocido	CO07 0004	Vivir permanentemente bajo la inseguridad o sentirse inseguro	
			CO07 0005	Verse afectado en las relaciones por el sospecho	
	CA05-Causas que mejoran el nivel de activos y aumentan capacidades		CO07 0006	Internar a alguien en una institución	
	CA051-Activos materiales		CO07 0007	Recibir amenazas	
	CA05 1001	Aumento del ingreso	CO07 0008	Guerra en el barrio entre pandillas	
	CA05 1002	Ayuda por parte de parientes o amigos o institución	CO07 0009	Presencia de limpieza social en el barrio	
	CA05 1003	Compra lote porque barato	CO07 0010	Sentirse humillado/a o rechazo	
	CA05 1004	Mejora del ingreso con trabajo independiente	CO07 0011	ICBF quiere privar la mamá de los niños	
	CA05 1005	Inversión en activos de trabajo			
	CA05 1006	Tener buen trabajo y/o remuneración			
	CA05 1007	Renovación contrato de trabajo			
	CA05 1008	No querer gastar en arriendo e invertir en casa			
	CA05 1009	Ayuda económica al interior del hogar			
	CA05 1010	Obtener vivienda por subsidio			
	CA05 1011	Recibir una herencia o un pago			
	CA05 1012	Facilidad pago (generalmente casa)/Credito			
	CA05 1013	Apertura de tienda/negocio			
	CA05 1014	Realizar permuta			
	CA05 1015	Estabilidad del trabajo			
	CA05 1016	Conseguir préstamo			
	CA05 1017	No pagar arriendo			
	CA05 1018	Ganar/Comprar loteria/rifa			
	CA05 1019	Trabajar los dos en el hogar			
	CA05 1020	Tener la oportunidad de/Conseguir empleo			
	CA05 1021	Tener un interés a fuera de Bogotá			
	CA05 1022	Tener ahorros/Ahorrar			
	CA05 1023	Conseguir mejor trabajo			
	CA05 1024	Beneficiado o inscrito a algun programa o fondo/Sisben/Liderar proyecto			
	CA05 1025	Empezar a trabajar por los niños			
	CA05 1026	Recomendación laboral			
	CA05 1027	Dedicación/Responsabilidad /Seguridad para con el trabajo/hogar/estudio			
	CA052-Activos no materiales				
	CA05 2001	Nacimiento hijo-a			
	CA05 2002	Mejoras en la calidad de la vivienda			
	CA05 2003	Regreso al estudio para mejorar nivel de capacitación			
	CA05 2004	Deseo de mejorar nivel vida/de ser profesional			
	CA05 2005	Matrimonio de una hija			

		CA05 2006	Fuerte deseo de conseguir algo			
		CA05 2007	Unión y dialogo entre la pareja			
		CA05 2008	Terminar estudios			
		CA05 2009	Deseo de lo mejor para los hijos			
		CA05 2010	Experiencia religiosa			
		CA05 2011	Regreso del hijo al hogar			
		CA05 2012	Deseo de o formación de hogar			
		CA05 2013	Tener tiempo			
		CA05 2014	Otras causas			
		CA05 2015	Planear mejoras y proyectos			
		CA05 2016	Obtener cupo académico			
		CA05 2017	Celebrar/Viaje o visita afuera			
		CA05 2018	No se sabe			

Annex 4 Table of Burt

SPAD.N Sistema Portable para el Analisis de Datos
Copyright (C) CISIA, 1987, 1991 - Version 2.52
Marca Registrada: France logiciel APP-88 08 006 01

----- SPAD.N - MODIFICACION DE PARAMETROS -----
LISTP=SI,LISTF=NO,LERFA=SI,NXLPA=59,LRESM=NO,NAPEL=0,MEM=50000

LISTADO DE LOS PARAMETROS DE COMANDO

```
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----+-----8
1
LISTP=SI,LISTF=NO,LERFA=SI,NXLPA=59,LRESM=NO,NAPEL=0,MEM=50000
2 NDICA = '\SPADN\V1.LAR'
3 NDONA = '\SPADN\V1.DAR'
4 PROC SELEC
5 Selección de datos ffiles
6 LSELI = TODO, IMASS = UNIF, LZERO = REC, LEDIT = CORTO, TIRER = NO
7 NOMI ACT 2,4,6,8,3,5,7
8 FIN
9
10 PROC CORMU
11 An lisis de correspondencias múltiples
12 NAXE = 3, PCMIN = 2. , LBURT = 1, LEDCO = SI
13
14 PROC DEFAC
15 Ayuda para interpretaci3n de factores
16 SEUIL = 40., LTRI = VTEST, VTMIN = 2.
17 VEC = 1--2 / CONT / MOD
18 FIN
19
20 MGUSG = 'last1.GUS'
21 PROC ASCII
22 PLANO FACTORIAL
23 LGUS = SI
24
25 PROC GRAPH
26 Gr ficos factoriales
27 LVEC = SI, LCLAS = NO, FORMI = 0.601
28 POINTS = MOD ACT, X = VEC 1, Y = VEC 2, ZOOM = 0.0, DOUBLE = NO >
29     HEIGHT = CHAR = 22, WIDTH = CHAR = 63, IDENT = 1A4
30 POINTS = IND, X = VEC 1, Y = VEC 2, ZOOM = 0.0, DOUBLE = NO >
31     HEIGHT = CHAR = 22, WIDTH = CHAR = 63, IDENT = '*'
32 FIN
33 STOP           : Fin del fichero de comandos
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----+-----8
```

----- SPAD.N - MODIFICACION DE PARAMETROS -----
NDICA = '\SPADN\V1.LAR'

----- SPAD.N - MODIFICACION DE PARAMETROS -----
NDONA = '\SPADN\V1.DAR'

MEMORIA RESERVADA PARA LOS CALCULOS 192 KILO-BYTES

=====

PROCEDIMIENTO ** SELEC **

Selección de datos útiles

=====

PARAMETROS DEL PROCEDIMIENTO

LSELI = TODO modo de seleccion de los individuos (0=TODO, 1=LISTA, 2=FILT).

IMASS = UNIF numero de la variable 'peso de los individuos' (0=UNIF, -1=FORZ).

LZERO = REC recodificacion de los valores nominales mancantes (0=NOREC, 1=REC).

LEDIT = CORTO impresion del diccionario de variables retenidas (0=NO, 1=CORTO, 2=LARGO).

* NXFIL = 20 numero maximo de constantes empleadas en el filtro (si LSELI=FILT o 2).

TIRER = NO extraccion aleatoria de una submuestra.

RESUMEN DE LA SELECCION DE VARIABLES

TIPO	NUMERO	NUMEROS							
NOMI	ACT	7	2	3	4	5	6	7	8

7 CUESTIONES ACTIVAS

72 MODALIDADES ASOCIADAS

2 . Eventos de vida (12 MODALIDADES)
3 . Conglomerados de causas1 (6 MODALIDADES)
4 . Subconglomerados de causas1 (15 MODALIDADES)
5 . Conglomerados de consecuencias1 (8 MODALIDADES)
6 . Subconglomerados de consecuencias1 (17 MODALIDADES)
7 . Conglomerados de estrategias1 (4 MODALIDADES)
8 . Subconglomerados de estrategias1 (10 MODALIDADES)

PESO DE LOS INDIVIDUOS: Peso de los individuos, uniforme igual a 1.

INDIVIDUOS

	NUMERO -----	PESO -----
RETENIDOS.....	NITOT = 2051	PITOT = 2051.000
ACTIVOS.....	NIACT = 2051	PIACT = 2051.000
SUPLEMENTARIOS.....	NISUP = 0	PISUP = .000

=====

FIN DEL PROCEDIMIENTO ** SELEC **
Selección de datos útiles

=====

MEMORIA RESERVADA PARA LOS CALCULOS 192 KILO-BYTES

PROCEDIMIENTO ** CORMU **
An lisis de correspondencias mltiples

PARAMETROS DEL PROCEDIMIENTO

NAXE = 3 numero de ejes retenidos.
PCMIN = 2.000 umbral de verificacion de las modalidades activas (en porcentaje).

LBURT = 1 edicion de la tabla de Burt (0=NO, 1=PESO, 2=TODO, 3=PERF).
* NVEDI = 39 numero de valores propios que figuran sobre el histograma.
* NAXED = 5 numero de ejes para los cuales se editan las coordenadas.
* LEDIN = 0 edicion de las coordenadas de los individuos (0=NO, 1=ACT, 2=TODO).
LEDCO = SI edicion de las correlaciones entre variables y ejes (0=NO, 1=SI).
* LGUS = 0 escritura sobre NGUS de la matriz de BURT.

ELIMINACION DE LAS MODALIDADES DE PESO MUY DEBIL : UMBRAL
(PCMIN) ... 2.00 %

PESOS 41.02

ANTES DE LA DEPURACION : 7 CUESTIONES ACTIVAS 72

MODALIDADES ASOCIADAS

DESPUES : 7 CUESTIONES ACTIVAS 57 MODALIDADES
ASOCIADAS

PESO TOTAL DE LOS INDIVIDUOS ACTIVOS : 2051.00

TABLA DE FRECUENCIAS DE LAS CUESTIONES ACTIVAS

```

-----+-----+-----
MODALIDADES | ANTES DEPURACION | DESPUES DEPURACION
IDENT ETIQUETAS | EFE. PESOS | EFE. PESOS HISTOGRAMA DE
LOS PESOS RELATIVOS
-----+-----+-----

```

2 . Eventos de vida

```

ev01 - Empleo y trabajo | 126 126.00 | 131 131.00 ****
ev02 - Fallecimientos | 317 317.00 | 318 318.00 *****
ev03 - Violencia y D.H. | 65 65.00 | 69 69.00 ***
ev04 - Hogar | 216 216.00 | 220 220.00 *****
ev05 - Ingreso, activos y c | 393 393.00 | 398 398.00 *****
ev06 - Deuda | 60 60.00 | 61 61.00 **
ev07 - Parientes y barrio | 44 44.00 | 50 50.00 **
ev08 - Enfermedad y salud | 391 391.00 | 392 392.00 *****
ev09 - Inversion/riesgo | 145 145.00 | 147 147.00 *****
ev10 - Ev. que implican mej | 261 261.00 | 265 265.00 *****
ev11 - Genero | 13 13.00 | === VENTILADA ===
2_ - respuesta mancante | 20 20.00 | === VENTILADA ===
-----+-----+-----

```

3 . Conglomerados de causas1

```

cs01 - Salud y enfermedad | 582 582.00 | 582 582.00 *****
cs02 - Hogar | 167 167.00 | 167 167.00 *****
cs03 - Violencia | 214 214.00 | 214 214.00 *****
cs04 - Factores economicos | 480 480.00 | 480 480.00 *****
cs05 - Mejoras y aumento ca | 118 118.00 | 118 118.00 ****
3_ - respuesta mancante | 490 490.00 | 490 490.00 *****
-----+-----+-----

```

4 . Subconglomerados de causas1

```

c011 - Cuerpo y persona com | 144 144.00 | 157 157.00 *****
c012 - Relacionadas a la en | 423 423.00 | 442 442.00 *****

```

c013 - Instituciones	15	15.00	=== VENTILADA ===
c021 - Pareja	123	123.00	135 135.00 ****
c022 - Inter. entre miembro	26	26.00	=== VENTILADA ===
c023 - Genero	18	18.00	=== VENTILADA ===
c031 - En contra de la pers	169	169.00	186 186.00 *****
c032 - En contra del hogar	30	30.00	=== VENTILADA ===
c033 - Perpetrada por los a	15	15.00	=== VENTILADA ===
c041 - Inversion en activos	34	34.00	=== VENTILADA ===
c042 - Empleo e ingreso	359	359.00	379 379.00 *****
c043 - Deuda y corte activo	87	87.00	105 105.00 ****
c051 - activos materiales	72	72.00	86 86.00 ***
c052 - activos inmateriales	46	46.00	60 60.00 **
4_ - respuesta mancante	490	490.00	501 501.00 *****

-----+-----+-----

-----+-----+-----
 MODALIDADES | ANTES DEPURACION | DESPUES DEPURACION
 IDENT ETIQUETAS | EFE. PESOS | EFE. PESOS HISTOGRAMA DE
 LOS PESOS RELATIVOS
 -----+-----+-----

5 . Conglomerados de consecuencias1

cn01 - Tipo economico | 577 577.00 | 578 578.00 *****
 cn02 - Salud fisica y psico | 589 589.00 | 594 594.00 *****
 cn03 - Aumento exposicion a | 82 82.00 | 86 86.00 ***
 cn04 - Nivel capacidades | 108 108.00 | 111 111.00 ****
 cn05 - Problemas en el hoga | 130 130.00 | 135 135.00 ****
 cn06 - Mejoras y aumento ca | 356 356.00 | 360 360.00 *****
 cn07 - Violencia afuera hog | 25 25.00 | === VENTILADA ===
 5_ - respuesta mancante | 184 184.00 | 187 187.00 *****

6 . Subconglomerados de consecuencias1

n011 - Afectan el consumo | 295 295.00 | 308 308.00 *****
 n012 - Afectan ingreso y tr | 189 189.00 | 203 203.00 *****
 n013 - Afectan activos | 93 93.00 | 108 108.00 ****
 n021 - Afectan psicologia | 401 401.00 | 413 413.00 *****
 n022 - Afectan cuerpo | 156 156.00 | 173 173.00 *****
 n023 - Afectan acceso salud | 32 32.00 | === VENTILADA ===
 n031 - Carga trabajo y ries | 45 45.00 | 56 56.00 **
 n032 - Menos activos materi | 19 19.00 | === VENTILADA ===
 n033 - Menos activos intang | 18 18.00 | === VENTILADA ===
 n041 - Educacion | 38 38.00 | === VENTILADA ===
 n042 - Trabajo | 70 70.00 | 82 82.00 ***
 n051 - Pareja, tensiones y | 27 27.00 | === VENTILADA ===
 n052 - Familiares | 103 103.00 | 119 119.00 ****
 n061 - Mejoras | 128 128.00 | 142 142.00 *****
 n062 - Capacidades | 228 228.00 | 244 244.00 *****
 n071 - Vioencia afuera hoga | 25 25.00 | === VENTILADA ===
 6_ - respuesta mancante | 184 184.00 | 203 203.00 *****

7 . Conglomerados de estrategias1

st01 - Conservar funcionami | 761 761.00 | 761 761.00 *****
 st02 - Utilizar redes forma | 390 390.00 | 390 390.00 *****
 st03 - Generar capacidades | 288 288.00 | 288 288.00 *****
 7_ - respuesta mancante | 612 612.00 | 612 612.00 *****

8 . Subconglomerados de estrategias1

t011 - Deuda	281	281.00	281	281.00	*****
t012 - Cortes consumo	96	96.00	96	96.00	***
t013 - Trabajo y activos	211	211.00	211	211.00	*****
t014 - Tener que...no poder	173	173.00	173	173.00	*****
t021 - Formales	74	74.00	74	74.00	***
t022 - Informales	316	316.00	316	316.00	*****
t031 - Mejorar personalment	75	75.00	75	75.00	***
t032 - Mejorar condicion ec	89	89.00	89	89.00	***
t033 - Enfrentar eventos	124	124.00	124	124.00	****
8_ - respuesta mancante	612	612.00	612	612.00	*****

-----+-----+-----

EDICION DE LA TABLA DE BURT

	ev01	ev02	ev03	ev04	ev05	ev06	ev07	ev08	ev09	ev10	cs01	cs02	cs03	cs04	cs05	3_
ev01	131	0	0	0	0	0	0	0	0	0						
ev02	0	318	0	0	0	0	0	0	0	0						
ev03	0	0	69	0	0	0	0	0	0	0						
ev04	0	0	0	220	0	0	0	0	0	0						
ev05	0	0	0	0	398	0	0	0	0	0						
ev06	0	0	0	0	0	61	0	0	0	0						
ev07	0	0	0	0	0	0	50	0	0	0						
ev08	0	0	0	0	0	0	0	392	0	0						
ev09	0	0	0	0	0	0	0	0	147	0						
ev10	0	0	0	0	0	0	0	0	0	265						
cs01	22	198	7	21	33	5	14	260	7	15	582	0	0	0	0	0
cs02	5	1	3	114	19	1	7	11	3	3	0	167	0	0	0	0
cs03	4	83	39	20	17	2	8	36	2	3	0	0	214	0	0	0
cs04	66	3	4	20	274	42	5	14	32	20	0	0	0	480	0	0
cs05	2	2	0	5	5	4	0	8	46	46	0	0	0	0	118	0
3_	32	31	16	40	50	7	16	63	57	178	0	0	0	0	0	490
c011	8	25	7	24	19	3	4	55	3	9	144	5	4	4	0	0
c012	14	169	5	4	22	5	12	200	4	7	425	6	7	4	0	0
c021	3	3	2	96	13	1	5	8	4	0	3	126	2	4	0	0
c031	2	80	24	17	13	2	5	35	2	6	0	5	177	4	0	0
c042	61	4	6	22	236	23	1	9	6	11	3	6	5	365	0	0
c043	5	3	3	5	32	12	5	9	24	7	3	5	6	91	0	0
c051	3	2	2	6	6	1	1	9	27	29	1	7	4	2	72	0
c052	3	1	2	5	4	4	0	3	20	18	2	4	5	3	46	0
4_	32	31	18	41	53	10	17	64	57	178	1	3	4	3	0	490
cn01	73	46	21	40	240	43	10	62	30	13	108	35	57	268	21	89
cn02	11	223	24	58	33	3	10	207	7	18	314	49	93	40	14	84
cn03	5	6	4	11	29	4	4	9	6	8	16	14	9	27	3	17
cn04	10	5	3	7	25	0	5	50	2	4	43	5	15	23	1	24
cn05	2	15	5	52	23	2	12	14	0	10	32	34	17	34	1	17
cn06	5	6	3	31	20	4	3	21	83	184	38	16	8	48	66	184
5_	25	17	9	21	28	5	6	29	19	28	31	14	15	40	12	75
n011	32	19	4	14	171	32	2	21	8	5	41	18	19	182	4	44
n012	38	26	14	28	38	6	7	30	10	6	48	18	32	55	8	42
n013	6	4	6	4	44	5	3	16	14	6	25	2	8	42	9	22
n021	7	219	15	51	24	3	9	71	2	12	212	41	76	24	6	54
n022	5	4	11	9	11	0	1	121	5	6	94	10	22	18	6	23
n031	2	4	1	9	14	4	3	10	5	4	15	8	5	15	2	11

```

n042 | 5 3 2 4 11 0 3 50 0 4 | 37 3 13 10 3 16 |
n052 | 3 13 4 41 20 1 11 17 0 9 | 29 31 12 31 0 16 |
n061 | 2 1 3 10 11 1 1 4 16 93 | 18 5 5 15 26 73 |
n062 | 6 6 0 26 20 4 4 20 67 91 | 27 14 5 44 41 113 |
 6_ | 25 19 9 24 34 5 6 32 20 29 | 36 17 17 44 13 76 |
-----+-----+-----+
st01 | 56 93 25 44 228 49 13 127 68 58 | 185 40 79 272 44 141 |
st02 | 8 97 6 57 51 2 9 129 8 23 | 172 41 55 58 10 54 |
st03 | 26 52 8 57 46 4 8 49 10 28 | 97 45 30 69 15 32 |
 7_ | 41 76 30 62 73 6 20 87 61 156 | 128 41 50 81 49 263 |
-----+-----+-----+
t011 | 17 28 6 2 94 24 6 36 47 21 | 64 3 22 111 25 56 |
t012 | 12 10 0 4 44 10 1 9 2 4 | 18 3 9 55 2 9 |
t013 | 17 22 9 26 69 15 1 22 10 20 | 31 20 22 80 11 47 |
t014 | 10 33 10 12 21 0 5 60 9 13 | 72 14 26 26 6 29 |
t021 | 1 20 1 3 5 0 1 36 3 4 | 40 1 15 9 3 6 |
t022 | 7 77 5 54 46 2 8 93 5 19 | 132 40 40 49 7 48 |
t031 | 2 12 4 29 8 0 2 8 1 9 | 19 23 7 11 4 11 |
t032 | 21 7 1 8 23 2 3 8 4 12 | 20 6 4 39 7 13 |
t033 | 3 33 3 20 15 2 3 33 5 7 | 58 16 19 19 4 8 |
 8_ | 41 76 30 62 73 6 20 87 61 156 | 128 41 50 81 49 263 |
-----+-----+-----+
| ev01 ev02 ev03 ev04 ev05 ev06 ev07 ev08 ev09 ev10 | cs01 cs02 cs03 cs04 cs05 3_ |

```

```

| c011 c012 c021 c031 c042 c043 c051 c052 4_ | cn01 cn02 cn03 cn04 cn05 cn06 5_ |
-----+-----+-----+
c011 | 157 0 0 0 0 0 0 0 0 |
c012 | 0 442 0 0 0 0 0 0 0 |
c021 | 0 0 135 0 0 0 0 0 0 |
c031 | 0 0 0 186 0 0 0 0 0 |
c042 | 0 0 0 0 379 0 0 0 0 |
c043 | 0 0 0 0 0 105 0 0 0 |
c051 | 0 0 0 0 0 0 86 0 0 |
c052 | 0 0 0 0 0 0 0 60 0 |
 4_ | 0 0 0 0 0 0 0 0 501 |
-----+-----+-----+
cn01 | 43 72 30 46 214 44 11 22 96 | 578 0 0 0 0 0 0 |
cn02 | 50 262 41 88 38 9 13 7 86 | 0 594 0 0 0 0 0 |
cn03 | 9 9 7 7 24 8 4 1 17 | 0 0 86 0 0 0 0 |
cn04 | 13 30 5 13 19 5 0 2 24 | 0 0 0 111 0 0 0 |
cn05 | 18 18 27 12 29 8 5 0 18 | 0 0 0 0 135 0 0 |
cn06 | 15 25 15 8 21 23 44 24 185 | 0 0 0 0 0 360 0 |
 5_ | 9 26 10 12 34 8 9 4 75 | 0 0 0 0 0 0 187 |
-----+-----+-----+
n011 | 15 29 17 20 141 30 3 6 47 | 295 3 1 4 4 1 0 |
n012 | 23 26 14 25 46 10 6 8 45 | 189 1 4 7 1 1 0 |
n013 | 8 20 2 3 36 6 2 8 23 | 93 7 3 4 1 0 0 |

```


t012	44	14	7	10	3	1	2	4	4	5	2	96	0	0	0	0
t013	61	31	15	33	11	6	5	10	11	15	13	211	0	0	0	0
t014	12	18	10	37	33	3	11	9	10	12	18	173	0	0	0	0
t021	4	5	2	24	14	3	6	1	4	8	3	0	74	0	0	0
t022	31	24	12	101	45	10	12	20	14	21	26	0	316	0	0	0
t031	1	6	5	15	4	1	3	21	5	9	5	0	0	75	0	0
t032	22	17	4	6	1	3	4	11	5	6	10	0	0	89	0	0
t033	7	11	2	38	17	5	8	13	5	5	13	0	0	124	0	0
8_	56	41	23	112	31	15	26	23	73	119	93	0	0	0	612	0

