Building Sustainable Communities: Enhancing Human Capital in Resource Regions - Colombian Case

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Abstract

In recent years, there has been increasing emphasis on the need for greater involvement of stakeholders in forging sustainable livelihood options in resource regions. Old forms of regulatory planning processes for sustainable livelihoods are being replaced by multi-stakeholder collaboration governance dynamics in which the private sector plays a key role in decision-making processes. Nevertheless, the role of the market, particularly mining and exploration companies, in mitigating the conflicting demands of the global economy and local livelihoods, is under-investigated in the context of resource regions in developing countries. This thesis makes a strong contribution to the literature concerning sustainable livelihoods, as it increases our understanding of the processes of multi-stakeholder collaboration and governance dynamics for human capital capacity-building. It focuses on these as integral parts of a ´sustainable livelihoods framework´ in resource locations.

With the sustainable livelihood approach as the governing theoretical framework, the research focuses on the apparent contradiction between skilled labour shortages in the minerals industry and a lack of employment opportunities for the local population in natural resource-rich regions. The research explores the linkage between global mining and local livelihoods, which currently is not only causing productivity losses in the industry, on account of delays and extra wages for imported labour, but is also fostering discontent and tensions in the regions concerned. The thesis is based on qualitative research within a comparative case study research methodology. The methodological approach of this research is also based on literature review findings, field observations and interviews with local government officials, mining and exploration company representatives and community activists. The research suggests remedial measures to enhance stakeholders involvement, particularly that of the private sector, in the development of sustainable livelihoods. The case studies were conducted in Antioquia and Risaralda, two resource regions of Colombia. Nevertheless, the findings of the research can be applied to other resource locations in Latin America and elsewhere.
Declaration by the author

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution by others to jointly authored works that I have included in my thesis.

I have clearly stated the contribution of others to my thesis as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my thesis. The content of my thesis is the result of work I have carried out since the commencement of my research higher degree candidature and does not include a substantial part of work that has been submitted to qualify for the award of any other degree or diploma in any university or other tertiary institution. I have clearly stated which parts of my thesis, if any, have been submitted to qualify for another award.

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Contributions by others to the thesis

There are no contributions by others except for the co-authors listed in the previous section. Guidance and support were provided by Associate Professor John Minnery at the School of Geography, Planning and Environmental Management and Dr Terry Maybury at the Sustainable Minerals Institute.

Statement of parts of the thesis submitted to qualify for the award of another degree

None
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Mining, human capital, community, sustainable livelihoods, development, capacity-building, governance, Colombia, Latin America, corporate social responsibility.

Australian and New Zealand Standard Research Classifications (ANZSRC)

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ANZSRC code: 150303, Corporate Governance and Stakeholder Engagement, 40%

Fields of Research (FoR) Classification

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FoR code: 1503, Business and Management, 40%
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<td>Corporate Social Responsibility</td>
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<td>DIFD</td>
<td>Department for International Development</td>
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<td>GRI</td>
<td>Global Reporting Initiative</td>
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<td>HCB</td>
<td>Human Capital Capacity-building</td>
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<td>ICMM</td>
<td>International Council on Mining and Metals</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ISO</td>
<td>International Organization for Standardization</td>
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<td>NGO</td>
<td>Non-government Organisation</td>
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<td>OCAD</td>
<td>Organos Colegiados de Administracion y Decision (Decision-making Collegiate Entity)</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>PDAC</td>
<td>Prospectors and Developers Association of Canada</td>
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<tr>
<td>PIP</td>
<td>Policies Institutions and Processes</td>
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<td>SD</td>
<td>Sustainable Development</td>
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<td>SHCB</td>
<td>System for Human Capacity-building</td>
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<td>SSM</td>
<td>Small Scale Mining</td>
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<td>RJC</td>
<td>Responsible Jewellery Council</td>
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INTRODUCTION AND RESEARCH PROBLEM

The overarching aim of this thesis is to better understand the processes of multi-stakeholder collaboration as an integral part of the development of sustainable livelihoods for communities. It does this through case studies focused on human capital capacity-building (HCB) in mining resource regions of Colombia. Embracing community capacity-building as a component of sustainable livelihoods may help locals cope with potential mining impacts (Veiga, Scoble, & McAllister, 2001). Understanding the way that stakeholders collaborate (or do not collaborate) is important in helping plan for the establishment of resource regions. The use of the sustainable livelihood approach as the conceptual framework of this research enables the thesis to develop a better and more nuanced understanding of multi-stakeholder collaboration processes for HCB in mining regions. The case studies used for the research are in Colombia, a Latin American country currently experiencing a resource boom. However, the findings of the research have the potential to be applied to other resource regions in Latin America and elsewhere.