-----+-----+-----+
| n011 n012 n013 n021 n022 n031 n042 n052 n061 n062 6_ | st01 st02 st03 7_ |

	t011	t012	t013	t014	t021	t022	t031	t032	t033	8_	
t011	281	0	0	0	0	0	0	0	0	0	0
t012	0	96	0	0	0	0	0	0	0	0	0
t013	0	0	211	0	0	0	0	0	0	0	0
t014	0	0	0	173	0	0	0	0	0	0	0
t021	0	0	0	0	74	0	0	0	0	0	0
t022	0	0	0	0	0	316	0	0	0	0	0
t031	0	0	0	0	0	0	75	0	0	0	0
t032	0	0	0	0	0	0	0	89	0	0	0
t033	0	0	0	0	0	0	0	0	124	0	0
8_	0	0	0	0	0	0	0	0	0	612	0

-----+-----+-----+
| t011 t012 t013 t014 t021 t022 t031 t032 t033 8_ |

EDICION DE LOS VALORES PROPIOS

PRECISION DE LOS CALCULOS : TRAZA ANTES DIAGONALIZACION .. 7.1429
SUMA DE LOS VALORES PROPIOS... 7.1429

HISTOGRAMA DE LOS 39 PRIMEROS VALORES PROPIOS

NUMERO	VALOR PROPIO	PORCENTA.	PORCENTA. ACUMU.
1	.5580	7.81	7.81
2	.5311	7.44	15.25
3	.4109	5.75	21.00
4	.3201	4.48	25.48
5	.3007	4.21	29.69
6	.2859	4.00	33.70
7	.2695	3.77	37.47
8	.2596	3.64	41.10
9	.2505	3.51	44.61
10	.2391	3.35	47.96
11	.2269	3.18	51.13
12	.2136	2.99	54.12
13	.2008	2.81	56.94
14	.1856	2.60	59.53
15	.1801	2.52	62.06

16	.1650	2.31	64.37	*****
17	.1637	2.29	66.66	*****
18	.1537	2.15	68.81	*****
19	.1516	2.12	70.93	*****
20	.1450	2.03	72.96	*****
21	.1440	2.02	74.98	*****
22	.1419	1.99	76.96	*****
23	.1365	1.91	78.87	*****
24	.1332	1.86	80.74	*****
25	.1306	1.83	82.57	*****
26	.1257	1.76	84.33	*****
27	.1238	1.73	86.06	*****
28	.1223	1.71	87.77	*****
29	.1187	1.66	89.44	*****
30	.1131	1.58	91.02	*****
31	.1068	1.50	92.51	*****
32	.0971	1.36	93.87	*****
33	.0770	1.08	94.95	*****
34	.0715	1.00	95.95	*****
35	.0573	.80	96.76	*****
36	.0454	.64	97.39	*****
37	.0452	.63	98.03	*****
38	.0346	.48	98.51	*****
39	.0249	.35	98.86	****

EDICION SUMARIA DE LOS VALORES PROPIOS DE 40 A 50 (NUMERO = VALOR)

40 = .0215	41 = .0174	42 = .0120	43 = .0090	44 = .0073
45 = .0068	46 = .0056	47 = .0020	48 = .0000	49 = .0000
50 = .0000				

COORDENADAS, CONTRIBUCIONES Y COSENOS CUADRADOS DE LAS MODALIDADES ACTIVAS EN LOS EJES 1 A 3

MODALIDADES		COORDENADAS										
CONTRIBUCIONES		COSENOS CUADRADOS										
IDEN - ETIQUETA	P.REL DIST.	1	2	3	0	0	1	2	3	0	0	1
2 3 0 0												
2 . Eventos de vida												
ev01 - Empleo y trabajo	.91 14.66	-.38	-.76	.05	.00	.00	.2	1.0	.0	.0	.0	
	.01 .04 .00 .00 .00											
ev02 - Fallecimientos	2.21 5.45	1.07	.41	.43	.00	.00	4.5	.7	1.0	.0	.0	
	.21 .03 .03 .00 .00											
ev03 - Violencia y D.H.	.48 28.72	.19	.14	.06	.00	.00	.0	.0	.0	.0	.0	.00
	.00 .00 .00 .00											
ev04 - Hogar	1.53 8.32	.24	.19	-1.87	.00	.00	.2	.1	13.1	.0	.0	.01
	.00 .42 .00 .00											
ev05 - Ingreso, activos y c	2.77 4.15	-.32	-1.24	.09	.00	.00	.5	8.0	.1	.0	.0	
	.02 .37 .00 .00 .00											
ev06 - Deuda	.42 32.62	-.51	-1.42	.37	.00	.00	.2	1.6	.1	.0	.0	.01
	.06 .00 .00 .00											
ev07 - Parientes y barrio	.35 40.02	.12	.25	-.65	.00	.00	.0	.0	.4	.0	.0	.00
	.00 .01 .00 .00											
ev08 - Enfermedad y salud	2.73 4.23	.81	.37	.47	.00	.00	3.2	.7	1.5	.0	.0	
	.15 .03 .05 .00 .00											
ev09 - Inversion/riesgo	1.02 12.95	-1.21	.42	.25	.00	.00	2.7	.3	.2	.0	.0	
	.11 .01 .00 .00 .00											
ev10 - Ev. que implican mej	1.85 6.74	-1.30	1.04	.06	.00	.00	5.6	3.8	.0	.0	.0	
	.25 .16 .00 .00 .00											
CONTRIBUCION ACUMUL. = 17.1 16.3												
16.3 .0 .0												
3 . Conglomerados de causas1												
cs01 - Salud y enfermedad	4.05 2.52	.97	.32	.43	.00	.00	6.8	.8	1.8	.0	.0	
	.37 .04 .07 .00 .00											
cs02 - Hogar	1.16 11.28	.39	.07	-2.33	.00	.00	.3	.0	15.4	.0	.0	.01
	.00 .48 .00 .00											
cs03 - Violencia	1.49 8.58	.76	.09	.16	.00	.00	1.5	.0	.1	.0	.0	.07
	.00 .00 .00 .00											
cs04 - Factores economicos	3.34 3.27	-.40	-1.35	.06	.00	.00	1.0	11.5	.0	.0	.0	
	.05 .56 .00 .00 .00											

cs05 - Mejoras y aumento ca	.82	16.38		-1.29	.73	.15	.00	.00		2.4	.8	.0	.0	.0	
3_ - respuesta mancante	3.41	3.19		-.91	.71	.13	.00	.00		5.0	3.2	.1	.0	.0	
	.26	.16		.01	.00	.00									

+-----+----- CONTRIBUTION ACUMUL. = 17.1 16.3
17.5 .0 .0 +-----+

| 4 . Subconglomerados de causas1

c011 - Cuerpo y persona com	1.09	12.06		.59	.11	-.13	.00	.00		.7	.0	.0	.0	.0	
c012 - Relacionadas a la en	3.08	3.64		1.06	.36	.58	.00	.00		6.2	.8	2.5	.0	.0	
	.31	.04		.09	.00	.00									

c021 - Pareja	.94	14.19		.44	.03	-2.52	.00	.00		.3	.0	14.6	.0	.0	
	.00	.45		.00	.00										

c031 - En contra de la pers	1.30	10.03		.85	.13	.18	.00	.00		1.7	.0	.1	.0	.0	
	.07	.00		.00	.00	.00									

c042 - Empleo e ingreso	2.64	4.41		-.32	-1.44	.02	.00	.00		.5	10.3	.0	.0	.0	
	.02	.47		.00	.00	.00									

c043 - Deuda y corte activo	.73	18.53		-.50	-.81	.01	.00	.00		.3	.9	.0	.0	.0	
	.01	.04		.00	.00	.00									

c051 - activos materiales	.60	22.85		-1.13	.74	-.04	.00	.00		1.4	.6	.0	.0	.0	
	.06	.02		.00	.00	.00									

c052 - activos inmateriales	.42	33.18		-1.00	.30	.09	.00	.00		.7	.1	.0	.0	.0	
	.03	.00		.00	.00	.00									

4_ - respuesta mancante	3.49	3.09		-.89	.69	.12	.00	.00		5.0	3.1	.1	.0	.0	
	.26	.15		.00	.00	.00									

+-----+----- CONTRIBUTION ACUMUL. = 16.8 15.8
17.4 .0 .0 +-----+

| 5 . Conglomerados de consecuencias1

cn01 - Tipo economico	4.03	2.55		-.22	-1.11	.21	.00	.00		.4	9.3	.4	.0	.0	
	.02	.48		.02	.00	.00									

cn02 - Salud fisica y psico	4.14	2.45		1.00	.47	.33	.00	.00		7.3	1.7	1.1	.0	.0	
	.40	.09		.05	.00	.00									

cn03 - Aumento exposicion a	.60	22.85		-.04	-.29	-.44	.00	.00		.0	.1	.3	.0	.0	
	.00	.00		.01	.00	.00									

cn04 - Nivel capacidades	.77	17.48		.33	.04	.24	.00	.00		.2	.0	.1	.0	.0	
	.01	.00		.00	.00	.00									

cn05 - Problemas en el hoga	.94	14.19		.41	-.13	-2.27	.00	.00		.3	.0	11.8	.0	.0	
	.01	.00		.36	.00	.00									

cn06 - Mejoras y aumento ca	2.51	4.70		-1.27	.93	.07	.00	.00		7.2	4.1	.0	.0	.0	
	.34	.18		.00	.00	.00									

5_ - respuesta mancante	1.30	9.97		-.50	.34	-.13	.00	.00		.6	.3	.1	.0	.0	
	.01	.00		.00	.00	.00									

+-----+----- CONTRIBUTION ACUMUL. = 16.0 15.5
13.8 .0 .0 +-----+

MODALIDADES		COORDENADAS									
CONTRIBUCIONES		COSENOS CUADRADOS									
IDEN - ETIQUETA	P.REL DIST.	1	2	3	0	0	1	2	3	0	0
2	3	0	0								

6 . Subconglomerados de consecuencias1

n011 - Afectan el consumo	2.15	5.66	-.31	-1.38	.24	.00	.00	.4	7.7	.3	.0	.0
	.02	.34	.01	.00	.00							
n012 - Afectan ingreso y tr	1.41	9.10	-.05	-.67	.00	.00	.00	.0	1.2	.0	.0	.0
	.00	.05	.00	.00	.00							
n013 - Afectan activos	.75	17.99	-.27	-.83	.36	.00	.00	.1	1.0	.2	.0	.0
	.04	.01	.00	.00								.00
n021 - Afectan psicología	2.88	3.97	1.03	.49	.25	.00	.00	5.5	1.3	.4	.0	.0
	.27	.06	.02	.00	.00							
n022 - Afectan cuerpo	1.20	10.86	.96	.39	.49	.00	.00	2.0	.3	.7	.0	.0
	.08	.01	.02	.00	.00							
n031 - Carga trabajo y ries	.39	35.63	.05	-.24	-.46	.00	.00	.0	.0	.2	.0	.0
	.00	.00	.01	.00	.00							
n042 - Trabajo	.57	24.01	.51	.25	.29	.00	.00	.3	.1	.1	.0	.0
	.00	.00	.00	.00								.01
n052 - Familiares	.83	16.24	.42	-.15	-2.30	.00	.00	.3	.0	10.7	.0	.0
	.00	.33	.00	.00								.01
n061 - Mejoras	.99	13.44	-1.24	.99	.04	.00	.00	2.7	1.8	.0	.0	.0
	.07	.00	.00	.00								.11
n062 - Capacidades	1.70	7.41	-1.17	.79	.03	.00	.00	4.2	2.0	.0	.0	.0
	.19	.08	.00	.00	.00							
6_ - respuesta mancante	1.41	9.10	-.44	.30	-.19	.00	.00	.5	.2	.1	.0	.0
	.01	.00	.00	.00								.02

CONTRIBUCION ACUMUL. = 15.9 15.7
12.8 .0 .0 +-----+

7 . Conglomerados de estrategias1

st01 - Conservar funcionami	5.30	1.70	-.13	-.68	.36	.00	.00	.1	4.6	1.6	.0	.0
	.01	.27	.08	.00	.00							
st02 - Utilizar redes forma	2.72	4.26	.92	.31	.16	.00	.00	4.1	.5	.2	.0	.0
	.02	.01	.00	.00								.20
st03 - Generar capacidades	2.01	6.12	.41	-.12	-1.28	.00	.00	.6	.1	8.0	.0	.0
	.03	.00	.27	.00	.00							
7_ - respuesta mancante	4.26	2.35	-.62	.70	.06	.00	.00	3.0	4.0	.0	.0	.0
	.16	.21	.00	.00	.00							

+-----+----- CONTRIBUTION ACUMUL. = 7.8 9.1													
9.9 .0 .0 +-----+													
8 . Subconglomerados de estrategias													
t011 - Deuda	1.96	6.30	- .36	-.72	.53	.00	.00	.5	1.9	1.4	.0	.0	.02
.08	.05	.00	.00										
t012 - Cortes consumo	.67	20.36	- .20	-1.40	.32	.00	.00	.1	2.5	.2	.0	.0	
.00	.10	.01	.00										
t013 - Trabajo y activos	1.47	8.72	- .22	-.79	.13	.00	.00	.1	1.7	.1	.0	.0	.01
.07	.00	.00	.00										
t014 - Tener que...no poder	1.20	10.86	- .42	-.06	.36	.00	.00	.4	.0	.4	.0	.0	
.02	.00	.01	.00										
t021 - Formales	.52	26.72	- 1.08	.49	.72	.00	.00	1.1	.2	.6	.0	.0	.04
.01	.02	.00	.00										
t022 - Informales	2.20	5.49	- .88	.27	.03	.00	.00	3.1	.3	.0	.0	.0	.14
.01	.00	.00	.00										
t031 - Mejorar personalment	.52	26.35	- .39	.15	-2.28	.00	.00	.1	.0	6.6	.0	.0	
.01	.00	.20	.00										
t032 - Mejorar condicion ec	.62	22.04	- .14	-.69	-.90	.00	.00	.0	.6	1.2	.0	.0	
.00	.02	.04	.00										
t033 - Enfrentar eventos	.86	15.54	- .81	.12	-.95	.00	.00	1.0	.0	1.9	.0	.0	
.04	.00	.06	.00										
8_ - respuesta mancante	4.26	2.35	- .62	.70	.06	.00	.00	3.0	4.0	.0	.0	.0	
.16	.21	.00	.00										
+-----+----- CONTRIBUTION ACUMUL. = 9.3 11.3													
12.4 .0 .0 +-----+													

COORDENADAS Y VALORES TEST DE LAS MODALIDADES EN LOS EJES 1 A 3

MODALIDADES		VALORES TEST									
COORDENADAS											
IDEN - ETIQUETAS	EFE. P.ABS	1	2	3	0	0	1	2	3	0	
0	DIST.										
2 . Eventos de vida											
ev01 - Empleo y trabajo	126 126.00	-4.2	-9.4	.5	.0	.0	-.37	-.81	.04	.00	
	.00 15.28										
ev02 - Fallecimientos	317 317.00	20.7	8.0	8.3	.0	.0	1.07	.41	.43	.00	
	.00 5.47										
ev03 - Violencia y D.H.	65 65.00	1.9	1.0	.4	.0	.0	.24	.12	.05	.00	
	.00 30.55										
ev04 - Hogar	216 216.00	4.0	2.8	-29.4	.0	.0	.25	.18	-1.89	.00	
	.00 8.50										
ev05 - Ingreso, activos y c	393 393.00	-7.0	-27.6	2.2	.0	.0	-.32	-1.25	.10	.00	
	.00 4.22										
ev06 - Deuda	60 60.00	-4.0	-11.4	3.0	.0	.0	-.50	-1.45	.38	.00	
	.00 33.18										
ev07 - Parientes y barrio	44 44.00	1.0	1.3	-4.1	.0	.0	.15	.19	-.61	.00	
	.00 45.61										
ev08 - Enfermedad y salud	391 391.00	17.8	8.2	10.3	.0	.0	.81	.37	.47	.00	
	.00 4.25										
ev09 - Inversion/riesgo	145 145.00	-15.1	5.1	3.2	.0	.0	-1.21	.41	.26	.00	
	.00 13.14										
ev10 - Ev. que implican mej	261 261.00	-22.6	18.2	1.1	.0	.0	-1.31	1.05	.06	.00	
	.00 6.86										
ev11 - Genero	13 13.00	-.4	.8	-2.2	.0	.0	-.11	.22	-.60	.00	
	.00 156.77										
2_ - respuesta mancante	20 20.00	-3.1	2.8	-.3	.0	.0	-.70	.63	-.07	.00	
	.00 101.55										
3 . Conglomerados de causas1											
cs01 - Salud y enfermedad	582 582.00	27.5	9.0	12.2	.0	.0	.97	.32	.43	.00	
	.00 2.52										
cs02 - Hogar	167 167.00	5.2	.9	-31.4	.0	.0	.39	.07	-2.33	.00	
	.00 11.28										
cs03 - Violencia	214 214.00	11.7	1.4	2.5	.0	.0	.76	.09	.16	.00	
	.00 8.58										

cs04 - Factores economicos	480	480.00	-10.1	-33.8	1.4	.0	.0	-.40	-1.35	.06
.00	.00	3.27								
cs05 - Mejoras y aumento ca	118	118.00	-14.4	8.1	1.7	.0	.0	-1.29	.73	.15
.00	.00	16.38								
3_ - respuesta mancante	490	490.00	-23.0	18.0	3.2	.0	.0	-.91	.71	.13
.00	.00	3.19								

-----+-----+

| 4 . Subconglomerados de causas1

c011 - Cuerpo y persona com	144	144.00	7.9	1.9	-1.0	.0	.0	.64	.15	-.08
.00	.00	13.24								
c012 - Relacionadas a la en	423	423.00	25.2	9.0	14.1	.0	.0	1.09	.39	.61
.00	.00	3.85								
c013 - Instituciones	15	15.00	2.4	-.7	.4	.0	.0	.62	-.17	.09
.00	135.73									
c021 - Pareja	123	123.00	5.4	1.0	-30.3	.0	.0	.47	.08	-2.65
.00	15.67									
c022 - Inter. entre miembro	26	26.00	1.0	1.0	-8.4	.0	.0	.19	.19	-1.64
.00	.00	77.88								
c023 - Genero	18	18.00	.5	-.9	-4.9	.0	.0	.12	-.22	-1.14
.00	112.94									
c031 - En contra de la pers	169	169.00	12.2	2.2	3.2	.0	.0	.90	.16	.24
.00	.00	11.14								
c032 - En contra del hogar	30	30.00	1.4	-1.2	.8	.0	.0	.26	-.21	.15
.00	67.37									
c033 - Perpetrada por los a	15	15.00	.7	-.4	-2.8	.0	.0	.18	-.10	-.72
.00	135.73									
c041 - Inversion en activos	34	34.00	-2.7	-7.3	1.0	.0	.0	-.45	-1.23	.18
.00	.00	59.32								
c042 - Empleo e ingreso	359	359.00	-7.3	-30.9	.7	.0	.0	-.35	-1.48	.04
.00	.00	4.71								
c043 - Deuda y corte activo	87	87.00	-5.7	-8.2	.9	.0	.0	-.60	-.86	.09
.00	22.57									
c051 - activos materiales	72	72.00	-11.4	7.6	1.6	.0	.0	-1.33	.88	.19
.00	27.49									
c052 - activos inmateriales	46	46.00	-8.4	3.4	.7	.0	.0	-1.22	.49	.10
.00	43.59									
4_ - respuesta mancante	490	490.00	-23.0	18.0	3.2	.0	.0	-.91	.71	.13
.00	.00	3.19								

-----+-----+

| 5 . Conglomerados de consecuencias1

cn01 - Tipo economico	577	577.00	-6.4	-31.4	5.9	.0	.0	-.23	-1.11	.21
.00	.00	2.55								
cn02 - Salud fisica y psico	589	589.00	28.9	13.4	9.8	.0	.0	1.01	.47	.34
.00	.00	2.48								

cn03 - Aumento exposicion a	82	82.00		-5	-2.9	-3.9	.0	.0		-05	-.31	-.42
.00	.00		24.01									
cn04 - Nivel capacidades	108	108.00		3.7	.3	2.5	.0	.0		.34	.03	.23
.00		17.99										
cn05 - Problemas en el hoga	130	130.00		4.8	-1.6	-27.3	.0	.0		.41	-.14	-2.32
.00	.00		14.78									
cn06 - Mejoras y aumento ca	356	356.00		-26.6	19.4	1.6	.0	.0		-1.28	.93	.08
.00	.00		4.76									
cn07 - Violencia afuera hog	25	25.00		.3	1.9	-2.3	.0	.0		.06	.38	-.46
.00		81.04										
5_ - respuesta mancante	184	184.00		-7.2	4.8	-2.0	.0	.0		-.51	.34	-.14
.00	.00		10.15									
+-----+-----+-----+												
-----+-----+-----+												

MODALIDADES		VALORES TEST									
COORDENADAS											
IDEN - ETIQUETAS	EFE. P.ABS	1	2	3	0	0	1	2	3	0	
0	DIST.										