In recent times, Colombia’s mining industry has experienced an economic mining boom. Mining is a vital part of the country’s economy with revenues from the sector accounting for US $863 million in 2009 (Molina-Escobar & Restrepo-Baena, 2010, p. 151; Ponce, 2010, p. 384). Colombia is the largest producer of coal and nickel in South America and it also exports gold and emeralds. However, a major problem confronting the industry is the shortage of skilled labour, which compromises many companies’ ability to expand their operations. On the other hand, local communities in Colombian resource regions lack essential human capital, like education and knowledge, to become active participants in the minerals industry or to find gainful employment opportunities in other sectors of the local economy (Cardenas, 2011, pp. 9,34; Ministerio de Educacion Nacional, 2003).

This apparent paradox between skilled labour shortages and lack of employment opportunities for the local population is not only causing productivity losses in the Colombian minerals industry (on account of delays and extra wages for the imported labour), but is also fostering discontent and tension in the regions. Local
communities consider metals and minerals to be important natural resources, which they have some right to benefit from. The extraction of such natural capital by ‘outside’ companies with the help of external, imported labour creates resentment. Thus far, natural resource extraction has been mainly compensated for by mining revenues. However, these gains have not contributed meaningfully to meeting development aspirations of the local communities. Thus, the current development model in resource regions of Colombia is not sustainable, as the loss of ‘natural capital’ is not being adequately compensated for by a gain in human or other forms of capital (Molina-Escobar & Restrepo-Baena, p. 151), and the developmental potential from this mining activity is not being realised. Preliminary investigations identified that one reason for this was the inadequacies in the collaboration process amongst the multiple stakeholders involved. The collaboration that does occur has yielded mixed results.

A case in point is Antioquia, a coal and gold producer region located in the north of Colombia. Large mining and exploration projects are undertaken in Antioquia by South African and Canadian multinational companies, and domestic mining companies. Mining and exploration companies have developed partnerships with the local, regional and national governments as well as with tertiary institutions to implement HCB strategies to up-skill local communities. However, a preliminary investigation of the situation reveals only marginal positive outcomes for locals. Constraints in the implementation of HCB approaches as a constituent part of corporate social responsibility agendas, contextual factors like internal conflict, issues related to informal mining, low accountability and poor governance are factors that seemed to prevent stakeholders, particularly companies, from meaningfully contributing to the creation of sustainable livelihoods. The main question that arose out of this situation was why the various partnerships and their initiatives did not seem to produce satisfactory results.

Another case is Risaralda, Colombia, where a Canadian company, and a domestic coal mining company operate. Risaralda’s mining industry has engaged with government stakeholders to implement HCB initiatives to up-skill civil society organisations and other community members. An exploration of the context and governance environment in the region revealed that multi-stakeholder collaboration
in Risaralda has elicited positive outcomes for local communities, although there are still some aspects that are challenging for all parties involved. The question then was why these HCB approaches appeared to be more successful.

HCB implementation, undertaken in collaboration amongst several stakeholders, is not only a challenging process for the participants involved, but poor implementation seems also to diminish the possibilities to develop sustainable livelihoods. Following Veiga et al (2001) and Loza (2004), community capacity-building initiatives could be understood as ongoing and context-based processes intended to transfer knowledge and to provide communities with tangible skills and education to work in the resource sector or other priority industries at the local level.

Yet in the resource regions in question, HCB initiatives, started in isolation by companies, local governments and tertiary institutions, appear to be problematic. There appeared to be both inadequate involvement of the local stakeholders in the HCB processes and difficulties in collaboration amongst these stakeholders. This diminishes the success of these initiatives and the potential to achieve positive outcomes for all parties but particularly for local communities. This was clearly an area that needed investigation.

This research addresses these issues, proposing a modification and application of the widely accepted ‘sustainable livelihood framework’ (SLF) that responds to scholarly concerns regarding the potential role of the private sector (especially mining and exploration companies) and governance dynamics in creating sustainable livelihoods in developing countries (Carney, 2003, p. 48). This framework is both a planning tool itself and a way of thinking about development (Carney, 2003, pp. 14-15; Rakodi & Lloyd-Jones, 2002) The SLF also helps us build knowledge about the dynamics of communities and their opportunities to forge sustainable livelihoods as well as to understand the linkages amongst the three key areas of the research that will be developed further in later chapters 5, 6 and 7: the context of mining; governance; and capacity-building. In addition, the study aims to provide greater understanding about both collaborative but also conflict-laden interactions amongst relevant stakeholders, including governments, companies and civil society actors. This is an area that has not been seriously examined in the
This research also addresses current scholarly concerns over capacity-building implementation in natural resource-rich locations (Cornelius et al, 2008; Jenkins, 2004; Tracey, 2005).