6 . Subconglomerados de consecuencias1											
n011 - Afectan el consumo	295	295.00	-6.2	-26.3	5.1	.0	.0	-.34	-1.42	.28	
.00	.00		5.95								
n012 - Afectan ingreso y tr	189	189.00	-.3	-10.3	.2	.0	.0	-.02	-.71	.01	
.00	.00		9.85								
n013 - Afectan activos	93	93.00	-2.9	-9.3	3.9	.0	.0	-.29	-.94	.40	.00
.00			21.05								
n021 - Afectan psicologia	401	401.00	23.3	11.0	6.0	.0	.0	1.04	.49	.27	
.00	.00		4.11								
n022 - Afectan cuerpo	156	156.00	13.4	5.9	7.2	.0	.0	1.03	.46	.55	
.00	.00		12.15								
n023 - Afectan acceso salud	32	32.00	2.4	1.1	1.3	.0	.0	.41	.20	.22	
.00	.00		63.09								
n031 - Carga trabajo y ries	45	45.00	.2	-1.6	-3.4	.0	.0	.03	-.24	-.50	.00
.00			44.58								
n032 - Menos activos materi	19	19.00	-.7	-3.8	-.6	.0	.0	-.16	-.88	-.14	
.00	.00		106.95								
n033 - Menos activos intang	18	18.00	-.6	.4	-2.1	.0	.0	-.15	.11	-.50	.00
.00			112.94								
n041 - Educacion	38	38.00	-.8	-3.0	-.5	.0	.0	-.13	-.48	-.09	.00
.00			52.97								
n042 - Trabajo	70	70.00	5.1	2.6	3.4	.0	.0	.60	.30	.40	.00
.00			28.30								
n051 - Pareja, tensiones y	27	27.00	1.2	-1.3	-8.9	.0	.0	.22	-.26	-1.70	.00
.00			74.96								
n052 - Familiares	103	103.00	4.7	-1.1	-25.9	.0	.0	.45	-.11	-2.48	.00
.00			18.91								
n061 - Mejoras	128	128.00	-15.7	13.1	.8	.0	.0	-1.34	1.12	.07	.00
.00			15.02								
n062 - Capacidades	228	228.00	-20.0	13.3	1.3	.0	.0	-1.25	.83	.08	
.00	.00		8.00								
n071 - Vioencia afuera hoga	25	25.00	.3	1.9	-2.3	.0	.0	.06	.38	-.46	
.00	.00		81.04								
6_ - respuesta mancante	184	184.00	-7.2	4.8	-2.0	.0	.0	-.51	.34	-.14	
.00	.00		10.15								

+-----+-----+-----+												
-----+-----+												
7 . Conglomerados de estrategias1												
st01 - Conservar funcionami	761	761.00		-4.3	-23.6	12.4	.0	.0		-.13	-.68	.36
.00	.00		1.70									
st02 - Utilizar redes forma	390	390.00		20.2	6.9	3.6	.0	.0		.92	.31	.16
.00	.00		4.26									
st03 - Generar capacidades	288	288.00		7.4	-2.2	-23.5	.0	.0		.41	-.12	-1.28
.00	.00		6.12									
7_ - respuesta mancante	612	612.00		-18.4	20.8	1.6	.0	.0		-.62	.70	.06
.00	.00		2.35									
+-----+-----+-----+												
-----+-----+												

+-----+-----+												
-----+-----+												
8 . Subconglomerados de estrategias1												
t011 - Deuda	281	281.00		-6.5	-13.1	9.6	.0	.0		-.36	-.72	.53
.00	.00		6.30									
t012 - Cortes consumo	96	96.00		-2.1	-14.1	3.2	.0	.0		-.20	-1.40	.32
.00	.00		20.36									
t013 - Trabajo y activos	211	211.00		-3.4	-12.2	2.1	.0	.0		-.22	-.79	.13
.00	.00		8.72									
t014 - Tener que...no poder	173	173.00		5.7	-.9	4.9	.0	.0		.42	-.06	.36
.00	.00		10.86									
t021 - Formales	74	74.00		9.5	4.3	6.3	.0	.0		1.08	.49	.72
.00	.00		26.72									
t022 - Informales	316	316.00		17.0	5.2	.7	.0	.0		.88	.27	.03
.00	.00		5.49									
t031 - Mejorar personalment	75	75.00		3.4	1.3	-20.1	.0	.0		.39	.15	-2.28
.00	.00		26.35									
t032 - Mejorar condicion ec	89	89.00		-1.3	-6.6	-8.7	.0	.0		-.14	-.69	-.90
.00	.00		22.04									
t033 - Enfrentar eventos	124	124.00		9.3	1.4	-10.9	.0	.0		.81	.12	-.95
.00	.00		15.54									
8_ - respuesta mancante	612	612.00		-18.4	20.8	1.6	.0	.0		-.62	.70	.06
.00	.00		2.35									
+-----+-----+-----+												
-----+-----+												

=====

FIN DEL PROCEDIMIENTO ** CORMU **

An lisis de correspondencias múltiples

=====

MEMORIA RESERVADA PARA LOS CALCULOS 192 KILO-BYTES

=====

PROCEDIMIENTO ** DEFAC **
Ayuda para interpretación de factores

=====

PARAMETROS DEL PROCEDIMIENTO

SEUIL = 40.000 umbral de seleccion de los elementos mas significativos.

LTRI = VTEST criterio de seleccion de modalidades (coordenada o valor test).

VTMIN = 2.000 valor test umbral para la seleccion de modalidades.

LISTA DE COMANDOS :

EDICION(ES) PARA EL FACTOR 1

MODALIDADES

VARIABLES CONTINUAS

ELEMENTOS PEDIDOS NO EXISTEN

EDICION SUPRIMIDA, LOS

EDICION(ES) PARA EL FACTOR 2

MODALIDADES

VARIABLES CONTINUAS

ELEMENTOS PEDIDOS NO EXISTEN

EDICION SUPRIMIDA, LOS

EDICION SOBRE EL FACTOR 1 DE MODALIDADES

+-----+
 -----+
 | ID. | V.TEST | MODALIDAD | VARIABLE |
 PESO | NUMERO |

cn06	-26.59	Mejoras y aumento ca	Conglomerados de consecuencias1
356.00	1		
4_	-23.04	respuesta mancante	Subconglomerados de causas1
490.00	2		
3_	-23.04	respuesta mancante	Conglomerados de causas1
490.00	3		
ev10	-22.59	Ev. que implican mej	Eventos de vida
261.00	4		
n062	-19.96	Capacidades	Subconglomerados de consecuencias1
228.00	5		
7_	-18.36	respuesta mancante	Conglomerados de estrategias1
612.00	6		
8_	-18.36	respuesta mancante	Subconglomerados de estrategias1
612.00	7		
n061	-15.70	Mejoras	Subconglomerados de consecuencias1
128.00	8		
ev09	-15.13	Inversion/riesgo	Eventos de vida
145.00	9		
cs05	-14.38	Mejoras y aumento ca	Conglomerados de causas1
118.00	10		
c051	-11.45	activos materiales	Subconglomerados de causas1
72.00	11		
cs04	-10.06	Factores economicos	Conglomerados de causas1
480.00	12		
c052	-8.38	activos inmateriales	Subconglomerados de causas1
46.00	13		
c042	-7.28	Empleo e ingreso	Subconglomerados de causas1
359.00	14		

ZONA CENTRAL

c011	7.94	Cuerpo y persona com	Subconglomerados de causas1
144.00	59		
t033	9.30	Enfrentar eventos	Subconglomerados de estrategias1
124.00	60		
t021	9.50	Formales	Subconglomerados de estrategias1
74.00	61		

cs03	11.74	Violencia	Conglomerados de causas1		
214.00	62				
c031	12.21	En contra de la pers	Subconglomerados de causas1		
169.00	63				
n022	13.45	Afectan cuerpo	Subconglomerados de consecuencias1		
156.00	64				
t022	17.02	Informales	Subconglomerados de estrategias1		
316.00	65				
ev08	17.75	Enfermedad y salud	Eventos de vida		
391.00	66				
st02	20.17	Utilizar redes forma	Conglomerados de estrategias1		
390.00	67				
ev02	20.74	Fallecimientos	Eventos de vida		317.00
68					
n021	23.26	Afectan psicología	Subconglomerados de consecuencias1		
401.00	69				
c012	25.16	Relacionadas a la en	Subconglomerados de causas1		
423.00	70				
cs01	27.53	Salud y enfermedad	Conglomerados de causas1		
582.00	71				
cn02	28.91	Salud física y psico	Conglomerados de consecuencias1		
589.00	72				

+-----+
-----+

EDICION SOBRE EL FACTOR 2 DE MODALIDADES

ID.	V.TEST	MODALIDAD	VARIABLE
PESO	NUMERO		
cs04	-33.79	Factores economicos	Conglomerados de causas1
480.00	1		
cn01	-31.40	Tipo economico	Conglomerados de consecuencias1
577.00	2		
c042	-30.86	Empleo e ingreso	Subconglomerados de causas1
359.00	3		
ev05	-27.61	Ingreso, activos y c	Eventos de vida
393.00	4		
n011	-26.28	Afectan el consumo	Subconglomerados de consecuencias1
295.00	5		
st01	-23.63	Conservar funcionami	Conglomerados de estrategias1
761.00	6		
t012	-14.08	Cortes consumo	Subconglomerados de estrategias1
96.00	7		
t011	-13.07	Deuda	Subconglomerados de estrategias1
281.00	8		
t013	-12.18	Trabajo y activos	Subconglomerados de estrategias1
211.00	9		
ev06	-11.39	Deuda	Eventos de vida
10			60.00
n012	-10.26	Afectan ingreso y tr	Subconglomerados de consecuencias1
189.00	11		
ev01	-9.44	Empleo y trabajo	Eventos de vida
126.00	12		
n013	-9.28	Afectan activos	Subconglomerados de consecuencias1
93.00	13		
c043	-8.22	Deuda y corte activo	Subconglomerados de causas1
87.00	14		
ZONA CENTRAL			
cs05	8.11	Mejoras y aumento ca	Conglomerados de causas1
118.00	59		
ev08	8.22	Enfermedad y salud	Eventos de vida
391.00	60		
c012	8.99	Relacionadas a la en	Subconglomerados de causas1
423.00	61		

cs01	9.02	Salud y enfermedad	Conglomerados de causas1	
582.00	62			
n021	11.02	Afectan psicología	Subconglomerados de consecuencias1	
401.00	63			
n061	13.11	Mejoras	Subconglomerados de consecuencias1	
128.00	64			
n062	13.28	Capacidades	Subconglomerados de consecuencias1	
228.00	65			
cn02	13.44	Salud fisica y psico	Conglomerados de consecuencias1	
589.00	66			
3_	18.02	respuesta mancante	Conglomerados de causas1	
490.00	67			
4_	18.02	respuesta mancante	Subconglomerados de causas1	
490.00	68			
ev10	18.15	Ev. que implican mej	Eventos de vida	
261.00	69			
cn06	19.40	Mejoras y aumento ca	Conglomerados de consecuencias1	
356.00	70			
7_	20.78	respuesta mancante	Conglomerados de estrategias1	
612.00	71			
8_	20.78	respuesta mancante	Subconglomerados de estrategias1	
612.00	72			

+-----+
-----+

```

=====
=====
                FIN DEL PROCEDIMIENTO ** DEFAC **
                Ayuda para interpretaci3n de factores
=====
=====

```

----- SPAD.N - MODIFICACION DE PARAMETROS -----
MGUSG = 'last1.GUS'

MEMORIA RESERVADA PARA LOS CALCULOS 192 KILO-BYTES

=====

PROCEDIMIENTO ** ASCII **

PLANO FACTORIAL

=====

PARAMETROS DEL PROCEDIMIENTO

* LDICA = 0 conversion del fichero NDICA de etiquetas de las variables.
* LDONA = 0 conversion del fichero NDONA de datos.
LGUS = SI conversion del fichero NGUS de coordenadas factoriales.

=====

FIN DEL PROCEDIMIENTO ** ASCII **

PLANO FACTORIAL

=====

MEMORIA RESERVADA PARA LOS CALCULOS 192 KILO-BYTES

PROCEDIMIENTO ** GRAPH **
Gr ficos factoriales

PARAMETROS DEL PROCEDIMIENTO

LVEC = SI utilizacion de los resultados de un analisis factorial (0=NO, 1=SI).
LCLAS = NO utilizacion de los resultados de una clasificacion (0=NO, 1=SI).
FORMI = .601 relacion de escala en la impresora utilizada (0.601 = STAN6).

COMANDO 1

POINTS = MOD ACT, X = VEC 1, Y = VEC 2, ZOOM = 0.0, DOUBLE = NO >
HEIGHT = CHAR = 22, WIDTH = CHAR = 63, IDENT = 1A4

NUMERO DE PUNTOS A REPRESENTAR : 72

NUMERO DE PUNTOS REPRESENTADOS : 72

PUNTOS MULTIPLES

-----+-----+-----+-----+-----

	ABSCISA		ORDENADA		NUM.DE		
P. VISTO		APROXIMADA		APROXIMADA		TAPADOS	P. TAPADOS

-----+-----+-----+-----+-----

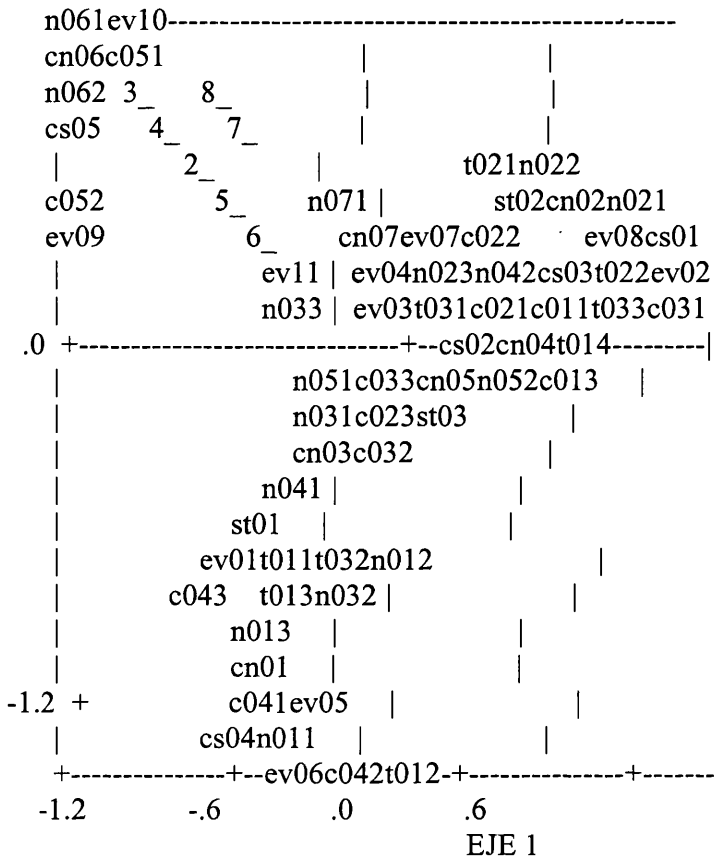
cs01		1.01		.36		1		c012
------	--	------	--	-----	--	---	--	------

-----+-----+-----+-----+-----

1 PUNTOS MULTIPLES, 1 PUNTOS TAPADOS

EJE 1 * EJE 2

EJE 2



COMANDO 2

POINTS = IND, X = VEC 1, Y = VEC 2, ZOOM = 0.0, DOUBLE = NO >
HEIGHT = CHAR = 22, WIDTH = CHAR = 63, IDENT = '*'

NUMERO DE PUNTOS A REPRESENTAR : 2051

NUMERO DE PUNTOS REPRESENTADOS : 2051

255 PUNTOS MULTIPLES, 1323 PUNTOS TAPADOS

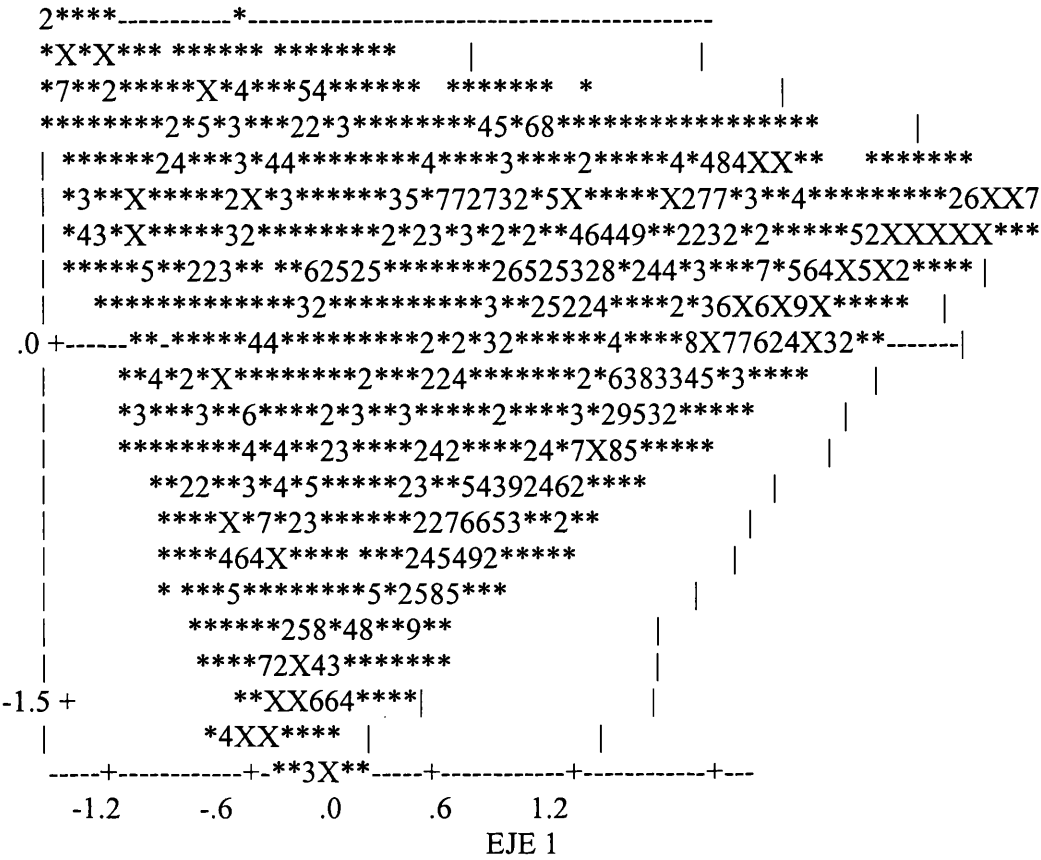
IDENTIFICACION DE LOS PUNTOS

* : UN SOLO PUNTO

N : N PUNTOS SUPERPUESTOS X : 10 PUNTOS SUPERPUESTOS O MAS

EJE 1 * EJE 2

EJE 2



COMANDO 3

FIN

=====

FIN DEL PROCEDIMIENTO ** GRAPH **

Gr ficos factoriales

=====

=====

** STOP : FIN DEL ANALISIS **

=====

Annex 5 Correspondences analysis

i) Data processing with correspondence analysis on the 1997 fieldwork data

```
-----  
SPAD.N Sistema Portable para el Analisis de Datos  
Copyright (C) CISIA, 1987, 1991 - Version 2.52  
Marca Registrada: France logiciel APP-88 08 006 01  
-----
```

```
----- SPAD.N - MODIFICACION DE PARAMETROS -----  
LISTP=SI,LISTF=NO,LERFA=SI,NXLPA=59,LRESM=NO,NAPEL=0,MEM=50000
```

LISTADO DE LOS PARAMETROS DE COMANDO

```
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----+-----8  
1 LISTP=SI,LISTF=NO,LERFA=SI,NXLPA=59,LRESM=NO,NAPEL=0,MEM=50000  
2 NDICZ = '\SPADN\V1.LAD' : Fichero de etiquetas  
3  
4 NDICA = '\SPADN\V1.LAR'  
5 PROC ARDIC  
6 Archivo de etiquetas  
7 LDICZ = EXT, LTYPE = LARGO, LEDIT = CORTO, NQEXA = 10, NXMOD = 16  
8  
9 NDONA = '\SPADN\V1.DAR'  
10 PROC SELEC  
11 Selecci3n de datos ffiles  
12 LSELI = TODO, INASS = UNIF, LZERO = REC, LEDIT = CORTO, TIRER = NO  
13 NOMI ACT 2,4,6,8  
14 FIN  
15  
16 PROC CORMU  
17 An lisis de correspondencias m3ltiples  
18 NAXE = 3, PCMIN = 2. , LBURT = 1, LEDCO = SI  
19  
20 PROC DEFAC  
21 Ayuda para interpretaci3n de factores  
22 SEUIL = 40., LTRI = VTEST, VTMIN = 2.  
23 VEC = 1--2 / CONT / MOD  
24 FIN  
25  
26 MGUSG = 'last1.GUS'  
27 PROC ASCII  
28 PLANO FACTORIAL  
29 LGUS = SI  
30  
31 PROC GRAPH  
32 Gr ficos factoriales  
33 LVEC = SI, LCLAS = NO, FORMI = 0.601  
34 POINTS = MOD ACT, X = VEC 1, Y = VEC 2, ZOOM = 0.0, DOUBLE = NO >  
35 HEIGHT = CHAR = 22, WIDTH = CHAR = 63, IDENT = 1A4  
36 POINTS = IND, X = VEC 1, Y = VEC 2, ZOOM = 0.0, DOUBLE = NO >  
37 HEIGHT = CHAR = 22, WIDTH = CHAR = 63, IDENT = '*'  
38 FIN  
39 STOP : Fin del fichero de comandos  
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----+-----8
```

```
----- SPAD.N - MODIFICACION DE PARAMETROS -----  
NDICZ = '\SPADN\V1.LAD'
```

```
----- SPAD.N - MODIFICACION DE PARAMETROS -----  
NDICA = '\SPADN\V1.LAR'
```

```
MEMORIA RESERVADA PARA LOS CALCULOS ..... 192 KILO-BYTES  
=====
```

```
PROCEDIMIENTO ** ARDIC **  
Archivo de etiquetas
```

=====

PARAMETROS DEL PROCEDIMIENTO

LDICZ = EXT localizacion del fichero diccionario fuente (0=LEC, 1=EXT).
LTYPE = LARGO tipo del diccionario fuente (0=LARGO, 1=DENSO, 2=CREA, 3=LISTA, 4=AUTO).
NQEXA = 10 numero de variables registradas sobre el diccionario fuente.
NXMOD = 16 numero maximo de modalidades para una variable.
* NXLIS = 1 si LTYPE=LISTA numero maximo de listas utilizadas.
* NXMOL = 1 si LTYPE=LISTA numero maximo de modalidades en las listas.
LEDIT = CORTO modo de impresion del diccionario (0=NO, 1=CORTO, 2=LARGO, 3=LISTA).

Archivo de etiquetas

1 . Localidades	(8 MODALIDADES)
2 . Eventos de vida	(11 MODALIDADES)
3 . Conglomerados de causas1	(5 MODALIDADES)
4 . Subconglomerados de causas1	(14 MODALIDADES)
5 . Conglomerados de consecuencias1	(7 MODALIDADES)
6 . Subconglomerados de consecuencias1	(16 MODALIDADES)
7 . Conglomerados de estrategias1	(3 MODALIDADES)
8 . Subconglomerados de estrategias1	(9 MODALIDADES)
9 . Afiliacion SGSS	(2 MODALIDADES)
10 . Afiliacion SISBEN	(2 MODALIDADES)

=====

FIN DEL PROCEDIMIENTO ** ARDIC **
Archivo de etiquetas

=====

----- SPAD.N - MODIFICACION DE PARAMETROS -----
NDONA = '\SPADN\V1.DAR'

MEMORIA RESERVADA PARA LOS CALCULOS 192 KILO-BYTES


```

=====
PROCEDIMIENTO ** SELEC **
Selección de datos útiles
=====

```

PARAMETROS DEL PROCEDIMIENTO

```

LSELI = TODO modo de seleccion de los individuos (0=TODO, 1=LISTA, 2=FILT).
IMASS = UNIF numero de la variable 'peso de los individuos' (0=UNIF, -1=FORZ).
LZERO = REC recodificacion de los valores nominales mancantes (0=NOREC, 1=REC).
LEDIT = CORTO impresion del diccionario de variables retenidas (0=NO, 1=CORTO, 2=LARGO).
* NXFIL = 20 numero maximo de constantes empleadas en el filtro (si LSELI=FILT o 2).
TIRER = NO extraccion aleatoria de una submuestra.

```

RESUMEN DE LA SELECCION DE VARIABLES

TIPO	NUMERO	NUMEROS			
		2	4	6	8
NOMI ACT	4	2	4	6	8

=====

PROCEDIMIENTO ** CORMU **

An lisis de correspondencias mUltiples

=====

PARAMETROS DEL PROCEDIMIENTO

NAXE = 3 numero de ejes retenidos.

PCMIN = 2.000 umbral de verificacion de las modalidades activas (en porcentaje).

LBURT = 1 edicion de la tabla de Burt (0=NO, 1=PESO, 2=TODO, 3=PERF).

* NVEDI = 39 numero de valores propios que figuran sobre el histograma.

* NAXED = 5 numero de ejes para los cuales se editan las coordenadas.

* LEDIN = 0 edicion de las coordenadas de los individuos (0=NO, 1=ACT, 2=TODO).

LEDCO = SI edicion de las correlaciones entre variables y ejes (0=NO, 1=SI).

* LGUS = 0 escritura sobre NGUS de la matriz de BURT.

ELIMINACION DE LAS MODALIDADES DE PESO MUY DEBIL : UMBRAL (PCMIN) ... 2.00 %
 PESOS 41.02

ANTES DE LA DEPURACION : 4 CUESTIONES ACTIVAS 54 MODALIDADES ASOCIADAS
 DESPUES : 4 CUESTIONES ACTIVAS 40 MODALIDADES ASOCIADAS

PESO TOTAL DE LOS INDIVIDUOS ACTIVOS : 2051.00

TABLA DE FRECUENCIAS DE LAS CUESTIONES ACTIVAS

IDENT ETIQUETAS RELATIVOS	MODALIDADES		ANTES DEPURACION		DESPUES DEPURACION		HISTOGRAMA DE LOS PESOS
	EFE.	PESOS	EFE.	PESOS			
2 . Eventos de vida							
ev01 - Empleo y trabajo	126	126.00	131	131.00	****		
ev02 - Fallecimientos	317	317.00	322	322.00	*****		
ev03 - Violencia y D.H.	65	65.00	68	68.00	**		
ev04 - Hogar	216	216.00	217	217.00	*****		
ev05 - Ingreso, activos y c	393	393.00	396	396.00	*****		
ev06 - Deuda	60	60.00	60	60.00	**		
ev07 - Parientes y barrio	44	44.00	49	49.00	**		
ev08 - Enfermedad y salud	391	391.00	393	393.00	*****		
ev09 - Inversion/riesgo	145	145.00	150	150.00	****		
ev10 - Ev. que implican mej	261	261.00	265	265.00	*****		
ev11 - Genero	13	13.00	===	VENTILADA	===		
2_ - respuesta mancante	20	20.00	===	VENTILADA	===		
4 . Subconglomerados de causas1							
c011 - Cuerpo y persona com	144	144.00	157	157.00	****		
c012 - Relacionadas a la en	423	423.00	439	439.00	*****		
c013 - Instituciones	15	15.00	===	VENTILADA	===		
c021 - Pareja	123	123.00	140	140.00	****		
c022 - Inter. entre miembro	26	26.00	===	VENTILADA	===		
c023 - Genero	18	18.00	===	VENTILADA	===		
c031 - En contra de la pers	169	169.00	183	183.00	*****		
c032 - En contra del hogar	30	30.00	===	VENTILADA	===		
c033 - Perpetrada por los a	15	15.00	===	VENTILADA	===		
c041 - Inversion en activos	34	34.00	===	VENTILADA	===		
c042 - Empleo e ingreso	359	359.00	378	378.00	*****		
c043 - Deuda y corte activo	87	87.00	109	109.00	****		
c051 - activos materiales	72	72.00	82	82.00	***		
c052 - activos inmateriales	46	46.00	59	59.00	**		
4_ - respuesta mancante	490	490.00	504	504.00	*****		

MODALIDADES		ANTES DEPURACION		DESPUES DEPURACION		HISTOGRAMA DE LOS PESOS
IDENT	ETIQUETAS	EFE.	PESOS	EFE.	PESOS	
RELATIVOS						
-----+-----+-----						
6 . Subconglomerados de consecuencias1						
n011	- Afectan el consumo	295	295.00	305	305.00	*****
n012	- Afectan ingreso y tr	189	189.00	202	202.00	*****
n013	- Afectan activos	93	93.00	105	105.00	****
n021	- Afectan psicologia	401	401.00	416	416.00	*****
n022	- Afectan cuerpo	156	156.00	178	178.00	*****
n023	- Afectan acceso salud	32	32.00	===	VENTILADA ===	
n031	- Carga trabajo y ries	45	45.00	58	58.00	**
n032	- Menos activos materi	19	19.00	===	VENTILADA ===	
n033	- Menos activos intang	18	18.00	===	VENTILADA ===	
n041	- Educacion	38	38.00	===	VENTILADA ===	
n042	- Trabajo	70	70.00	83	83.00	***
n051	- Pareja, tensiones y	27	27.00	===	VENTILADA ===	
n052	- Familiares	103	103.00	115	115.00	****
n061	- Mejoras	128	128.00	147	147.00	*****
n062	- Capacidades	228	228.00	245	245.00	*****
n071	- Vioencia afuera hoga	25	25.00	===	VENTILADA ===	
6_	- respuesta mancante	184	184.00	197	197.00	*****
-----+-----+-----						
8 . Subconglomerados de estrategias1						
t011	- Deuda	281	281.00	281	281.00	*****
t012	- Cortes consumo	96	96.00	96	96.00	***
t013	- Trabajo y activos	211	211.00	211	211.00	*****
t014	- Tener que...no poder	173	173.00	173	173.00	*****
t021	- Formales	74	74.00	74	74.00	***
t022	- Informales	316	316.00	316	316.00	*****
t031	- Mejorar personalment	75	75.00	75	75.00	***
t032	- Mejorar condicion ec	89	89.00	89	89.00	***
t033	- Enfrentar eventos	124	124.00	124	124.00	****
8_	- respuesta mancante	612	612.00	612	612.00	*****
-----+-----+-----						

EDICION DE LOS VALORES PROPIOS

PRECISION DE LOS CALCULOS : TRAZA ANTES DIAGONALIZACION .. 9.0000
 SUMA DE LOS VALORES PROPIOS... 9.0000

HISTOGRAMA DE LOS 36 PRIMEROS VALORES PROPIOS

NUMERO	VALOR PROPIO	PORCENTA.	PORCENTA. ACUMU.
1	.5973	6.64	6.64
2	.5659	6.29	12.92
3	.4547	5.05	17.98
4	.3851	4.28	22.25
5	.3555	3.95	26.21
6	.3266	3.63	29.83
7	.2978	3.31	33.14
8	.2934	3.26	36.40
9	.2852	3.17	39.57
10	.2797	3.11	42.68
11	.2661	2.96	45.63
12	.2644	2.94	48.57
13	.2585	2.87	51.44
14	.2519	2.80	54.24
15	.2492	2.77	57.01
16	.2472	2.75	59.76
17	.2461	2.73	62.49
18	.2430	2.70	65.19
19	.2423	2.69	67.89
20	.2325	2.58	70.47
21	.2265	2.52	72.99
22	.2227	2.47	75.46
23	.2219	2.47	77.93
24	.2130	2.37	80.29
25	.2075	2.31	82.60
26	.1942	2.16	84.76
27	.1869	2.08	86.83

COORDENADAS, CONTRIBUCIONES Y COSENOS CUADRADOS DE LAS MODALIDADES ACTIVAS EN LOS EJES 1 A 3

MODALITIES										COORDINATES					CONTRIBUTIONS				
SQUARED COSENS																			
ID	LABELS				P.REL	DIST.	1	2	3	0	0	1	2	3	0	0			
1	2	3	0	0															
2 . Life Events																			
ev01	- Empoloy. & Income				1.60	14.66	-.71	-.59	.04	.00	.00	1.4	1.0	.0	.0				
.0	.03	.02	.00	.00	.00														
ev02	- Deaths				3.92	5.37	1.20	-.17	.35	.00	.00	9.4	.2	1.0	.0				
.0	.27	.01	.02	.00	.00														
ev03	- Violence & H.Rights				.83	29.16	.23	.11	-.30	.00	.00	.1	.0	.2	.0				
.0	.00	.00	.00	.00	.00														
ev04	- Household Crisis				2.65	8.45	.27	.06	-2.22	.00	.00	.3	.0	28.8	.0				
.0	.01	.00	.58	.00	.00														
ev05	- Income, assets & C.				4.83	4.18	-.92	-1.06	.12	.00	.00	6.9	9.6	.2	.0				
.0	.20	.27	.00	.00	.00														
ev06	- Indebtedness				.73	33.18	-1.17	-1.08	.40	.00	.00	1.7	1.5	.3	.0				
.0	.04	.03	.00	.00	.00														
ev07	- Relatives & Neighb.				.60	40.86	.22	.27	-.48	.00	.00	.0	.1	.3	.0				
.0	.00	.00	.01	.00	.00														
ev08	- Illness & health				4.79	4.22	.96	-.05	.58	.00	.00	7.4	.0	3.5	.0				
.0	.22	.00	.08	.00	.00														
ev09	- Inverion/risk				1.83	12.67	-.87	1.08	.54	.00	.00	2.3	3.8	1.2	.0				
.0	.06	.09	.02	.00	.00														
ev10	- Ev. Impl. Improvem.				3.23	6.74	-.71	1.66	.11	.00	.00	2.7	15.7	.1	.0				
.0	.07	.41	.00	.00	.00														
CONTRIBUCION ACUMUL. = 32.1 32.0 35.4 .0																			
4 . Sub-clusters of causes1																			
c011	- Cuerpo y persona com				1.91	12.06	.44	-.11	-.34	.00	.00	.6	.0	.5	.0				
.0	.02	.00	.01	.00	.00														
c012	- Relacionadas a la en				5.35	3.67	1.14	-.20	.63	.00	.00	11.7	.4	4.6	.0				
.0	.35	.01	.11	.00	.00														
c021	- Pareja				1.71	13.65	.35	-.15	-2.63	.00	.00	.4	.1	26.0	.0				
.0	.01	.00	.51	.00	.00														
c031	- En contra de la pers				2.23	10.21	.86	-.25	.16	.00	.00	2.8	.2	.1	.0				
.0	.07	.01	.00	.00	.00														
c042	- Empleo e ingreso				4.61	4.43	-.97	-1.18	.04	.00	.00	7.2	11.3	.0	.0				
.0	.21	.31	.00	.00	.00														
c043	- Deuda y corte activo				1.33	17.82	-.82	-.22	.26	.00	.00	1.5	.1	.2	.0				
.0	.04	.00	.00	.00	.00														
c051	- activos materiales				1.00	24.01	-.73	1.46	.43	.00	.00	.9	3.7	.4	.0				
.0	.02	.09	.01	.00	.00														
c052	- activos inmateriales				.72	33.76	-.79	.78	.13	.00	.00	.8	.8	.0	.0				
.0	.02	.02	.00	.00	.00														
4_	- respuesta mancante				6.14	3.07	-.43	.94	.06	.00	.00	1.9	9.6	.1	.0				
.0	.06	.29	.00	.00	.00														
CONTRIBUCION ACUMUL. = 27.7 26.3 31.9 .0																			
6 . Sub-clusters of consecuencias1																			
n011	- Afectan el consumo				3.72	5.72	-.98	-1.16	.24	.00	.00	6.0	8.8	.5	.0				
.0	.17	.23	.01	.00	.00														
n012	- Afectan ingreso y tr				2.46	9.15	-.13	-.45	-.28	.00	.00	.1	.9	.4	.0				
.0	.00	.02	.01	.00	.00														
n013	- Afectan activos				1.28	18.53	-.63	-.55	.45	.00	.00	.8	.7	.6	.0				
.0	.02	.02	.01	.00	.00														
n021	- Afectan psicologia				5.07	3.93	1.06	-.10	.06	.00	.00	9.6	.1	.0	.0				
.0	.29	.00	.00	.00	.00														
n022	- Afectan cuerpo				2.17	10.52	1.01	-.11	.55	.00	.00	3.7	.0	1.4	.0				
.0	.10	.00	.03	.00	.00														

Annex 6 SAS Programs

a. Data base filtering

```
PROC CONTENTS DATA=D.VULNER1;  
RUN;
```

```
DATA D.VULNER1;  
SET D.VULNER1;  
LABEL  
AGE                ='EDAD'  
AGECLPS            ='GRUPOS DE EDAD'  
CONTRIB            ='CONTRIBUCIÓN ECONÓMICA'  
EDUC1              ='NIVEL EDUCACIÓN 1'  
EDUC2              ='NIVEL EDUCACIÓN 2'  
FAMILY             ='NUCLEO FAMILIAR'  
GENDER             ='GENERO'  
HEAD               ='GENERO DEL JEFE DEL HOGAR'  
HSLDLST            ='LISTA ORDINAL MIEMBROS DEL HOGAR'  
IDENT              ='IDENTIFICADOR NUCLEO FAMILIAR'  
IDENTH             ='IDENTIFICADOR HOGAR'  
IDENTP             ='IDENTIFICADOR PERSONA'  
INCOME             ='INGRESO CATEGORIZACION INICIAL'  
INGRESO            ='INGRESO CATEGORIZACION FINAL'  
INTVIEW            ='NÚMERO DE ENTREVISTA REALIZADA'  
LOCALITY           ='LOCALIDAD'  
PRTHOOD            ='PARENTESCO'  
RESPOND            ='ENCUASTADO, DEPENDE DE HSLDLST'  
SECTOR             ='SECTOR'  
STILLSCH           ='TODAVÍA ES ESTUDIANTE'  
;  
RUN;
```

```
PROC CONTENTS DATA=D.VULNER2;  
RUN;
```

```
DATA D.VULNER2;  
SET D.VULNER2;  
LABEL  
BNALIMNT           ='PROGRAMA DE ALIMENTACIÓN'  
BNCANCER           ='PROGRAMA PREVENCION CANCER'  
BNCHLDGR           ='PROGRAMA CREC. Y DES. NIÑOS'  
BNHIV              ='PROGRAMA PREVENCION SIDA'  
BNHYGNE            ='PROGRAMA HIGIENE'  
BNOTHPRG           ='OTRO PROGRAMA'  
BNPRGMAT           ='PROGRAMA PREV. MATERNIDAD'  
BNRED              ='PROGRAMA RED DE SOLIDARIDAD'  
IDENTH             ='IDENTIFICADOR HOGAR'  
INTVIEW            ='ENTREVISTA'  
KNOWHOWA           ='COMO ENTERO EXISTENCIA PROG. ALIM.'  
KNOWHOWC           ='COMO ENTERO EXISTENCIA PROG. CANC.'  
KNOWHOWM           ='COMO ENTERO EXISTENCIA PROG. MATE.'  
KNOWHOWR           ='COMO ENTERO EXISTENCIA PROG. RED.'  
KNOWHWCD           ='COMO ENTERO EXISTENCIA PROG. NIÑO.'  
KNOWHWHG           ='COMO ENTERO EXISTENCIA PROG. HIGI.'
```

```

KNOWHHVH = 'COMO ENTERO EXISTENCIA PROG. SIDA.'
KNWHWOTH = 'COMO ENTERO EXISTENCIA PROG. OTRO.'
LOCALITY  = 'LOCALIDAD'
PRCANC1   = 'PROGRAMA PREV. CANCER 1'
PRCANC2   = 'PROGRAMA PREV. CANCER 1'
PRCANC3   = 'PROGRAMA PREV. CANCER 1'
PRCANC4   = 'PROGRAMA PREV. CANCER 1'
PRCANCER  = 'TIPO DE PROG. PREV. CANCER'
PRGCHLD   = 'PROGRAMA PREV. NIÑOS 1'
PRGCHLD1  = 'PROGRAMA PREV. NIÑOS 2'
PRGHIV    = 'PROGRAMA PREV. SIDA'
PRGRED    = 'PROGRAMA PREV. RED 1'
PRGRED1   = 'PROGRAMA PREV. RED 2'
PRHYGNE   = 'PROGRAMA PREV. HIGIENE'
SECTOR    = 'SECTOR'
TYPEALMT  = 'TIPO PROGRAMA PREV. ALIMENTACION'
TYPEMAT   = 'TIPO PROGRAMA PREV. MATERNIDAD'
TYPOTHPR  = 'TIPO OTRO PROGRAMA PREV.'
WHOALMT   = 'QUIEN SE ENTERO PROG. PREV. ALI.'
WHOCANC   = 'QUIEN SE BENEFICIO PROG. PREV. CANC.'
WHOCHLD   = 'QUIEN SE BENEFICIO PROG. PREV. NIÑOS'
WHOHIV    = 'QUIEN SE BENEFICIO PROG. PREV. SIDA'
WHOHYG    = 'QUIEN SE BENEFICIO PROG. PREV. HIG.'
WHORED    = 'QUIEN SE BENEFICIO PROG. PREV. RED'
WHOTHER   = 'QUIEN SE BENEFICIO OTRO PROG. PREV.'
WHOTOLDM  = 'QUIEN SE ENTERO PROG. PREV. MATE.'
WHREALM1  = 'DONDE Y COMO SE BENEFICIO P. ALIM 2'
WHREALMT  = 'DONDE Y COMO SE BENEFICIO P. ALIM 1'
WHRECAN1  = 'DONDE Y COMO SE BENEFICIO P. CANCER 2'
WHRECANC  = 'DONDE Y COMO SE BENEFICIO P. CANCER 1'
WHRECHD1  = 'DONDE Y COMO SE BENEFICIO P. NIÑOS 2'
WHRECHLD  = 'DONDE Y COMO SE BENEFICIO P. NIÑOS 1'
WHREHIV   = 'DONDE Y COMO SE BENEFICIO P. SIDA 2'
WHREHIV1  = 'DONDE Y COMO SE BENEFICIO P. SIDA 1'
WHREHYG1  = 'DONDE Y COMO SE BENEFICIO P. HIGIENE 1'
WHREHYGN  = 'DONDE Y COMO SE BENEFICIO P. HIGIENE 2'
WHREMAT   = 'DONDE Y COMO SE BENEFICIO P. MATER. 2'
WHREMAT1  = 'DONDE Y COMO SE BENEFICIO P. MATER 1'
WHREOTH1  = 'DONDE Y COMO SE BENEFICIO OTRO P. 1'
WHREOTHR  = 'DONDE Y COMO SE BENEFICIO OTRO P. 2'
WHRERED   = 'DONDE Y COMO SE BENEFICIO P. RED 2'
WHRERED1  = 'DONDE Y COMO SE BENEFICIO P. RED 1'

```

```

;
RUN;

```

```

PROC CONTENTS DATA=D.VULNER3;
RUN;

```

```

DATA D.VULNER3;
SET D.VULNER3;
LABEL
AFIL      = 'AFILIACION SGSSS'
BYWHOM    = 'PERSONA HOGAR DE QUIEN ES BENEFICIARIO'
COST      = 'COSTO MENSUAL AFILIACION'
HEALTH1   = 'EPS-ARS-ESS DE AFILIACION 1'
HEALTH2   = 'EPS-ARS-ESS DE AFILIACION 2'

```

```

IDENTH      ='IDENTIFICADOR HOGAR'
INTVIEW     ='ENTREVISTA'
LOCALITY    ='LOCALIDAD'
RANKAFF     ='PERSONA AFILIADA EN EL HOGAR (HSLDLST)'
SECTOR      ='SECTOR'
SISBEN      ='AFILIACION AL SISBEN'

```

```

;
RUN;

```

```

PROC CONTENTS DATA=D.VULNER4;
RUN;

```

```

DATA D.VULNER4;
SET D.VULNER4;
LABEL
ATTNID      ='ATENDIDO O NO CON CARNET'
BLVRGHT     ='CREE TENER DERECHO SISBEN'
GOTID       ='RECEPCION DEL CARNET'
INTSISBN    ='HA SIDO ENTREVISTADO/A SISBEN'
INTVIEW     ='ENTREVISTA'
KNOWLEV     ='CONOCE SU NIVEL DE SISBEN'
LOCALITY    ='LOCALIDAD'
NINTWS      ='VECES ENTREVISTADO POR EL SISBEN'
PCTPAID     ='SABE EL %XPAGAR EN RELACION AL SISBEN'
RIGHTSBN    ='SABE SI NIVEL ASIGNADO DA DERECHO ASIST.'
SECTOR      ='SECTOR'
SISBLEV     ='NIVEL DE SISBEN ASIGNADO'
SOLSISB     ='HA SOLICITADO APLICACION SISBEN'
SUBSID      ='RECIBIO DOCUM. SUSTITUTO CARNET'
TEMP        ='TEMP=1 SI SOLICITO O FUE ENTREVISTADO'
TIMECNSG    ='TIEMPO ENTREGA CARNET, SI LO RECIBIO'
TIMEWTNG    ='TIEMPO ESPERA, NO RECIBIDA'
UTILHOSP    ='UTILIZACION HOSPITAL'
VDTYID      ='SABE SI SU CARNET ESTA VIGENTE'

```

```

;
RUN;

```

```

PROC CONTENTS DATA=D.VULNER5;
RUN;

```

```

DATA D.VULNER5;
SET D.VULNER5;
LABEL
CLWH1       ='RAZON UTILIZAR HOSPITAL 1 CONG. L'
CLWH2       ='RAZON UTILIZAR HOSPITAL 2 CONG. L'
CLWH3       ='RAZON UTILIZAR HOSPITAL 3 CONG. L'
CWH1        ='RAZON UTILIZAR HOSPITAL 1 CONG. SS'
CWH2        ='RAZON UTILIZAR HOSPITAL 2 CONG. SS'
CWH3        ='RAZON UTILIZAR HOSPITAL 3 CONG. SS'
IDENTH      ='IDENTIFICADOR HOGAR'
IDENTP      ='IDENTIFICADOR PERSONA'
INTVIEW     ='ENTREVISTA'
LOCALITY    ='LOCALIDAD'
SECTOR      ='SECTOR'
SURGHSP     ='TUVO CIRUGÍA COMO CONSECUENCIA'
WHOHOSP     ='MIEMBRO DEL HOGAR QUE USO EL HOSPITAL'

```

```

WHYHOSP1      ='RAZON PARA UTILIZAR HOSPITAL 1'
WHYHOSP2      ='RAZON PARA UTILIZAR HOSPITAL 2'
WHYHOSP3      ='RAZON PARA UTILIZAR HOSPITAL 3'
;
RUN;

```

```

PROC CONTENTS DATA=D.VULNER6;
RUN;

```

```

DATA D.VULNER6;
SET D.VULNER6;
LABEL
ATENHOSP      ='FUE ATENDIDO EN EL HOSP.'
COSTHOSP      ='COSTO HOSPITALIZACION 1'
COSTHSP1      ='COSTO HOSPITALIZACION 2'
COSTHSP2      ='COSTO HOSPITALIZACION 3'
HLTHCNTR      ='UTLIZO CENTRO DE SALUD'
INTVIEW       ='ENTREVISTA'
LOCALITY      ='LOCALIDAD'
PDEXMHSP      ='PAGÓ EXÁMENES HOSP'
PDMEDHSP      ='PAGÓ MEDICAMENTOS HOSP'
QLTDCTHP      ='CALIDAD ATENCION DOCT. HOSP'
QLTNRSHSP     ='CALIDAD ATENCION ENFER. HOSP'
SECTOR        ='SECTOR'
WHYNOTHP      ='PORQUE NO FUE ATENDIDO HOSP 1'
WHYNTHP1      ='PORQUE NO FUE ATENDIDO HOSP 2'
;
RUN;