While the existing body of academic literature on sustainable development and mineral industry practices have helped frame this thesis, my extensive professional experience in this area has also played a significant part. I worked as a consultant for a government organisation in which I was in charge of promoting multi-stakeholder collaboration for HCB initiatives in resource regions. During this professional experience, I saw firsthand the challenges that the stakeholders (companies, governments, tertiary institutions and other civil society actors) experienced. I witnessed the limitations of multi-stakeholder collaboration, particularly in identifying roles, responsibilities and potential engagement processes and mechanisms to implement HCB initiatives. These limitations tended to reproduce and even reinforce existing local conditions of vulnerability, like poverty and unemployment. For this reason, this research aims to improve understanding of the effective and ineffective interactions amongst stakeholders in resource contexts so that it can provide more efficacious approaches based on greater knowledge and expertise in this area.

The discussion in the thesis is organised as follows: Chapter 1 presents the significance of the research, research questions, statement of sustainability, limitations, and its contributions to knowledge. Chapter 2 presents the literature review of the three key components of analysis, which are the context of mining, governance and capacity-building. Chapter 3 presents the research design and methodology. Chapter 4 introduces and explains the sustainable livelihood framework (SLF), the conceptual framework that drives this thesis. The discussion then presents the data analysis in Chapters 5 to 7 which are structured around the major components of the sustainable livelihoods framework.

Chapter 5 introduces Antioquia and Risaralda as case study areas and provides a greater understanding of existing global-local dynamics in the Colombian mining context and their implications for the livelihoods of local communities. Chapter 6 explores the governance environment in Colombia but with a major focus on multi-
stakeholder collaboration governance processes. Based on the SLF livelihood ‘assets’ component (explained in Chapter 4), Chapter 7 analyses current HCB approaches and determines the priority human capital assets for HCB. Conclusions, a more detailed discussion of the modified SLF version and recommendations for further research are contained in Chapter 8.

1.1 Significance of the Research and Innovation

Based on the sustainable livelihood framework as the governing framework of the research, this study proposes innovative approaches in multi-stakeholder collaboration dynamics that warrant immediate attention by stakeholders involved in HCB in resource contexts. The research focuses on Colombia, where issues around HCB are significant and multi-stakeholder collaboration for HCB has been inadequate. However, the study offers the potential of applying such knowledge to similar contexts in other developing countries.

With such an innovative application of the SLF, this study fills existing scholarly gaps and addresses scholarly concerns in the key areas of research, which are: the context of mining; governance; and human capital capacity-building. The tensions between the needs of multinational companies and the need to compensate local communities for natural resource extraction, through HCB and meaningful employment opportunities, has increased the necessity to rethink development issues in resource regions. These tensions have risen scholarly and industry concerns regarding the potential role of mining and exploration companies in forging sustainable livelihoods during the whole of the mine life cycle: exploration; project development; construction; operations; and mine closure (Cornelius et al., 2008, p. 363; Buitrago & Robertson, 2014). Sustainable development agendas and approaches like SLF have emerged as frameworks to address these issues. However, despite widespread acceptance of the conceptual strength of the SLF and the fact that many organisations have embarked on SLF practices, existing applications neither provide an adequate understanding of the role of the private sector, nor do they broaden thinking about governance dynamics (Carney, 2003, p. 48). These are critical shortcomings that this thesis intends to address.
Stemming from the combined understanding of the three areas of research, this study proposes an application of the SLF that will not only address these scholarly concerns but will also elicit practical strategies and recommendations. This is to enable stakeholders in resource regions, particularly companies, to contribute to planning for sustainable communities through effective multi-stakeholder collaboration leading to improved human capital capacity-building.

1.2 Research Questions

The following are the research questions that guide this research:

- What role does the private sector play in implementing HCB to forge sustainable livelihoods in local communities in resource regions and what role could it play?
- Who are the stakeholders (their roles and responsibilities) for HCB in a multi-stakeholder collaboration governance scenario in resource regions?
- What are the factors that limit or foster multi-stakeholder collaboration in the implementation and development of HCB initiatives in resource regions?
- What are the main priority areas for HCB and to what extent are they valuable for local communities in resource regions?