```

```

PROC CONTENTS DATA=D.VULNER7;
RUN;

```

```

DATA D.VULNER7;
SET D.VULNER7;
LABEL
CLWC1         ='RAZON UTILIZAR CEN. SAL. 1 CONG. L'
CLWC2         ='RAZON UTILIZAR CEN. SAL. 2 CONG. L'
CLWC3         ='RAZON UTILIZAR CEN. SAL. 3 CONG. L'
CWC1          ='RAZON UTILIZAR CEN. SAL. 1 CONG. SS'
CWC2          ='RAZON UTILIZAR CEN. SAL. 2 CONG. SS'
CWC3          ='RAZON UTILIZAR CEN. SAL. 3 CONG. SS'
IDENTH        ='IDENTIFICADOR HOGAR'
IDENTP        ='IDENTIFICADOR PERSONA'
INTVIEW       ='ENTREVISTA'
LOCALITY      ='LOCALIDAD'
RANKHC        ='MIEMBRO DEL HOGAR QUE USO EL CEN. SAL.'
SECTOR        ='SECTOR'
SURGHTCN      ='TUVO CIRUGÍA COMO CONSECUENCIA'
WHYHTCN       ='RAZON PARA UTILIZAR CEN. SAL. 1'
WHYHTCN1      ='RAZON PARA UTILIZAR CEN. SAL. 2'
WHYHTCN2      ='RAZON PARA UTILIZAR CEN. SAL. 3'
;
RUN;

```

```
PROC CONTENTS DATA=D.VULNER8;
RUN;
```

```
DATA D.VULNER8;
SET D.VULNER8;
```

```
LABEL
ATNHLTHC      ='FUE ATENDIDO EN EL CEN. SAL..'
COSTHCN       ='COSTO CUIDADO CEN. SAL. 1'
COSTHCN1      ='COSTO CUIDADO CEN. SAL. 2'
COSTHCN2      ='COSTO CUIDADO CEN. SAL. 3'
INTVIEW       ='ENTREVISTA'
LOCALITY      ='LOCALIDAD'
PDEXMHCHN     ='PAGÓ EXÁMENES CEN. SAL.'
PDMEDHCN      ='PAGÓ MEDICAMENTOS CEN. SAL.'
PRVTDCTR      ='UTILIZO MEDICO PARTICULAR'
QLTDCTCN      ='CALIDAD ATENCION DOCT. CEN. SAL.'
QLTNRSCN      ='CALIDAD ATENCION ENFER. CEN. SAL.'
SECTOR        ='SECTOR'
WHYNTHC       ='PORQUE NO FUE ATENDIDO CEN. SAL. 1'
```

```
;
RUN;
```

```
PROC CONTENTS DATA=D.VULNER9;
RUN;
```

```
DATA D.VULNER9;
SET D.VULNER9;
```

```
LABEL
CLWD1         ='RAZON UTILIZAR DOC. PRIV. 1 CONG. L'
CLWD2         ='RAZON UTILIZAR DOC. PRIV. 2 CONG. L'
CLWD3         ='RAZON UTILIZAR DOC. PRIV. 3 CONG. L'
CWD1          ='RAZON UTILIZAR DOC. PRIV. 1 CONG. SS'
CWD2          ='RAZON UTILIZAR DOC. PRIV. 2 CONG. SS'
CWD3          ='RAZON UTILIZAR DOC. PRIV. 3 CONG. SS'
IDENTH        ='IDENTIFICADOR HOGAR'
IDENTP        ='IDENTIFICADOR PERSONA'
INTVIEW       ='ENTREVISTA'
LOCALITY      ='LOCALIDAD'
PDEXMPVD      ='PAGÓ TODO EXÁMENES DOC. PRIV.'
PDMEDPVD      ='PAGÓ TODO MEDICAMENTOS DOC. PRIV.'
RANKPVD       ='MIEMBRO DEL HOGAR QUE USO EL DOC. PRIV.'
SECTOR        ='SECTOR'
WHYPVD        ='RAZON PARA UTILIZAR DOC. PRIV. 1'
WHYPVD1       ='RAZON PARA UTILIZAR DOC. PRIV. 2'
WHYPVD2       ='RAZON PARA UTILIZAR DOC. PRIV. 3'
```

```
;
RUN;
```

```
PROC CONTENTS DATA=D.VULNER10;
RUN;
```

```
DATA D.VULNER10;
SET D.VULNER10;
```

```
LABEL
```

```

ALTERN1      ='TIPO DE MEDICINA ALTER.'
ALTERN2      ='CUANDO UTILIZO MED. ALTER.'
ALTERN3      ='PORQUE USO MED. ALTER. 1'
ALTERN4      ='PORQUE USO MED. ALTER. 2'
ATNPRVDC     ='FUE ATENDIDO POR MED. PRIV.'
CHGSICK1     ='CAMBIA CON LA ENFERMEDAD 2'
CHGSICK2     ='CAMBIA CON LA ENFERMEDAD 3'
CNGSICK      ='CAMBIA CON LA ENFERMEDAD 1'
COSTALT      ='COSTO MED. ALTER. COMPARADO HOSP.'
COSTPRVD     ='COSTO MED. PRIV. 1'
CSTPRVD1     ='COSTO MED. PRIV. 2'
CSTPRVD2     ='COSTO MED. PRIV. 3'
HADLFEVN     ='HOGARES QUE TUVIERON 1 Ó MÁS EVENTOS'
IDENTH       ='IDENTIFICADOR HOGAR'
INTVIEW      ='ENTREVISTA'
LAST3MTH     ='SE ENFERMO EN LOS 3 ULT. MESES'
LOCALITY     ='LOCALIDAD'
MNGSICK      ='SIGNIFICADO SENTIRSE ENFERMO/A 1'
MNGSICK1     ='SIGNIFICADO SENTIRSE ENFERMO/A 2'
MNGSICK2     ='SIGNIFICADO SENTIRSE ENFERMO/A 3'
PDEXMPV      ='PAGÓ TODO EXÁMENES DOC. PRIV.'
PDMEDPV      ='PAGÓ TODO MEDICAMENTOS DOC. PRIV.'
QLTALTN      ='CALIDAD MED. ALTER.'
QLTNRSPV     ='CALIDAD ATENCIÓN ENFERMERA MED. PRIV.'
QLTPVD       ='CALIDAD ATENCIÓN MED. PRIV.'
SECTOR       ='SECTOR'
SGHTCARE     ='LO/A ATENDIÓ MEDICO ETC..'
SLFHLTH1     ='AUTOEVALUACIÓN PRESENTE ESTADO SALUD'
SLFHLTH2     ='AUTOEVALUACIÓN EST. SAL. vs UN AÑO ATRÁS '
SLFHLTH3     ='AUTOEVALUACIÓN EST. SAL. DURANTE AÑO PASADO'
SLFHLTH4     ='AUTOEVALUACIÓN EST. SAL. 1 vs 5 AÑOS ATRÁS'
THERAPY      ='PUDO SEGUIR LA TERAIOIA'
WHAT3MT      ='DE QUE SE ENFERMO EN LOS 3 ULTIMOS MESES 1'
WHAT3MT1     ='DE QUE SE ENFERMO EN LOS 3 ULTIMOS MESES 2'
WHAT3MT2     ='DE QUE SE ENFERMO EN LOS 3 ULTIMOS MESES 3'
WHAT3MT3     ='DE QUE SE ENFERMO EN LOS 3 ULTIMOS MESES 4'
WHYNODC1     ='PORQUE NO BUSCO AYUDA MEDICA 4'
WHYNODC2     ='PORQUE NO BUSCO AYUDA MEDICA 3'
WHYNODC3     ='PORQUE NO BUSCO AYUDA MEDICA 2'
WHYNODOC     ='PORQUE NO BUSCO AYUDA MEDICA 1'
WHYNOTER     ='PORQUE NO SIGUIO TERAPIA 1'
WHYNOTR1     ='PORQUE NO SIGUIO TERAPIA 2'
WHYNOTR2     ='PORQUE NO SIGUIO TERAPIA 3'
WHYNOTR3     ='PORQUE NO SIGUIO TERAPIA 4'
WHYNTPV1     ='RAZON NO ATENDIDO MED. PRIV. 2'
WHYNTPVD     ='RAZON NO ATENDIDO MED. PRIV. 1'
WHYWORRY     ='RAZON PREOCUPARSE FUTURO ESTADO DE SALUD 1'
WHYWRRY1     ='RAZON PREOCUPARSE FUTURO ESTADO DE SALUD 2'
WHYWRRY2     ='RAZON PREOCUPARSE FUTURO ESTADO DE SALUD 3'
WORRYHHTH    ='PREOCUPACION FUTURO ESTADO DE SALUD'
;
RUN;

PROC CONTENTS DATA=D.VULNER11;
RUN;

```

```

DATA D.VULNER11;
SET D.VULNER11;
LABEL
CAUSE1      ='CAUSA EVENTO DE VIDA 1'
CAUSE2      ='CAUSA EVENTO DE VIDA 2'
CCAUSE1     ='CAUSA EVENTO DE VIDA 1 CONG.'
CCAUSE2     ='CAUSA EVENTO DE VIDA 2 CONG.'
CCCAUSE1    ='CAUSA EVENTO DE VIDA 1 SUBCONG.'
CCCAUSE2    ='CAUSA EVENTO DE VIDA 2 SUBCONG.'
CCONSEQ1    ='CONSECUENCIA EBENTO DE VIDA CONG. 1'
CCONSEQ2    ='CONSECUENCIA EBENTO DE VIDA CONG. 2'
CCONSEQ3    ='CONSECUENCIA EBENTO DE VIDA CONG. 3'
CCONSEQ4    ='CONSECUENCIA EBENTO DE VIDA CONG. 4'
CCONSEQ5    ='CONSECUENCIA EBENTO DE VIDA CONG. 5'
CONSEQ1     ='CONSECUENCIA EBENTO DE VIDA 1'
CONSEQ2     ='CONSECUENCIA EBENTO DE VIDA 2'
CONSEQ3     ='CONSECUENCIA EBENTO DE VIDA 3'
CONSEQ4     ='CONSECUENCIA EBENTO DE VIDA 4'
CONSEQ5     ='CONSECUENCIA EBENTO DE VIDA 5'
CSTRATG1    ='ESTRATEGIA EVEN. CONG. 1'
CSTRATG2    ='ESTRATEGIA EVEN. CONG. 2'
CSTRATG3    ='ESTRATEGIA EVEN. CONG. 3'
CSTRATG4    ='ESTRATEGIA EVEN. CONG. 4'
CSTRATG5    ='ESTRATEGIA EVEN. CONG. 5'
DONSEQ1     ='CONSECUENCIA EBENTO DE VIDA SUBCONG. 1'
DONSEQ2     ='CONSECUENCIA EBENTO DE VIDA SUBCONG. 2'
DONSEQ3     ='CONSECUENCIA EBENTO DE VIDA SUBCONG. 3'
DONSEQ4     ='CONSECUENCIA EBENTO DE VIDA SUBCONG. 4'
DONSEQ5     ='CONSECUENCIA EBENTO DE VIDA SUBCONG. 5'
DSTRATG1    ='ESTRATEGIA EVEN. SUBCONG. 1'
DSTRATG2    ='ESTRATEGIA EVEN. SUBCONG. 2'
DSTRATG3    ='ESTRATEGIA EVEN. SUBCONG. 3'
DSTRATG4    ='ESTRATEGIA EVEN. SUBCONG. 4'
DSTRATG5    ='ESTRATEGIA EVEN. SUBCONG. 5'
EVENT       ='EVENTO DE VIDA'
HIT1        ='PERSONA AFECTADA O TODO EL HOGAR 1'
HIT2        ='PERSONA AFECTADA O TODO EL HOGAR 2'
HIT3        ='PERSONA AFECTADA O TODO EL HOGAR 3'
INTVIEW     ='ENTREVISTA'
LOCALITY    ='LOCALIDAD'
NEVENT      ='EVENTO DE VIDA CONGLOMERADO'
SECTOR      ='SECTOR'
STRATG1     ='ESTRATEGIA EVEN. 1'
STRATG2     ='ESTRATEGIA EVEN. 2'
STRATG3     ='ESTRATEGIA EVEN. 3'
STRATG4     ='ESTRATEGIA EVEN. 4'
STRATG5     ='ESTRATEGIA EVEN. 5'
TIEMPO      ='TIEMPO EN QUE OCURRIO EL EVENTO CONG.'
TIMING      ='TIEMPO EN QUE OCURRIO EL EVENTO'
;
RUN;

PROC CONTENTS DATA=D.VULNER12;
RUN;

```

```
DATA D.VULNER12;
```



```

SET D.VULNER12;
LABEL
ACT1          =' FUTURO '
ACT2          =' SATISFACCION CON LA VIDA EN BOGOTA '
ACT3          =' REALIZACION PERSONAL '
ACT4          =' PELIGRO EN BOGOTA CUALQUIER MOMENTO '
ACT5          =' APROVECHAR OPORT. SIN IMPORTAR RESTO '
ACT6          =' CULPABILIDAD ROBO POR NECESIDAD '
ACT7          =' DIGNIDAD VIDA PERS. vs INGRESO '
ACT8          =' MIEDO EN LAS CALLES BOGOTANAS '
ACT9          =' FUTURO NIÑOS Y JOVENES DE HOY '
ACT10         =' MIEDO A LOS MEDICOS '
ACT11         =' IR DONDE EL MEDICO NO SIRVE '
ACT12         =' CORRELACION CALIDAD COSTO '
COMPINC       =' INGRESO ACTUAL vs. 1 AÑO ATRÁS '
DIFFICWK      =' DIFICULTAD ENCONTRAR O MANTENER TRABAJO '
GRAVE         =' QUE HACE EN CASO DE ENFERMEDAD GRAVE 1 '
GRAVE1        =' QUE HACE EN CASO DE ENFERMEDAD GRAVE 2 '
GRAVE2        =' QUE HACE EN CASO DE ENFERMEDAD GRAVE 3 '
INCCOMP       =' '
INGR_HOG      =' INGRESO MENSUAL DEL HOGAR '
INTVIEW       =' ENTREVISTA '
LOCALITY      =' LOCALIDAD '
MILD          =' QUE HACE EN CASO DE ENFER NO GRAVE 1 '
MILD1         =' QUE HACE EN CASO DE ENFER NO GRAVE 2 '
MILD2         =' QUE HACE EN CASO DE ENFER NO GRAVE 3 '
SECTOR        =' SECTOR '
SERIOUS       =' QUE HACE EN CASO DE ENFERMEDAD SERIA 1 '
SERIOUS1      =' QUE HACE EN CASO DE ENFERMEDAD SERIA 2 '
SERIOUS2      =' QUE HACE EN CASO DE ENFERMEDAD SERIA 3 '
TR662         =' '
TR663         =' '
TYPWKLY       =' CUAL FUE SU OCUPACION HACE 1 AÑO '
TYPWKKNOW     =' CUAL ES SU OCUPACION '
WORKLSTY      =' ESTABA EMPLEADO HACE 1 AÑO '
WORKNOW       =' ESTA EMPLEADO/A '
;
RUN;

```

```

PROC CONTENTS DATA=D.VULNER13;
RUN;

```

```

DATA D.VULNER13;
SET D.VULNER13;
LABEL
BIEM1         =' EMPEÑAR NEVERA '
BIEM2         =' EMPEÑAR LAVADORA '
BIEM3         =' EMPEÑAR COCINA '
BIEM4         =' EMPEÑAR LICUADORA '
BIEM5         =' EMPEÑAR TELEVISIÓN '
BIEM6         =' EMPEÑAR RADIO '
BIEM7         =' EMPEÑAR EQUIPO DE SONIDO '
BIEM8         =' EMPEÑAR CELULAR '
BLENDER       =' LICUADORA '
COOKER        =' COCINA '
FRIDGE        =' POSEE NEVERA '

```

```

HIFI          ='POSEE EQUIPO DE SONIDO'
INTVIEW      ='ENTREVISTA'
LOCALITY     ='LOCALIDAD'
ORDFAM       ='ORDEN DE LA FAMILIA'
PORTABLE     ='CELULAR'
RADIO        ='POSEE RADIO'
SECTOR       ='SECTOR'
TV           ='POSEE TELEVISOR'
WASHMCH      ='POSEE LAVADORA'
;
RUN;

```

```

PROC CONTENTS DATA=D.VULNER14;
RUN;

```

```

DATA D.VULNER14;
SET D.VULNER14;
LABEL
ADDRESS      ='DIRECCION'
CEILING      ='MATERIAL TECHO'
CHEESE       ='QUESO'
CHICKEN      ='POLLO'
CHLDCARE     ='QUIEN CUIDA NIÑOS'
CHLDHELP     ='NIÑOS MENORES DE 14 TRABAJEN'
DINING       ='COMEDOR'
DOOR         ='MATERIAL PUERTA PPAL'
EGGS         ='HUEVOS'
ELECTR       ='CONECCION ELECTRICA LEGAL'
EXTWALLS     ='MATERIAL PAREDES EXTERIORES'
FISH         ='PESCADO'
FLOORMAT     ='MATERIAL PISOS'
FRUITS       ='FRUTAS'
GRAINS       ='GRANOS'
GREENS       ='VEGETALES'
HOUSE        ='TIPO DE CASA'
IDENTH       ='IDENTIFICADOR HOGAR'
INTVIEW      ='ENTREVISTA'
JUICES       ='JUGOS'
KITCHEN      ='COCINA'
LIGHTING     ='TIPO ALUMBRADO PUBLICO'
LIVING       ='SALA'
LOCALITY     ='LOCALIDAD'
MEAT         ='CARNE'
MILK         ='LECHE'
NUMBBTH      ='NUMERO DE BAÑOS'
PASTA        ='PASTA'
PERB1        ='NUMERO PERS. COMPARTEN BAÑOS'
POTATO       ='PAPAS'
RICE         ='ARROZ'
ROAD         ='CAMINO PAVIMENTADO'
ROOMS        ='NUMERO DE CUARTOS PARA LA FAMILIA'
SALAD        ='ENSALADA'
SECTOR       ='SECTOR'
SEWAGE       ='ALCANTARILLADO LEGAL'
SLPDING      ='CUANTAS PERS. DUERMEN COMEDOR'
SLPLIVNG     ='CUANTAS PERS. DUERMEN SALA'

```

```

SLPRM1      ='CUANTAS PERS. DUERMEN ALCOBA 1'
SLPRM2      ='CUANTAS PERS. DUERMEN ALCOBA 2'
SLPRM3      ='CUANTAS PERS. DUERMEN ALCOBA 3'
SLPRM4      ='CUANTAS PERS. DUERMEN ALCOBA 4'
SLPRM5      ='CUANTAS PERS. DUERMEN ALCOBA 5'
SOUP        ='SOPA'
TELEPHNE    ='TELEFONO'
TENENCY      ='TENENCIA DE LA VIVIENDA'
TIMEWK      ='TIEMPO PROMEDIO DE TRABAJO'
TOTALRMS    ='NUMERO TOTAL DE CUARTOS '
TRANSPRT    ='CALIDAD DEL TRANSPORTE EN EL AREA'
WALLSMAT    ='MATERIAL DE LAS PAREDES'
WATER       ='CONEXION LEGAL ABASTECIMIENTO AGUA'
WC          ='TIPO DE SANITARIO'
YUCA        ='YUCA'
;
RUN;

```

b. Importing data from SPSS to SAS

```

OPTIONS NONUMBER NODATE NOCENTER;

```

```

%MACRO F1 (DATA, VAR);
PROC FREQ DATA=D.&DATA;
TABLES &VAR;
RUN;
%MEND F1;

```

```

/*                TABLA 1 A                */

```

```

PROC TABULATE DATA=D.VULNER1 NOSEPS;
TITLE1 'Perfil de edad de la población (General y por genero)';
TITLE2 'TABLA 1A';
CLASS AGECLPS GENDER;
VAR Z;
TABLE (AGECLPS), (GENDER) * (Z) * (N='N° PER' PCTSUM<GENDER ALL>
PCTSUM<AGECLPS ALL>)/RTS=10;
RUN;

```

```

/*                TABLA 1 B                */

```

```

PROC TABULATE DATA=D.VULNER1 NOSEPS;
TITLE1 'Distribución del ingreso (global, por genero de la jefatura,
por sector y localidad)';
TITLE2 'TABLA 1B';
CLASS INCOME GENDER SECTOR LOCALITY ;
VAR Z;
TABLE (INCOME) , (GENDER) * (Z) * (N='N° PER' PCTSUM<GENDER ALL>
PCTSUM<INCOME ALL>)/RTS=10;
TABLE (SECTOR) , (INCOME) * (Z) * (N='N° PER' PCTSUM<INCOME ALL>
PCTSUM<SECTOR ALL>)/RTS=10;
TABLE (INCOME) , (LOCALITY) * (Z) * (N='N° PER' PCTSUM<LOCALITY ALL>
PCTSUM<INCOME ALL>)/RTS=10;
RUN;

```

```

/* COLAPSANDO INCOME */
PROC TABULATE DATA=D.VULNER1 NOSEPS;
TITLE1 'Distribución del ingreso (global, por genero de la jefatura,
por sector y localidad)';
TITLE2 'TABLA 1B COLAPSANDO';
CLASS INGRESO GENDER SECTOR LOCALITY ;
VAR Z;
TABLE (INGRESO) ,(GENDER)*(Z)*(N='N° PER' PCTSUM<GENDER ALL>
PCTSUM<INGRESO ALL>)/RTS=10;
TABLE (SECTOR) ,(INGRESO)*(Z)*(N='N° PER' PCTSUM<INGRESO ALL>
PCTSUM<SECTOR ALL>)/RTS=10;
TABLE (LOCALITY) ,(INGRESO)*(Z)*(N='N° PER' PCTSUM<LOCALITY ALL>
PCTSUM<INGRESO ALL>)/RTS=10;
/*WHERE (HEAD NOT IN (3) AND INGRESO IN (1,2));*/
RUN;

```

/*PRUEBA CHI CUADRADO*/

```

PROC FREQ DATA=D.VULNER1;
TABLES INCOME*HEAD SECTOR*INCOME LOCALITY*INCOME/CHISQ;
WHERE (HEAD NOT IN (3) AND INCOME NOT IN (99,33) );
RUN;

```

/* COLAPSANDO INCOME */

```

PROC FREQ DATA=D.VULNER1;
TABLES INGRESO*HEAD SECTOR*INGRESO LOCALITY*INGRESO/CHISQ;
WHERE (HEAD NOT IN (3));
RUN;

```

```

PROC FREQ DATA=D.VULNER1;
TABLES INGRESO*HEAD SECTOR*INGRESO LOCALITY*INGRESO/CHISQ;
WHERE (HEAD NOT IN (3) AND INGRESO IN (1,2));
RUN;

```

/*CORRELACION DE SPEARMAN*/

```

PROC CORR DATA=D.VULNER1 SPEARMAN /*KENDALL*/;
VAR INCOME HEAD SECTOR;
WHERE (HEAD NOT IN (3) AND INCOME NOT IN (99,33) );
RUN;

```

```

PROC CORR DATA=D.VULNER1 SPEARMAN /*KENDALL*/;
VAR INGRESO HEAD SECTOR;
WHERE (HEAD NOT IN (3) AND INGRESO IN (1,2));
RUN;

```

```

PROC CORR DATA=D.VULNER1 SPEARMAN /*KENDALL*/;
VAR INGRESO HEAD SECTOR;
WHERE (HEAD NOT IN (3) );
RUN;

```

/* TABLA 1C */

```

PROC TABULATE DATA=D.VULNER1 NOSEPS;

```

```

TITLE1 'Perfil educacional de la población (General, por grupos de
edad,
por ingreso y por estatus, o sea, si están todavía estudiando o
no)';
TITLE2 'TABLA 1C';
CLASS INGRESO EDUC1;
VAR Z;
TABLE (INGRESO) ,(EDUC1)*(Z)*(N='N° PER' PCTSUM<INGRESO ALL>
PCTSUM<EDUC1 ALL>)/RTS=10;
WHERE INGRESO NOT IN (99,33) ;
RUN;

```

```

PROC TABULATE DATA=D.VULNER1 NOSEPS;
TITLE1 'Perfil educacional de la población (General, por grupos de
edad,
por ingreso y por estatus, o sea, si están todavía estudiando o
no)';
TITLE2 'TABLA 1C';
CLASS INGRESO EDUC2;
VAR Z;
TABLE (INGRESO) ,(EDUC2)*(Z)*(N='N° PER' PCTSUM<INGRESO ALL>
PCTSUM<EDUC2 ALL>)/RTS=10;
WHERE INGRESO NOT IN (99,33) ;
RUN;

```

```

PROC TABULATE DATA=D.VULNER1 NOSEPS;
TITLE1 'Perfil educacional de la población (General, por grupos de
edad,
por ingreso y por estatus, o sea, si están todavía estudiando o
no)';
TITLE2 'TABLA 1C';
CLASS INGRESO AGECLPS;
VAR Z;
TABLE (AGECLPS) ,(INGRESO)*(Z)*(N='N° PER' PCTSUM<AGECLPS ALL>
PCTSUM<INGRESO ALL>)/RTS=10;
WHERE INGRESO NOT IN (99,33) ;
RUN;

```

/*CORRELACION DE SPEARMAN*/

```

PROC CORR DATA=D.VULNER1 SPEARMAN /*KENDALL*/;
VAR INGRESO EDUC1 EDUC2 AGE;
WHERE INGRESO NOT IN (99,33) ;
RUN;

```

/****** O J O *****/

```

/*=====*/
/*Cobertura y funcionamiento del SISBEN */
/*=====*/

```

/* TABLA 3A */

```

%F1(VULNER3,SISBEN);

```

```

/*          TABLA 3B          */
PROC TABULATE DATA=D.VULNER3 NOSEPS;
TITLE1 'Total de vinculados al SISBEN por localidad';
TITLE2 'TABLA 3B';
CLASS LOCALITY SISBEN;
VAR Z;
TABLE (LOCALITY ALL), (SISBEN ALL)*(Z)*(N='No Personas' PCTSUM <SISBEN
ALL>='%')
PCTSUM <LOCALITY ALL>='%')/RTS=10;
RUN;

```

```

/*          TABLA 3B          */
PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE1 'Total de vinculados al SISBEN por gender';
TITLE2 ' TABLA 3B ';
CLASS GENDER SISBEN;
VAR Z;
TABLE (GENDER ALL), (SISBEN ALL)*(Z)*(N='No Personas' PCTSUM <SISBEN
ALL>='%')
PCTSUM <GENDER ALL>='%')/RTS=10;
RUN;

```

```

/*          TABLA 3C          */
%F1(VULNER4,GOTID);

```

```

/*          TABLA 3D          */
PROC TABULATE DATA=D.VULNER4 NOSEPS;
TITLE1 'Demoras en la recepción del carnet, por localidad y por
sector';
TITLE2 ' TABLA 3D ';
CLASS LOCALITY SECTOR GOTID TIMECNSG;
VAR Z;
TABLE (TIMECNSG ALL), (GOTID ALL)*(Z)*(N='No Personas' PCTSUM <GOTID
ALL>
PCTSUM <TIMECNSG ALL>)/RTS=10;
TABLE (LOCALITY ALL), (GOTID ALL)*(Z)*(N='No Personas' PCTSUM <GOTID
ALL>
PCTSUM <LOCALITY ALL>)/RTS=10;
TABLE (SECTOR ALL), (GOTID ALL)*(Z)*(N='No Personas' PCTSUM <GOTID
ALL>
PCTSUM <SECTOR ALL>)/RTS=10;
TABLE (LOCALITY)*(TIMECNSG*ALL), (GOTID ALL)*
(Z)*(N='No Personas' PCTSUM <TIMECNSG ALL>
PCTSUM <GOTID ALL>)/RTS=25;
RUN;

```

```

/*          TABLA 3E          */
PROC TABULATE DATA=D.VULNER4 NOSEPS;
TITLE1 'Demoras en la recepción del carnet, por localidad y por
sector GOTID=1';
TITLE2 'TABLA 3E';
CLASS LOCALITY SECTOR GOTID TIMECNSG;
VAR Z;
TABLE (TIMECNSG ALL), (GOTID)*(Z)*(N='No Personas' PCTSUM <GOTID ALL>

```

```

        PCTSUM <TIMECNSG ALL>)/RTS=10;
TABLE (LOCALITY ALL), (GOTID)*(Z)*(N='No Personas' PCTSUM <GOTID ALL>
        PCTSUM <LOCALITY ALL>)/RTS=10;
TABLE (SECTOR ALL), (GOTID)*(Z)*(N='No Personas' PCTSUM <GOTID ALL>
        PCTSUM <SECTOR ALL>)/RTS=10;
TABLE (LOCALITY)*(GOTID), (TIMECNSG*ALL)*
        (Z)*(N='No Personas' PCTSUM <TIMECNSG ALL>
        PCTSUM <GOTID ALL>)/RTS=10;
WHERE GOTID IN(1);
RUN;

```

```

/*          TABLA 3F          */
PROC TABULATE DATA=D.VULNER4 NOSEPS;
TITLE1 'Vigencia del carnet por localidad y por sector';
TITLE2 'TABLA 3F';
CLASS LOCALITY SECTOR GOTID VDTYID;
VAR Z;
TABLE (VDTYID ALL), (GOTID ALL)*(Z)*(N='No Personas' PCTSUM <GOTID
ALL>
        PCTSUM <VDTYID ALL>)/RTS=10;
TABLE (LOCALITY)*(VDTYID*ALL), (GOTID ALL)*
        (Z)*(N='No Personas' PCTSUM <VDTYID ALL> PCTSUM <GOTID
ALL>)/RTS=10;
TABLE (SECTOR)*(VDTYID*ALL), (GOTID ALL)*(Z)*(N='No Personas' PCTSUM
<VDTYID ALL>
        PCTSUM <GOTID ALL> )/RTS=10;
RUN;

```

```

/*          TABLA 3G          */
PROC TABULATE DATA=D.VULNER4 NOSEPS;
TITLE 'Utilización servicios de salud por hogares poseedores de
carnet (hospitales), por pago';
TITLE2 'TABLA 3G';
CLASS LOCALITY SECTOR GOTID UTILHOSP;
VAR Z;
TABLE (GOTID ALL), (UTILHOSP ALL)*(Z)*(N='No Personas' PCTSUM <GOTID
ALL>
        PCTSUM <GOTID ALL>)/RTS=10;
TABLE (LOCALITY)*(UTILHOSP ALL), (GOTID ALL)*(Z)*(N='No Personas'
PCTSUM <UTILHOSP ALL>
        PCTSUM <GOTID ALL>)/RTS=10;
TABLE (SECTOR)*(UTILHOSP*ALL), (GOTID ALL)*
        (Z)*(N='No Personas' PCTSUM <UTILHOSP ALL> PCTSUM <GOTID
ALL>)/RTS=10;
RUN;

```

```

/*          TABLA 3G          */
PROC TABULATE DATA=D.VUL46810 NOSEPS;
TITLE1 'Utilización servicios de salud por hogares poseedores de
carnet (hospitales), por pago';
TITLE2 'TABLA 3G';
CLASS LOCALITY SECTOR GOTID COSTHOSP COSTHSP1 UTILHOSP;
VAR Z;
TABLE (COSTHOSP), (GOTID ALL)*(Z)*(N='No Personas' PCTSUM <GOTID ALL>
        PCTSUM <COSTHOSP ALL> )/RTS=10;

```

```

TABLE (COSTHSP1), (GOTID ALL)* (Z)* (N='No Personas' PCTSUM <GOTID ALL>
      PCTSUM <COSTHSP1 ALL> )/RTS=10;
WHERE UTILHOSP IN(1);
RUN;

```

```

/*          TABLA 3H          */

```

```

PROC TABULATE DATA=D.VUL46810 NOSEPS;
TITLE1 'Utilización servicios de salud por hogares poseores de
carnet (CEN SALUD), por pago';
TITLE2 'TABLA 3H';
CLASS LOCALITY SECTOR GOTID HLTHCNTR;
VAR Z;
TABLE (GOTID ALL), (HLTHCNTR ALL)* (Z)* (N='No Personas' PCTSUM <GOTID
ALL>
      PCTSUM <HLTHCNTR ALL>)/RTS=10;
TABLE (LOCALITY)* (HLTHCNTR*ALL), (GOTID ALL)*
      (Z)* (N='No Personas' PCTSUM <HLTHCNTR ALL> PCTSUM <GOTID
ALL>)/RTS=10;
TABLE (SECTOR)* (HLTHCNTR*ALL), (GOTID ALL)*
      (Z)* (N='No Personas' PCTSUM <HLTHCNTR ALL> PCTSUM <GOTID
ALL>)/RTS=10;
RUN;

```

```

/*          TABLA 3H          */

```

```

PROC TABULATE DATA=D.VUL46810 NOSEPS;
TITLE 'Utilización servicios de salud por hogares poseores de
carnet (CEN SALUD), por pago';
TITLE 'TABLA 3H';
CLASS LOCALITY SECTOR GOTID COSTHCN1 COSTHCN HLTHCNTR;
VAR Z;
TABLE (COSTHCN1), (GOTID ALL)* (Z)* (N='No Personas' PCTSUM <GOTID ALL>
      PCTSUM <COSTHCN1 ALL> )/RTS=10;
TABLE (COSTHCN), (GOTID ALL)* (Z)* (N='No Personas' PCTSUM <GOTID ALL>
      PCTSUM <COSTHCN ALL> )/RTS=10;
WHERE HLTHCNTR IN (1);
RUN;

```

```

/*          TABLA 3I          */

```

```

PROC TABULATE DATA=D.VUL46810 NOSEPS;
TITLE1 'Utilización servicios de salud por hogares poseores de
carnet (DOC PRIV), por pago';
TITLE2 'TABLA 3I';
CLASS LOCALITY SECTOR GOTID PRVTDCTR;
VAR Z;
TABLE (GOTID ALL), (PRVTDCTR ALL)* (Z)* (N='No Personas' PCTSUM <GOTID
ALL>
      PCTSUM <PRVTDCTR ALL>)/RTS=10;
TABLE (LOCALITY)* (PRVTDCTR*ALL), (GOTID ALL)
      (Z)* (N='No Personas' PCTSUM <PRVTDCTR ALL> PCTSUM <GOTID
ALL>)/RTS=10;
TABLE (SECTOR)* (PRVTDCTR*ALL), (GOTID ALL)*
      (Z)* (N='No Personas' PCTSUM <PRVTDCTR ALL> PCTSUM <GOTID
ALL>)/RTS=10;
RUN;

```



```

/*          TABLA 3I          */
PROC TABULATE DATA=D.VUL46810 NOSEPS;
TITLE1 'Utilización servicios de salud por hogares poseedores de
carnet (DOC PRIV), por pago';
TITLE2 'TABLA 3I';
CLASS LOCALITY SECTOR GOTID COSTPRVD CSTPRVD1 PRVTDCTR;
VAR Z;
TABLE (PRVTDCTR ALL)*(COSTPRVD), (GOTID ALL)*(Z)*(N='No Personas'
PCTSUM <GOTID ALL>
          PCTSUM <COSTPRVD ALL> )/RTS=10;
TABLE (PRVTDCTR ALL)*(CSTPRVD1), (GOTID ALL)*(Z)*(N='No Personas'
PCTSUM <GOTID ALL>
          PCTSUM <CSTPRVD1 ALL> )/RTS=10;

RUN;

/**      O J O      **/

/*=====*/
/*      Cobertura e utilización de los      */
/*      servicios de salud                    */
/*=====*/

/*          TABLA 5A          */
PROC FREQ DATA=D.VUL1_3HO;
TITLE1 'NUMERO DE AFILIADOS POR HOGAR (INCLUYE TODAS LAS FAMILIAS)';
TITLE2 'TABLA 5A';
TABLES NAFILH NSIS AFIL SISBEN;
RUN;

/*          TABLA 5B          */
PROC FREQ DATA=D.VUL1_3;
TITLE1 'Afiliados a EPS, ARS y ESS (N° de personas) por edad y
parentesco';
TITLE2 'TABLA 5B';
TABLES AGECLPS AFIL;
RUN;

PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE1 'Afiliados a EPS, ARS y ESS (N° de personas) por edad y
parentesco';
TITLE2 'TABLA 5B';
CLASS AFIL AGECLPS;
VAR Z;
TABLE (AGECLPS ALL), (AFIL ALL)*(Z)*(N='No Personas' PCTSUM <AFIL ALL>
          PCTSUM <AGECLPS ALL>)/RTS=10;

RUN;

PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE1 'Afiliados a EPS, ARS y ESS (N° de personas) por edad y
parentesco';
TITLE2 'TABLA 5B';

```

```

CLASS PRTHOOD AFIL ;
VAR Z;
TABLE (PRTHOOD ALL), (AFIL ALL)*(Z)*(N='No Personas' PCTSUM <AFIL ALL>
      PCTSUM <PRTHOOD ALL>)/RTS=10;
RUN;

```

```

/*          TABLA 5C          */
PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE 'Afiliados a EPS, ARS y ESS por ingreso';
TITLE 'TABLA 5C';
CLASS INCOME AFIL ;
VAR Z;
TABLE (INCOME ALL), (AFIL ALL)*(Z)*(N='No Personas' PCTSUM <AFIL ALL>
      PCTSUM <INCOME ALL>)/RTS=10;
RUN;

```

```

/* INCOME MODIFICADO */

```

```

PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE 'Afiliados a EPS, ARS y ESS por ingreso';
TITLE 'TABLA 5C';
CLASS INGRESO AFIL ;
VAR Z;
TABLE (INGRESO ALL), (AFIL ALL)*(Z)*(N='No Personas' PCTSUM <AFIL ALL>
      PCTSUM <INGRESO ALL>)/RTS=10;
RUN;

```

```

/*          TABLA 5D          */
PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE1 'EDUCACION DEL JEFE DE HOGAR EDUC1';
TITLE2 'TABLA 5D';
CLASS AFIL EDUC1 HEAD;
VAR Z;
TABLE (EDUC1 ALL), (AFIL ALL)*(HEAD ALL)*(Z)*(N='No Personas' PCTSUM
<AFIL ALL>
      PCTSUM <HEAD ALL>)/RTS=20;
WHERE PRTHOOD=99;
RUN;

```

```

PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE 'EDUCACION DEL JEFE DE HOGAR EDUC2';
TITLE2 'TABLA 5D';
CLASS AFIL EDUC2 HEAD;
VAR Z;
TABLE (EDUC2 ALL), (AFIL ALL)*(HEAD ALL)*(Z)*(N='No Personas' PCTSUM
<AFIL ALL>
      PCTSUM <HEAD ALL>)/RTS=20;
WHERE PRTHOOD=99;
RUN;

```

```

/*          TABLA 5F          */
PROC TABULATE DATA=D.VUL1_3 NOSEPS;

```

```

CLASS AFIL EDUC2;
TITLE2 'TABLA 5F';
VAR Z;
TITLE 'EDUCACION DE LA ESPOSA DEL JEFE DE HOGAR EDUC2';
TABLE (EDUC2 ALL), (AFIL ALL)*Z*(N='No Personas' PCTSUM <AFIL
ALL>)/RTS=10;
WHERE PRTHOOD=4;
RUN;

/*          TABLA 5H          */

/* POR HOGAR */

/* PORCENTAJE DE AFILIACION*/
PROC FREQ DATA=D.VUL1_3HO;
TITLE ' FRECUENCIA PORCENTAJES AFILIACION,SISBENIZACION';
TABLES RAZONAFI RAZONSIS;
RUN;

PROC UNIVARIATE DATA=D.VUL1_3HO;
TITLE ' DESCRIPTIVA PORCENTAJES AFILIACION,SISBENIZACION';
VAR RAZONAFI RAZONSIS NSIS NAFILH;
RUN;

PROC TABULATE DATA=D.VUL1_3HO NOSEPS;
TITLE1 'POR LO MENOS UN AFILIADO EN EL HOGAR Y POR LO MENOS UNO
AFILIADO AL SISBEN';
TITLE2 'TABLA 5H';
CLASS SIS AFILI ;
VAR Z;
TABLES (AFILI ALL), (SIS ALL)*Z*(N='N° HOG' PCTSUM<SIS ALL>
PCTSUM<AFILI ALL>)/RTS=10;
RUN;

/*          TOCA FORMAR OTROS ARCHIVOS
PROC TABULATE DATA=D.VUL1_3HO NOSEPS;
TITLE1 'POR LO MENOS UN AFILIADO EN EL HOGAR Y POR LO MENOS UNO
AFILIADO AL SISBEN';
TITLE2 'TABLA 5H';
CLASS SIS AFILI INGRESO;
VAR Z;
TABLES (AFILI ALL), (SIS ALL)*Z*(N='N° HOG' PCTSUM<SIS ALL>
PCTSUM<AFILI ALL>)/RTS=10;
RUN;

PROC TABULATE DATA=D.VUL1_3HO NOSEPS;
TITLE1 'POR LO MENOS UN AFILIADO EN EL HOGAR Y POR LO MENOS UNO
AFILIADO AL SISBEN';
TITLE2 'TABLA 5H';
CLASS SIS AFILI INCOME;
VAR Z;
TABLES (AFILI ALL), (SIS ALL)*Z*(N='N° HOG' PCTSUM<SIS ALL>
PCTSUM<AFILI ALL>)/RTS=10;
RUN; */

```

```
/* POR RESPOND */
```

```
PROC TABULATE DATA=D.VUL1_3 NOSEPS;  
TITLE1 'Afiliados a EPS, ARS y ESS , por entidad de afiliación y  
afili sisben';  
TITLE2 'SOLO ENCUESTADOS '  
TITLE3 'TABLA 5H';  
CLASS SISBEN HEALTH1;  
VAR Z;  
TABLES (HEALTH1 ALL),SISBEN*Z*(N='N° PER' PCTSUM<SISBEN ALL>  
PCTSUM<HEALTH1 ALL>)/RTS=10;  
WHERE (RESPOND NOT IN(.) AND AFIL=1);  
RUN;
```

```
PROC TABULATE DATA=D.VUL1_3 NOSEPS;  
TITLE1 'afiliación y por afili SISBEN';  
TITLE2 'SOLO ENCUESTADOS '  
TITLE3 'TABLA 5H';  
CLASS SISBEN AFIL;  
VAR Z;  
TABLES (AFIL ALL),(SISBEN ALL)*Z*(N='N° PER' PCTSUM<SISBEN ALL>  
PCTSUM<AFIL ALL>)/RTS=10;  
WHERE RESPOND NOT IN(.);  
RUN;
```

```
PROC TABULATE DATA=D.VUL1_3 NOSEPS;  
TITLE1 'Afiliados a EPS, ARS y ESS , por entidad de afiliación y por  
ingreso';  
TITLE2 'SOLO ENCUESTADOS '  
TITLE3 'TABLA 5H';  
CLASS SISBEN HEALTH1 INGRESO;  
VAR Z;  
TABLES (HEALTH1 ALL),SISBEN*INGRESO*Z*(N='N° PER' PCTSUM<SISBEN ALL>  
PCTSUM<HEALTH1 ALL>)/RTS=10;  
WHERE (RESPOND NOT IN(.) AND AFIL=1);  
RUN;
```

```
PROC TABULATE DATA=D.VUL1_3 NOSEPS;  
TITLE1 'Afiliados a EPS, ARS y ESS , por entidad de afiliación y por  
afili SISBEN';  
TITLE2 'SOLO ENCUESTADOS '  
TITLE3 'TABLA 5H';  
CLASS SISBEN AFIL INGRESO;  
VAR Z;  
TABLES INGRESO,SISBEN*Z*(N='N° PER' PCTSUM<SISBEN ALL> PCTSUM<INGRESO  
ALL>)/RTS=10;  
WHERE (RESPOND NOT IN(.) AND AFIL=1);  
RUN;
```

```
/* POR PERSONA */
```

```
PROC FREQ DATA=D.VULNER3;  
TABLES HEALTH1;
```

```
WHERE AFIL=1;
RUN;
```

```
PROC TABULATE DATA=D.VULNER3 NOSEPS;
TITLE1 'Afiliados a EPS, ARS y ESS , por entidad de afiliación y por
ingreso';
TITLE2 'TODOS ';
TITLE3 'TABLA 5H';
CLASS SISBEN HEALTH1;
VAR Z;
TABLES (HEALTH1 ALL),SISBEN*Z*(N='N° PER' PCTSUM<SISBEN ALL>
PCTSUM<HEALTH1 ALL>)/RTS=10;
WHERE AFIL=1;
RUN;
```

```
PROC TABULATE DATA=D.VUL1_3 NOSEPS;
TITLE1 'Afiliados a EPS, ARS y ESS , por entidad de afiliación y por
afili SISBEN';
TITLE2 'TODOS ';
TITLE3 'TABLA 5H';
CLASS SISBEN AFIL INGRESO;
VAR Z;
TABLES (AFIL ALL),(SISBEN ALL)*Z*(N='N° PER' PCTSUM<SISBEN ALL>
PCTSUM<AFIL ALL>)/RTS=10;
WHERE AFIL=1;
RUN;
```

c. Transferring the data base from SAS to SPAD

```
PROC CONTENTS DATA=D.VULNERA;
RUN;
PROC CONTENTS DATA=D.VULNER3;
RUN;
```

```
PROC FREQ DATA=D.VULNERA;
RUN;
```

```
DATA VULNERA;
SET D.VULNERA;
FORMAT CCAUSE1 1.0
CCAUSE2 1.0
CCCAUSE1 2.0
CCCAUSE2 2.0
CCONSEQ1 1.0
CCONSEQ2 1.0
CCONSEQ3 1.0
CCONSEQ4 1.0
CCONSEQ5 1.0
CSTRATG1 1.0
CSTRATG2 1.0
CSTRATG3 1.0
CSTRATG4 1.0
CSTRATG5 1.0
DCONSEQ1 2.0
```

```

DCONSEQ2 2.0
DCONSEQ3 2.0
DCONSEQ4 2.0
DCONSEQ5 2.0
DSTRATG1 1.0
DSTRATG2 1.0
DSTRATG3 1.0
DSTRATG4 1.0
DSTRATG5 1.0
INTVIEW 2.0
LOCALITY 1.0
NEVENT 2.0
SECTOR 4.0
TIMING 4.0
;
RUN;

DATA VULNER3(KEEP=SECTOR LOCALITY INTVIEW SISBEN: AFIL: IDENTH);
SET D.VULNER3;
IF AFIL IN(1) THEN AFIL1=1;
ELSE AFIL1=0;
IF SISBEN IN(1) THEN SISBEN1=1;
ELSE SISBEN1=0;
RUN;

PROC SORT DATA=VULNER3;
BY IDENTH;
RUN;

DATA VULNER3 (KEEP=SECTOR LOCALITY INTVIEW SISBEN2 AFIL2 IDENTH);
SET VULNER3;
RETAIN NSIS NAFIL;
BY IDENTH;
IF FIRST.IDENTH THEN DO;
    NAFIL=0;NSIS=0;
END;
NAFIL=NAFIL+AFIL1;
NSIS=NSIS+SISBEN1;
IF LAST.IDENTH THEN DO;
    IF NAFIL=0 THEN AFIL2=2;
    ELSE AFIL2=1;
    IF NSIS=0 THEN SISBEN2=2;
    ELSE SISBEN2=1;
    OUTPUT;
END;
RUN;

DATA VULNERA (DROP=L SECT E IDENT IDENTEV TIMING );
SET VULNERA;
FORMAT SECTOR 4.0 LOCALITY 1.0 INTVIEW 2.0;
LENGTH SECT $ 4 L $1 E $2 IDENT $ 7;
L =LOCALITY; SECT=SECTOR;
IF INTVIEW=9 THEN E='09';
ELSE IF INTVIEW=8 THEN E='08';
ELSE IF INTVIEW=7 THEN E='07';
ELSE IF INTVIEW=6 THEN E='06';

```

```
ELSE IF INTVIEW=5 THEN E='05';
ELSE IF INTVIEW=4 THEN E='04';
ELSE IF INTVIEW=3 THEN E='03';
ELSE IF INTVIEW=2 THEN E='02';
ELSE IF INTVIEW=1 THEN E='01';
ELSE E=INTVIEW;
IDENTH=L||SECT||E;
IF NEVENT=. THEN NEVENT=0;          /*OJO*/
RUN;
```

```
/*PROC SORT DATA=VULNERA NODUP;
BY SECTOR--IDENTH;
RUN;*/
```

```
PROC SORT DATA=VULNERA;
BY IDENTH;
RUN;
PROC SORT DATA=VULNER3;
BY IDENTH;
RUN;
```

```
DATA VUL;
MERGE VULNERA VULNER3;
BY IDENTH;
IF NEVENT=. THEN DELETE;
RUN;
```

```
DATA VUL(DROP=INTVIEW Z IDENTH);
SET VUL;
RUN;
```

```
/* EXPORTAR*/
```

6. Bibliography

- Ahumada, C. (1996). *El modelo neoliberal y su impacto en la sociedad colombiana*, Bogotá, Colombia: El Ancora Editores.
- Alkire, S. (2005), 'Why the Capability Approach?', *Journal of Human Development*, Vol. 6, No. 1: 115-135.
- Alkire, S. (2007). 'Choosing dimensions: the capability approach and multidimensional poverty', Oxford: Chronic Poverty Research Centre, Working Paper N.88.
- Allen, A, Dávila, J. and Hoffmann, P. (2006). 'The peri-urban water poor: citizens or consumers', *Environment and Urbanization*, Vol. 18, No.2:333 – 351.
- Amis, P. (1995). 'Making sense of urban poverty', *Environment and Urbanization*, Vol. 7, No.1: 145-158, April.
- Amis, P. (2002). 'Municipal Government, Urban Economic Growth and Poverty, in Rakodi, C. (ed.), *Urban Livelihoods: a People-Centred Approach to Reducing Poverty*. London and Sterling, VA: Earthscan.
- Amis, P. and Rakodi, C. (1994). 'Urban Poverty: Issues for Research and Policy', *Journal of International Development*, Vol. 6, No. 5: 627-634.
- Ardila, A. (2006). 'El transporte público en el plan maestro de movilidad: una mirada crítica', in 'El futuro de la movilidad en Bogotá, Reflexiones a propósito del plan maestro de movilidad', Cuaderno del Informe del Desarrollo Humano para Bogotá, Bogotá, PNUD y Editorial El Malpensante.
- Arraigada Luco, C. (2001). 'Servicios sociales y vulnerabilidad e América Latina: conceptos, medición e indagación empírica. Documento para el Seminario Internacional sobre 'Las diferentes expresiones de la vulnerabilidad social e América Latina y el Caribe. Santiago de Chile, 20 y 21 de junio: CEPAL, CELADE.

Bagchi, D.K. et al. (1998). 'Conceptual and methodological challenges in the study of livelihood trajectories: case-studies in Eastern India and Western Nepal', *Journal of International Development*, Vol. 10: 453-468.

Banco de la República (1995), *La economía colombiana: temas de comercio y desarrollo*. Bogotá: Banco de la República.

Bankoff, G., Frerks, G. and Hilhorst, D. (Eds.) (2004). *Mapping Vulnerability: Disasters, Development and People*, London and Sterling, VA: Earthscan.

Barrientos, A., Hulme, D. and A. Shepherd (2005). 'Can Social Protection tackle Chronic Poverty?' *European Journal of Development Research*, Vol. 17, No.1: 8-23.

Barrientos, A. (2006). 'Does vulnerability create poverty traps?', CPRC paper, IDS, University of Sussex: Brighton.

Barros, R. P. and Mendonça, R. (1997). 'A absorção de mão-de-obra no setor serviços', *Dados - Revista de Ciências Sociais*, Vol. 40, No. 1. Cited by Salama (2003).

Beall, J. (1993) 'The Gender Dimensions of Urbanization and Urban Poverty', Paper prepared for the Advancement of Women, United Nations Office at Vienna.

Beall, J. (1995). 'Social Security and Social Networks Among the Urban Poor in Pakistan', *Habitat International*, Vol. 19, No.4: 427-445.

Beall, J. (2000). 'From the culture of poverty to inclusive cities: re-framing urban policy and politics', *Journal of International Development*, Vol.12: 843-856.

Beall, J. (2005). *Funding local governance: small grants for democracy and development*, London: ITDG Publishing.

Beall, J. and Kanji, N. (1999). 'Households, livelihoods and urban poverty', Working Paper Three, Urban Governance, Partnership and Poverty, International Development Department, Birmingham: University of Birmingham.

Beall, J. and Kanji, N. (2002). 'Living in the Present, Investing in the Future – Household Security Among the Poor', in Rakodi, C. (ed.), *Urban Livelihoods: a People-Centred Approach to Reducing Poverty*. London and Sterling, VA: Earthscan.

Bebbington, A., (1999). 'Capitals and Capabilities: A Framework for Analyzing Peasant Viability, Rural Livelihoods and Poverty', *World Development*, Vol. 27, No.12: 2021-2044.

Behrman, J.R., Gaviria, A. and Székely, M. (Eds.) (2003). *Who's In and Who's Out: Social Exclusion in Latin America*, Washington, D.C: Inter-American Development Bank.

Beck, T. (1989). 'Survival Strategies and Power amongst the Poorest in a West Bengal Village', *IDS bulletin*, Vol.20, No.2: 23-32, April.

Beck, U. (1992). *Risk Society: Towards a New Modernity*, London, Thousand Oaks and New Delhi: Sage.

Blackwood, D. L. and Lynch, R. G. (1994). 'The Measurement of Inequality and Poverty: A Policy Maker's Guide to the Literature', *World Development*, Vol. 22, No. 4: 567-578.

Boltvinik, J. (1991). 'Conceptos y mediciones de la pobreza predominantes en América Latina. Evaluación crítica', in Fresneda, O., Sarmiento, L and Muñoz, M.C. (Eds), *Pobreza, violencia y desigualdad_ retos para la nueva Colombia*, Bogotá: United Nations Development Programme-Colombia.

Briceño-León, R. and Sonntag, H. (Eds.) (1998). *Pueblo, época y desarrollo: la sociología de América Latina*, CENDES and LACSO, Caracas: Editorial Nueva Sociedad.

Campbell, J. and Holland, J. (Eds.) (2005). 'Introduction', in Campbell, J. and Holland, J. (Eds.) *Methods in Development Research: combining qualitative and quantitative approaches*, Derby: ITDG.

Capra, F. (1996). *The Web of Life: A New Scientific Understanding of Living Systems*. New York: Anchor Books.

Cárdenas, C., Bollin, C., Hahn, H. and Vatsa, K, (2003). 'Gestión del Riesgo de desastres por comunidades y gobiernos locales', New York: Banco Interamericano de Desarrollo, Departamento de Desarrollo Sostenible.

Cardona, O., Yamin, L., Arámbula, S. and Molina, S. (2002). 'Retención y transferencia de riesgo sísmico en Colombia', Centro de Estudios Sobre Desastres y Riesgos Naturales (CEDRERI), Bogotá: Universidad de los Andes.

Carney, D. (ed.) (1998). *Sustainable Rural Livelihoods*, London: Department for International Development.

Castaño, H.L. y Núñez Méndez, J. (2007). *Pobreza y desigualdad en Colombia – Diagnóstico y Estrategias*, Bogotá: Misión para una Estrategia para la Reducción de la Pobreza y la Desigualdad, DNP.

Castells, M. (1996). *The Rise of the Network Society*, Vol I., Oxford: Blackwell.

CCB (2001). 'Indicadores sociales de la región andina', Observatorio Social de Bogotá No. 8, Bogotá: Cámara de Comercio de Bogotá.

CEPAL (2002). *Globalización y Desarrollo*, Santiago de Chile: CEPAL.

Chamber of Commerce of Bogotá <http://camara.ccb.org.co/default1.asp>

- Chambers, R. (1983). *Rural Development: Putting the Last First*, Harlow: Longman.
- Chambers, R. (1989). 'Vulnerability, Coping and Policy', *IDS bulletin*, Vol.20, No.2: 1-7, April.
- Chambers, R. (1995). 'Poverty and livelihoods: whose reality counts?', *Environment and Urbanization*, Vol.7, No.1: 173-204, April.
- Chambers, R. and Conway, G.R. (1992). 'Sustainable livelihoods: practical concepts for the 21st century'. IDS Discussion paper No. 296, Brighton: IDS.
- Chant, S., (1991). *Women and survival in Mexican cities*, Manchester and New York: Manchester University Press.
- CGR (2004). 'Evaluación de la política social 2003. Colombia', Bogotá: Imprenta Nacional, Marzo.
- CID (2004). 'Bien-estar y macroeconomía: informe de coyuntura, Bogotá: CID – UNAL – CGR.
- Cornia, A.G. (ed.) (2004). *Inequality, growth and poverty in an era of liberalization and globalization*, Oxford: Oxford University Press.
- Cornia, A.G. et al. (Eds.) (1987). *Adjustment with a Human Face*, Vols. 1 and 2, Oxford: Clarendon Press.
- Corredor, C. (Ed.) (1999). *Pobreza y Desigualdad: Reflexiones conceptuales y de medición*, Santa Fe de Bogotá: CINEP.
- Corredor, C. (2000), 'Pobreza y eficiencia social', Cuadernos del PNUD y del Ministerio para la Protección Social No. 1, Bogotá: PNUD and MPS.

CPRC (2005). *Chronic Poverty Report 2004-5*, Manchester: Chronic Poverty Research Centre, University of Manchester.

Cristancho, H. and León, N. (2008). 'Las transformaciones e los espacios rurales del norte de Bogotá', in Palacio, G. et al. (Eds.), *Historia ambiental de Bogotá y la Sabana, 1850-2005*, Bogotá: Universidad Nacional de Colombia and Instituto Amazónico de Investigación IMANI.

Cuervo, L.M. et al., 2002, 'Bogotá', in Dureau, F. et al (Coord.) *Metrópolis en movimiento*, Bogotá: Alfaomega.

DAPD 1997, *Estadísticas Santa Fe de Bogotá, D.C.*, Bogotá: Departamento Administrativo de Planeación Distrital.

Dávila, J. (2004). *La transformación de Bogotá*, Bogotá: Tercer Mundo.

Dávila, J. (2009). 'Being a mayor: The view from four Colombian cities', *Environment and Urbanization*, Vol. 21, No. 1: forthcoming.

Davis Lewis, N. and Kiefferam, E. (1994). 'The health of women: Beyond maternal and child health', in Phillips, D.R. and Verhasselt, Y., *Health and Development*. London, New York: Routledge.

Doyal, L. and Gough, I. (1991). *A Theory of Human Needs*, London: Macmillan.

Duque Franco, I. (2008). 'Planeamiento Urbano en Bogotá 1994-2007: La Construcción de un Modelo', *Scripta Nova*, Vol. XII, No. 270 (57). Available at <http://www.ub.es/geocrit/sn/sn-270/sn-270-57.htm> Last consulted March 22nd, 2009.

de Haan, A. (1999). 'Livelihoods and Poverty: The Role of Migration – A Critical Review of the Migration Literature', *Journal of Development Studies*, Vol. 36, No. 2: 1-47, December.

de Haan, A. (2005). 'Social Policy: Towards Inclusive Institutions, Paper presented at the Arusha Conference on "New Frontiers of Social Policy", December 12-15.

de Haan, A., Holland, J. and Kanji, N. (2002). 'Social Funds: an effective instrument to support local action for poverty reduction?', *Journal of International Development*, Vol. 14: 643-652.

De Sherbinin, A., Schiller, A., and Pulsipher, A. (2007). 'The vulnerability of global cities to climate hazards'. *Environment & Urbanization*, Vol. 19, No 1: 39-64.

DANE (1987). *La Pobreza en Bogotá: Descripción Cuantitativa*, Santa Fe de Bogotá: DANE, PNUD, UNICEF, DNP.

DANE (1998). Evolución de la pobreza en Colombia, medida por necesidades básicas insatisfechas - NBI, 1991, 1993-1995, Santa Fe de Bogotá: DANE, *boletín de estadística* No.520, julio.

DANE, (2000), *Las migraciones internas en Colombia 1988-1993*, Bogotá: Departamento Administrativo Nacional de Estadística (DANE).

DANE, (2003), *Evidencia reciente del comportamiento de la migración interna en Colombia a partir de la Encuestas Continua de Hogares*. Bogotá: Departamento Administrativo Nacional de Estadística (DANE).

DANE (2005), 'Censo General 2005', available at <http://www.dane.gov.co/censo/>

DAPD (1997). *Estadísticas de Santa Fe de Bogotá, D.C.* Alcaldía Mayor de Santa Fe de Bogotá, Santa Fe de Bogotá: Departamento Administrativo de Planeación Distrital.

DFID (1999). 'Sustainable livelihood guidance sheets', London: Department for International Development.

DNP (2005). *Visión Colombia II Centenario, 2019: Propuesta para Discusión*, Bogotá, D.C.: DNP.

Doyal, L. and Gough, I. (1986). *A Theory of Human Needs*, London: Macmillan.

Dréze, J. and Sen, A. K. (1989). *Hunger and Public Action*, Oxford: Clarendon Press.

Du Toit, A. (2004). 'Social Exclusion': Discourse and Chronic Poverty: A South African Case Study, *Development and Change*, Vol.35, No.5: 987-1010.

ECLAC (2004). *Productive development in open economies*, ECLAC: Santiago de Chile
Available at <http://www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/2/15082/P15082.xml&xsl=/tpl-i/p9f.xsl&base=/tpl-i/top-bottom.xslt> . Last consulted May, 3rd 2009.

Ellis, F. (1998). 'Household Strategies and Rural Livelihood Diversification', *Journal of Development Studies*, Vol. 35, No. 1: 1-38.

ECLAC (2006). *Shaping the Future of Social Protection: Access, Financing and Solidarity*. ECLAC: Santiago de Chile.

Evans, T. (1989). 'The Impact of Permanent Disability on Rural Households: River Blindness in Guinea', *IDS bulletin*, Vol.20, No.2: 41-48, April.

Fals Borda, O. (2000). 'El territorio como construcción social', *Revista Foro*, No.38: 45-51, Marzo.

Feachem, R.G.A. et al. (Eds.) (1992). *The Health of Adults in the Developing Countries*. World Bank, New York, Washington D.C.: Oxford University Press.

Filgueira, C. (2001). 'Estructura de Oportunidades y Vulnerabilidad Social: Aproximaciones Conceptuales Recientes', CEPAL and CELADE, Seminario Internacional sobre Las Diferentes Expresiones de la Vulnerabilidad Social en América Latina y el Caribe, Santiago de Chile: CEPAL.

Fine, B. (1999). 'The Developmental State is Dead – Long Live Social Capital?', *Development and Change*, Vol.30: 1-19.

Fine, B. (2001). *Social capital versus social theory: political economy and social science at the turn of the millennium*, London: Routledge.

Flórez, C. E. (2003), 'Migration and the Urban Informal Sector in Colombia', Conference on African Migration in Comparative Perspective, Johannesburg, South Africa.

Ford Foundation (2004). *Building Assets to Reduce Poverty and Injustice*, New York: Ford Foundation.

Frank, A. G. (1969). *Capitalism and underdevelopment in Latin America: historical studies of Chile and Brazil*. (Revised ed.), New York & London: Monthly Review Press.

Fresneda, O. (1991). 'Dimensión y características de la pobreza en Colombia', in Fresneda, O. et al. (Eds.), *Pobreza, Violencia y Desigualdad: Retos para la Nueva Colombia*. Bogotá. Programa de las Naciones Unidas para el Desarrollo.

Fresneda, O. (2003). 'La Focalización en el Régimen Subsidiado de Salud: Elementos para un Balance', *Salud Pública*, Vol. 5, No. 3: 209 – 245.

Fresneda, O. (2007). 'La medida de necesidades básicas insatisfechas (NBI) como instrumento de medición de la pobreza y focalización de los programas', Oficina de la CEPAL en Bogotá, *Serie Estudios y Perspectivas* No.18, Bogotá: CEPAL.

Fresneda, O. et al. (Eds.) (1991). *Pobreza, Violencia y Desigualdad: Retos para la Nueva Colombia*, United Nations Development Programme-Colombia.

García, M.C. and Zamudio, J.V. (1997). *Descentralización en Bogotá bajo la lupa (1992-1996)*, Bogotá: CINEP.

Garay, L.J. (2002). *Colombia entre la exclusión y el desarrollo: propuesta para la transición al Estado Social de Derecho*, Bogotá: Contraloría General de la República.

Gasper, D. (1996). *Needs and Basic Needs: A clarification of meanings, levels and different streams of work*, Institute of Social Studies, Working Paper No. 210, The Hague: Institute of Social Studies.

Gasper, D. (2004). *The Ethics of Development*, Edinburgh: Edinburgh University Press.

Gasper, D. (2007). 'Human Rights, Human Needs, Human Development, Human Security: Relationships between Four International 'Human' Discourses', The Hague: Institute of Social Studies (ISS).

Gaviria, A. (2000). '¿Sobre quién ha recaído el peso de la crisis? Un análisis preliminar usando la Encuesta Social de Fedesarrollo'. Trabajo preparado para la consultoría para la Focalización, Cobertura y Efectividad de la Red de Protección Social en Colombia, Bogotá, Noviembre: Banco Interamericano de Desarrollo y Banco Mundial.

Ghai, D. (ed.) (1991). *The IMF and the South: The Social Impact of Crisis and Adjustment*. United Nations Research Institute for Social Development, London: Zed Books Ltd.

Gilbert, A. (1974). *Latin American Development: A geographical perspective*, Harmondsworth: Penguin.

Gilbert, A. (1997). 'Employment and poverty during Economic Restructuring: The Case of Bogotá, Colombia', *Urban Studies*, Vol. 34, No. 7: 1047-1070.

Gilbert, A. and Gugler, J. (1992). *Cities, poverty and development: urbanization in the Third World*, New York Oxford University Press.

González de la Rocha, M.G. (1994). *The Resources of Poverty. Women and Survival in a Mexican City*, Cambridge, Massachusetts and Oxford: Blackwell.

González de la Rocha, M. and Grispun, A. (2001). 'Private Adjustments: Households, Crisis and Work', in *Choices for the Poor: Lessons from National Poverty Strategies*, New York: UNDP.

Gore, C. (2000). 'The Rise and Fall of the Washington Consensus as a Paradigm for Developing Countries', *World Development*, Vol. 28, No. 5: 789-804.

Gouëset, V. (1998). *Bogotá: nacimiento de una metrópoli*, Bogotá: Tercer Mundo Editores.

Gough, I., McGregor, A. and Camfield, L., 2007, 'Theorising wellbeing in international development', in *Wellbeing in Developing Countries: From Theory to Research*, Cambridge University Press: Cambridge.

Graham, C. (2002). 'Mobility, Opportunity and Vulnerability: The Dynamics of Poverty and Inequality in a Global Economy', *Journal of Human Development*, Vol. 3, No. 1: 57-94.

Granada Rodríguez, J. (1991). 'La Lucha contra la Pobreza 1986 – 1990', in Fresneda, O. et al. (Eds.) (1991). *Pobreza, Violencia y Desigualdad: Retos para la Nueva Colombia*, Bogotá: Programa de las Naciones Unidas para el Desarrollo.

Greeley, M. (1994). 'Measurement of Poverty and Poverty of Measurement', *IDS Bulletin*, Vol. 25, No. 4: 50-58.

Gugler, J. (ed.) (1996). *The Urban Transformation of the Developing World*, Oxford and New York: Oxford University Press.

Gough, I. and Wood, G. (2004). *Insecurity and Welfare Regimes in Asia, Africa and Latin America: Social Policy in Development Context*, Cambridge: Cambridge University Press.

Greenacre, M. (1994). 'Correspondence Analysis and its Interpretation', in Greenacre, M. and Blasius, J. (Eds.), *Correspondence analysis in the social sciences: recent developments and applications*, London and San Diego, CA: Academic Press.

Greenacre, M. and Blasius, J. (Eds.) (1994). *Correspondence analysis in the social sciences: recent developments and applications*, London and San Diego, CA: Academic Press.

Hall, A. and Midgley, J. (2004). *Social Policy for Development*, London, Thousand Oaks and New Delhi: Sage Publication.

Hardoy, J. and Satterthwaite, D. (1989). *Squatter citizens: life in the urban Third World*, London: Earthscan.

Harpham, T. (2002). *Measuring child poverty and health: a new international study*, London: Young Lives.

Harpham, T., and Stephens, C. (1991). *Urbanization and Health in Developing Countries*, Geneva: WHO.

Harpham, T. et al. (Eds.) (1988). *In the Shadow of the City*, New York: Oxford University Press.

Harpham, T., and Tanner, M. (Eds.) (1995). *Urban Health in Developing Countries: Progress and Prospects*, London: Earthscan.

Harris, J., and De Rienzo, P. (1997). 'Missing Link' or Analytically Missing?: The Concept of Social Capital', *Journal of International Development*, Vol. 9, No.7: 919-937.

Harrison, D. (1988). *The Sociology of Modernization & Development*, London, New York: Routledge.

Holzmann, R. and Jorgensen, S. (1999). 'Social Protection as Social Risk Management: Conceptual Underpinning for the Social Protection Strategy Papers', Washington, D.C.: The World Bank.

Holzmann, R. and Jorgensen, S. (2001). 'Risk and Vulnerability: The Forward Looking Role of Social Protection in a Globalizing World', Washington, D.C.: The World Bank.

Hausermann, J. (1998). *A human rights approach to development*, London: Rights and Humanity.

Hubbard, M. (2001). 'Attacking poverty – A strategic dilemma for the World Bank', *Journal of International Development*, Vol. 13: 293-298.

Hulme, D. and Shepherd, A. (2003). 'Conceptualizing Chronic Poverty', *World Development*, Vol. 31, No.3: 403-423.

Hunt, P., Osmani, S. and Nowak, M. (2004). 'Summary of the Draft Guidelines on a Human Rights Approach to Poverty Reduction, Geneva: OHCHR and Swiss Development Cooperation. – www.unhchr.ch/development/poverty.html

Huq, S. & Reid, H. (2005). 'Climate Change and Development', in Murray, L. (Ed.) 'Sectorial Issue, Section 2.3, Natural Disasters', London: IIED.

IDS (1989). 'Vulnerability, coping and policy', *IDS bulletin*. Vol.20, No.2:1-7, April.

IPCC (2007). 'Climate Change 2007: Impacts, Adaptation and Vulnerability: Working Group II Contribution to the Intergovernmental Panel on Climate Change, Fourth Assessment Report, Summary for policy makers', Brussels: WMO, UNEP, April.

Jaramillo, S. (1982). *Producción de vivienda y capitalismo dependiente, el caso de Bogotá*, Bogotá: CEDE – Unidandes.

Jaramillo Pérez, Y. (1997). *El futuro de la Salud: la ley 100 de 1993. Política Social, Mercado y Descentralización*, Bogotá: Fundación Corona, tercera edición.

Jodha, N.S. (1988). 'Poverty debate in India: a minority view', *Economic and Political Weekly*. Special Number: 2421-2428, November.

Kanbur, R.. (2001). 'Economic Policy, Distribution and Poverty: The Nature of Disagreements', *World Development*, Vol.29, No. 6:1083-94.

Kanji, N. and Barrientos, S. (2002). 'Trade liberalisation, poverty and livelihoods: understanding the linkages'. IDS Working Paper No. 159. Brighton: IDS.

Krugman, P. (1998). 'What's about the new economic geography?', *Oxford Review of Economic Policy*, Vol. 14: 7-17.

Lewis, O. (1959). *Five Families: Mexican case studies in the culture of poverty*, New York: Basic Books.

Lipton, M. (1997). 'Defining and Measuring Poverty: Conceptual Issues', *Human Development Papers 1997*, UNDP, Human Development Research Office: New York.

Loughhead, S. (2000). 'Urban Poverty and Vulnerability in India: A Social Development Perspective', A discussion paper for South Asia Urban and City Management Course, Goa, India, January 9-21.

Lulle, T. (2000). 'Bogotá: los costos del laissez-faire', in Dureau, F. et al. (Eds.), *Metrópolis en Movimiento: Una comparación internacional*, Bogotá: Alfaomega and Institut de Recherche pour le developpment.

Lustig, N. (1989.) 'The Impact of The Economic Crisis on Living Standards In Mexico: 1982- 1985', Workign Paper No. 75, Washington: The Brookings Institution. Cited in Salama (2003).

Max-Neef, M. (1991). *Human scale development: conception, application and further reflections*, New York: The Apex Press.

Maxwell, S. (2001). 'Innovative and important, yes, but also instrumental and incomplete: the treatment of redistribution in the new 'new poverty agenda'', *Journal of International Development*, Vol.13: 331-341.

McIlwine, C. and Moser, C. (2004). 'Drugs, alcohol and community tolerance: an urban ethnography from Colombia and Guatemala', *Environment & Urbanization*, Vol. 16, No. 2: 49 – 62.

Medina, A. (1997). Régimen Subsidiado en *Ley 100: un año de implementación*, Bogotá: Fundación FES.

Misión Social (2002). *Familias colombianas: estrategias frente al riesgo*, Bogotá: DNP – PNUD – ICBF – Misión Social.

Mitchell, D. (2008). 'A knot on rising food prices', Washington D.C., The World Bank.

Mitlín, D. (2003). 'The Economic and Social Processes Influencing the Level and Nature of Chronic Poverty in Urban Areas', University of Manchester, Chronic Poverty Research Centre (CPRC) Working Paper No.29.

Molina, E. S. (1996). 'Antecedentes y alcances del censo de 1993', in *Cámara de Comercio de Bogotá*, No. 87: 38-59, septiembre.

Moser, C.O.N. (1996). 'Confronting Crisis: A Comparative Study of Household Responses to Poverty and Vulnerability in Four Poor Urban Communities', Washington D.C.: The World Bank.

Moser, C.O.N. (1998). 'The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies', *World Development*, Vol. 26, No. 3: 1-19.

Moser, C. (2001). 'Insecurity and Social Protection – Has the World Bank Got It Right?', *Journal of International Development*, Vol. 13: 361-368.

Moser, C. (2004). 'Urban violence and insecurity: an introductory roadmap', *Environment and Urbanization*. Vol. 16, No.2: 3-16, October.

Moser, C. (2005). 'Assets, livelihoods and social policy'. Paper presented at the Arusha Conference on "New Frontiers of Social Policy", December 12-15.

Moser, C. (2006). 'Asset-based Approaches to Poverty Reduction in a Globalized Context: An Introduction to asset accumulation policy and summary and summary of workshop findings', Washington, D.C.: The Brooking Institution.

Moser, C. and Holland, J. (1997). '*Urban Poverty and Violence in Jamaica*', Working Paper n. 172, Washington, D.C.: The World Bank.

Moser, C. and Norton, A. (2001). 'To claim our rights: livelihoods security, human rights and sustainable development', London: Overseas Development Institute (ODI).

Mosley, P. (2001). '*Attacking Poverty* and the 'Post-Washington Consensus'', *Journal of International Development*, Vol. 13: 307-313.

Murray, C. (1999). 'Multiple Livelihoods and Social Change', University of Manchester, Institute for Development Policy and Management, Working Paper Series, No.4.

Murray, C. (2001). 'Livelihoods research: some conceptual and methodological issues', Background Paper No.5, Chronic Poverty Research Centre, September.

Narayan, D. with Patel, R., et al. (1999). *Can anyone hear us? Voices from 47 countries*, New York: Published by Oxford University Press for the World Bank.

Narayan, D. et al. (2000). *Crying out for change*, New York: Published by Oxford University Press for the World Bank.

Narayan and Walton (Eds.) (2000). *From many lands*, New York, Oxford: Oxford University Press.

Newman, P. (2006). 'The environmental impact of cities', *Environment and Urbanization*, Vol. 18, No.2: 275 – 295.

Núñez, J. y Espinosa, S. (2005). 'Asistencia social en Colombia: Diagnóstico y propuestas', *Documento CEDE 2005-42*, Bogotá: CEDE Universidad de Los Andes.

Ocampo, J.A. and Franco, R. (2000). *The equity gap: second assessment*, Santiago de Chile: ECLAC.

OIT (1969). 'Análisis comparativo de los Pactos Internacionales de Derechos Humanos y de los convenios y recomendaciones internacionales del trabajo', *Boletín Oficial*, LII, No. 2, documento preparado para el Consejo de Administración de la Oficina Internacional del Trabajo.

Pelling, M. (1998). 'Participation, social capital and vulnerability to urban flooding in Guyana', *Journal of International Development*, Vol.10: 469-486.

Pelling, M. (2002). 'Assessing urban vulnerability and social adaptation to risk: Evidence from Santo Domingo', *International Development Planning Review*, Vol.24, No.1: 59-76.

Pelling, M. (2003). *The Vulnerability of Cities: Natural Disasters and Social Resilience*, London and Sterling, VA.: Earthscan.

Peñalosa Ramos, M.C. (2004). 'Habilitación financiera de las Instituciones Prestadoras de Servicios de Salud (IPS), Bogotá: Ministerio para la Protección Social, DNP, ACCI.

Perlman, J. (1976). *The Myth of Marginality: Urban Poverty and Politics in Rio de Janeiro*, Berkley and London: University of California Press.

Pettinato, S. (2002). 'A Conceptual Primer on the Currents and Trends in Inequality', *Journal of Human Development*, Vol. 3, No.1: 23-56.

Phillips, D.R. and Verhasselt, Y. (1994). *Health and Development*, London, New York: Routledge.

Pineda, J. (2008). 'Informalidad y calidad de empleo', *Vías y escenarios de la transformación laboral: aproximaciones teóricas y nuevos problemas*, Universidad del Rosario, Vol. XXI, No.3: 281-306.

PNDH (2000). *Informe Nacional de Desarrollo Humano para Colombia*, Bogotá: PNUD-DNP, PNDH-

PNDH (2002). 'Un programa para disminuir la pobreza', Bogotá: PNUD-DNP, PNDH, mimeo.

PNDH (2003). *Diez años de desarrollo humano en Colombia*, Bogotá: DNP/PNUD/ACCI/PNDH.

PNDH (2004). *Las Regiones Colombianas frente a los Objetivos del Milenio*, Bogotá: Sistemas de las Naciones Unidas y CEPAL, PNDH/DNP/PNUD, ACCI, en alianza con la Federación Colombiana de Municipios y la Cooperación Técnica Alemana, GTZ.

PNUD (2008). *Informe sobre Desarrollo Humano para Bogotá*, PNUD, Alcaldía Mayor, Bogotá: PNUD.

Prada, F. (2001). 'La estrategia económica de las ciudades: Innovaciones y balance conceptual de la planeación local en Colombia', in Brand, P. (Ed. y comp.), *Trayectorias urbanas en la modernización del Estado en Colombia*, Bogotá: Tercer Mundo Editores, Universidad Nacional – Sede Medellín.

PROFAMILIA (1995). *Encuesta Nacional de Demografía y Salud 1995*, Bogotá: PROFAMILIA.

PROFAMILIA (2005). *Encuesta Nacional de Demografía y Salud 2005*, Bogotá: PROFAMILIA.

Pryer, J. (1989). 'When Breadwinners fall Ill: Preliminary Findings from a Case Study in Bangladesh', *IDS bulletin*, Vol.20, No.2:49-57, April.

Pryer, J., 2003, *Poverty and vulnerability in Dhaka slums: the urban livelihoods study*, Aldershot: Ashgate.

Putnam, R. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton, NJ: Princeton University Press.

Putzel, J. (1997). 'Accounting for the 'Dark Side' of Social Capital: Reading Robert Putnam on Democracy', *Journal of International Development*, Vol.9, No.7: 939-949.

Raczynski, D. (1987). 'Social Policy, Poverty, and Vulnerable Groups: Children in Chile', in Cornia, A.G. et al. (Eds.) *Adjustment with a Human Face*, Vol.2, Oxford: Clarendon Press.

Rakodi, C. (1999). 'A Capital Assets Framework for Analysing Household Livelihood Strategies', *Development Policy Review*, Vol. 17, No. 3, September: 315-342.

Rakodi, C. (2002). 'A Livelihoods Approach – Conceptual Issues and Definitions', in Rakodi, C. (ed.), *Urban Livelihoods: a People-Centred Approach to Reducing Poverty*, London and Sterling, VA.: Earthscan.

Ramírez Robledo, C.E. and Rodríguez Bravo, J.D. (2002). 'Pobreza en Colombia: Tipos de Medición y Evolución de Políticas entre los Años 1950 y 2000', *Estudios Gerenciales* No. 85: 81 – 107, Octubre.

Ravallion, M. (1992). 'Poverty Comparisons: A Guide to Concepts and Methods'. LSMS Working Paper No. 88, Washington, D. C.: The World Bank.

Ravallion, M., 2003, The Debate on globalization, poverty and inequality: why measurement matters, World Bank, Development Research Group, Poverty Team: Washington D.C.

Rincón Mesa, M.J. (2003). 'Hechos y tendencias de la población colombiana', in Wartenberg, L. (Comp.), *La Cátedra abierta en población 200-2001*, Bogotá: Fondo de Población de las Naciones Unidas, Universidad Externado de Colombia.

Rivera, R. M. (2003). 'Estudio sobre la distribución espacial de la población en Colombia'. *Serie Población y Desarrollo CEPAL N°48*, Bogotá: CEPAL.

Rodgers, G., et al. (1995). *Social Exclusion: Rhetoric, Reality, Responses*, Geneva: International Institute for Labour Studies, United Nations Development Programme.

Rossi-Espagnet, A. (1984). *Primary Health Care in Urban Areas: Reaching the Urban Poor in Developing Countries. A State-of-the-Art Report by UNICEF and WHO*, Geneva: UNICEF and WHO.

Ruggeri Laderchi, C. (2000). 'The monetary approach to poverty: a survey of concepts and methods, Queen Elisabeth House, Working Paper No. 58.

Ruggieri Laderchi, C., Saith, R., and Stewart, F. (2003). 'Does it matter that we don't agree on the definition of poverty?: A comparison of four approaches', Queen's Elizabeth House, Working Paper No 107.

Sáalama, P. (2003), 'Pobreza: la lucha contra las dos "v", volatilidad y vulnerabilidad. Promencia presentada al Seminario Internacional sobre Pobreza y Desigualdad en Colombia. Universidad Nacional de Colombia.

Sáarmiento Gómez, A. (1996). 'Un sistema de información para la gestión en salud, Bogotá: Misión Social – DNP/PNUD.

Sáarmiento Gómez, A. (2004). 'La institucionalidad social en Colombia: la búsqueda de una descentralización con centro'. Serie Políticas Sociales, No. 86, Santiago de Chile: CEPAL, División de Desarrollo Social, mayo.

Sáarmiento Gómez A. et al. (2001). Educación, Compromiso de Todos: Situación de la Educación Básica, Media y Superior en Colombia, Bogotá: CORPOEDUCACIÓN.

Sáatterthwaite, D., (1995). 'The underestimation of urban poverty and its health consequences', *Third World Planning Review*, Vol.17, No.4: iii-xii.

Sáatterthwaite, D., (1995). 'The underestimation of urban poverty and its health consequences', *Third World Planning Review*, Vol.17, No.4: iii-xii.

Sácoones, I. (1998). Sustainable Rural Livelihoods: a Framework for Analysis. IDS Working Paper No.72, Brighton: IDS.

Sácott, A.J. and Storper, M. (2003). 'Regions, globalization and development, *Regional Studies*, Vol. 37, 6 & 7: 579-593.

Sen, A.K. (1976). 'Poverty: An Ordinal Approach to Measurement', *Econometrica*, Vol. 44, No.2: 219-231.

Sen, A.K. (1981). *Poverty and Famines*, Oxford: Oxford University Press.

Sen, A.K. (1982). 'Poor, Relatively Speaking': Fifteenth Geary Lecture, Dublin: The Economic and Social Research Institute.

Sen, A.K., (1985a). *Commodities and Capabilities*, Amsterdam: North Holland.

Sen, A.K. (1985b). 'A Sociological Approach to the Measurement of Poverty: A Reply to Professor Peter Townsend', *Oxford Economic Papers, New Series*, Vol. 37, No. 669-676.

Sen, A.K. (1986). 'Food, economics and entitlements', WIDER Working Papers, World Institute for Development Economics Research of the United Nations University, February.

Sen, A.K. (1987). *The Standard of Living*, Tanner Lectures with discussion by J. Muellbauer and others, ed. G. Hawthorn, Cambridge: Cambridge University Press.

Sen, A.K. (1990). 'Development as capability expansion', in Griffin, K. & Knight, J. (Eds.), *Human Development and International Development Strategy for the 1990s*, London: New York: Oxford University Press.

Sen, A.K. (1992). *Inequality Reexamined*, New York: Oxford University Press.

Sen, A.K. (1999). *Development as Freedom*, New York: Knopf.

Sen, A.K. (2000). 'Social Exclusion: Concept, Application, and Scrutiny', *Social Development Papers*, No. 1, Manila: Asian Development Bank.

Shaffer, P. (2008). 'New thinking on poverty: Implications for globalization and poverty reduction strategies', *Economics Review*, Issue No. 47.

Simon, D. (2007). 'Urbanization and global environmental change: 21st century challenges', *The Geographical Journal*, Vol. 173, No.1: 75-92, March.

Solesbury, N. (2003). 'Sustainable livelihoods: a case study of the evolution of DFID policy. Working Paper No.17. ODI: London.

SSB (1997a). 'Conocimiento del sistema general de seguridad social en salud: población, asociaciones de usuarios y veedores ciudadanos en Santa Fe de Bogotá, Bogotá: Secretaría de Salud de Bogotá.

SSB (1997b). 'Población participante vinculada sin capacidad de pago', Bogotá: Estadística S.A. y Secretaría de Salud de Bogotá.

SSB (2002). 'Diagnóstico de la situación de salud en Bogotá: documento entregado a los candidatos presidenciales'. Secretaría de Salud de Bogotá. Archivo magnético.

SSPD (2009). Decreto Ley No. 186 de 1989, 'Por el cual se reglamentan los decretos-leyes 3069 de 1968 y 149 de 1976 y se establece una estructura nacional de tarifas para el servicio de aseo'. Available at http://www.superservicios.gov.co/basedoc/docs/decretos/d0196_89.html. Last consulted 19 January 2009.

Stephens, C. et al. (1994). 'Environment and health in developing countries: An analysis of intra-urban differentials using existing data (Restricted Circulation results), London School of Hygiene and Tropical Medicine; Directoria Ajunta de Estudos Populacionais Fundação SEADE; Department of Town & Country Planning, Ministry of Environment, Accra, Ghana.

Storper, M. (2000). 'Globalization, localization and trade', in Clark, G.; Feldman, M.; Gertler, M. (Eds.), *A Handbook of Economic Geography*, Oxford: Oxford University Press.

Streeten, P. (1984). 'Basic needs: some unsettled questions', *World Development*, Vol. 12, No. 9: 973- 978.

Suárez Montoya, A. (2008). 'La Vulnerabilidad alimentaria de Colombia, *Le Monde Diplomatique*, N. 67, available at:

http://www.eldiplo.info/mostrart_articulo.php?id=703&numero=67 (Last consulted February 10th, 2009).

Swift, J. (1989). 'Why are rural people vulnerable to famine? *IDS Bulletin*, Vol. 20, No. 2: 16-22.

Taal, H. (1989). 'How Farmers Cope with Risk and Stress in Rural Gambia', *IDS bulletin*, Vol.20, No.2:16-22, April.

Tabibzadeh, I., Maxwell, R. and Rossi-Espagnet, A. (1989). *Spotlight on the cities: improving urban health in developing countries*, Geneva: WHO.

Tomas, C. (2000), *Global Governance, Development and Human Security*, London and Sterling, VA: Pluto Press.

Townsend, P. (1954). 'Measuring Poverty', *British Journal of Sociology*, Vol. 5, No. 2: 130-137.

Townsend, P. (1962). 'The Meaning of Poverty', *The British Journal of Sociology*, Vol. 13, No. 3: 210-227, September.

Townsend, P. (1979). 'Poverty in the United Kingdom' London: Allen Lane.

Townsend, P. (1985)., 'A Sociological Approach to the Measurement of Poverty-A Rejoinder to Professor Amartya Sen, *Oxford Economic Papers*, New Series, Vol. 37, No.4: 659-668.

Townsend, P. (1993). *The International Analysis of Poverty*, Hemel Hempstead: Harvester Wheatsheaf.

Townsend, P. and Gordon, M. (Eds.) (2002). *World poverty: new policies to defeat and old enemy*, Bristol: Policy Press.

UNCRD (2005). *De las Ciudades a las Regiones: Desarrollo Regional Integrado en Bogotá-Cundinamarca*, Bogotá: UNDESA/UNCRD and Mesa de Planificación Regional Bogotá-Cundinamarca.

UNDP (1990). *Human Development Report 1990: Concepts and Measurement of Human Development*, Oxford University Press: New York & Oxford

UNDP (1995). *Human Development Report 1995: Gender and Human Development*, Oxford University Press: New York & Oxford.

Ul-Haq, M., (1995). 'The human development paradigm', in Fukuda-Parr, S. & Shiva Kuma A.K. (Eds.), *Readings in Human Development*, Oxford & New Delhi: Oxford University Press.

UN-Habitat (2003). *The challenge of slums: global report on human settlements*, London, Sterling, VA: Earthscan.

van Meyer, K.M. et al. (1994). 'Correspondence Analysis: A History and French Sociological Perspective', in Greenacre, M. and Blasius, J. (Eds.), *Correspondence analysis in the social sciences: recent developments and applications*, London and San Diego, CA: Academic Press.

Velásquez C. (2000). 'La agenda de la descentralización en Colombia', *Revista Foro*, No.38: 5-20, Marzo.

Wiesner et al. (2006). *At Risk: natural hazards, people's vulnerability and disasters*, London and New York: Routledge, Second Edition; First Edition, 1994.

Wood, G. (2007). 'Desperately seeking security', *Journal of International Development*, Vol. 13: 523:534.

Woodrow, P. & Anderson, M. (1989). *Rising from the Ashes: development strategies in times of disaster*. San Francisco: Westview Press.

World Bank (1990). *World Development Report 1990: Poverty*, Oxford & New York: Oxford University Press.

World Bank (1994). *Colombia Poverty Assessment Report. Volume 1: The Main Report*. Report 12673, Washington D.C.: The World Bank.

World Bank (2000). *World Development Report 2000/1: Attacking Poverty*, Washington D.C.: The World Bank.

World Bank (2002a). 'Colombia: Social Safety Net Assessment', Washington, D.C.: The World Bank.

World Bank (2002 b). *Colombia Poverty Report 2002*, Washington D.C.: The World Bank.

World Bank (2005). *World Development Indicators*. Available at http://devdata.worldbank.org/wdi2005/Section3_1.htm. Last consulted January 18th, 2009.

Wratten, E. (1995). 'Conceptualizing urban poverty', *Environment and Urbanization*. Vol.1, No.7:11-36, April.

Yin, R.K. (1991), *Case Study Research: Design and Methods*, London: Sage Publications.