1.3 Statement of Sustainability Contribution

The proposed innovative application of the SLF is the major contribution to sustainability offered by this research. The value of this framework will be demonstrated through two case studies (Antioquia and Risaralda). This research also contributes specifically to the area of sustainability of mineral resource extraction, as it carefully examines the role of the minerals industry and the impact of the governance environment on the development of sustainable livelihoods in the communities concerned. This research also embraces the principles of global regulatory frameworks that are intended to improve sustainability practices in the minerals industry.
Within these two areas of sustainability, the research further contributes by providing an exhaustive examination of global frameworks that regulate corporate social and environmental practices in the minerals industry (ICMM, 2005; IFC, 2011; ISO, 2010; OECD, 2008; PDAC, N.D; RJC, 2011). This exploration will seek to determine the minerals industry’s level of understanding of HCB as an approach to achieving social sustainability. The Guidance on Social Responsibility, ISO 26000 (2010), defines HCB as a process that facilitates the achievement of social and economic community development. Likewise, HCB is envisaged as one of the most sustainable legacies that companies can deliver to local communities (ICMM, 2005).

The examination of the current understanding of HCB in global sustainability agendas is compared in this thesis to the existing accountability mechanisms (corporate social responsibility (CSR) agendas and sustainability reports) of a group of ten mining companies, operating in Latin America and currently aligned with the International Council of Minerals and Metals’ (ICMM\(^1\)) principles (AngloAmerican, Barrick, AngloGold Ashanti, BHP Billiton, Freeport-McMoran, Goldfields, Newmont, Rio Tinto, Vale and Xstrata). This examination pays careful attention to accountability mechanisms of companies operating in Antioquia and Risaralda as a way of helping the companies to contribute more effectively to building sustainable communities. Hence, this thesis also contributes to sustainability by facilitating greater understanding of HCB, so that companies can play a stronger role in achieving social sustainability during and after mining operations.

### 1.4 Limitations of the Research

This section highlights constraints that emerged throughout this research. According to Yin (2009, p. 8), case study social research tends to be challenging, as the researcher has marginal control over the subject of inquiry, and undertaking research in one’s home country can lead to an array of intensified challenges (Scheyvens, R & Storey, D, 2003). This study is based on a qualitative research strategy, using case studies, and therefore the researcher does not have control

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\(^1\) The International Council on Mining and Minerals (ICMM) is an international organisation that assists the mining sector to achieve a more efficient and sustainable performance (ICMM, 2005, p. 17). The voluntary adherence of the Council’s members encourages them to implement the 10 principles contained in ICMM’s sustainability framework.
over the participants and their behaviours, making it complicated to get interviewees’ consent to participate. As multi-stakeholder governance processes are pivotal elements in this research, the roles and forms of collaboration between different stakeholders were examined in detail. However, participants were free to contribute to this study and could refuse to get involved or withdraw at any time, making data collection procedures challenging.

Some actions were in place to mitigate this barrier. The researcher contacted some of the participants and potential interviewees before the fieldwork. As a result of previous informal conversations, top-level government representatives expressed unconditional support for this project. State governments acknowledged the potential of this research for Colombia’s mining industry and the need to get all the stakeholders of the industry involved in the study. Governments in both case study areas actively contributed to fostering the participation of several stakeholders thus facilitating data collection procedures.

Some constraints regarding primary data collection were encountered. The participants were biased towards certain aspects of the study, constraining the reliability of the data provided. This research involved a range of stakeholders from both the public (state and non-state actors) and private sectors. Most of these actors represented public institutions or private corporations and this shaped their behaviours and their dialogue also, especially as it is recorded in this thesis. This also had implications for participants’ ideologies, attitudes and positions regarding certain matters. The collected primary data might be biased due to these preconceived ideological positions.

A qualitative strategy that involves the combination of a wide range of qualitative methods and techniques such as the case study method, semi-structured interviews and focus group interviews has been applied to this study. Similarly, data collected from government and corporate representatives have been triangulated with civil society’s perceptions. The application of method and data triangulation procedures have contributed to increased data reliability and validity (Singleton & Straits, 2010, p. 431). A further explanation of these procedures can be found in Chapter 3.
1.5 Contributions to Knowledge

This research contributes to knowledge on the following basis:

- The study proposes an application of the SLF that highlights the role of the private sector (especially mining and exploration companies) in forging sustainable livelihoods and governance dynamics in developing countries. There is a gap in this area, as the sustainable livelihood literature has not exhaustively addressed this issue (Carney, 2003, p. 48).

- This research also aims to provide a greater understanding of collaborative but also conflict-laden interactions between stakeholders in mining regions: governments, mining and exploration companies and civil society actors. This is a field that has not been seriously examined in the scholarly literature to date (Davies, 2005; Minnery, 2007).

- In addition, the research addresses current scholarly concerns regarding HCB implementation in natural resource-rich regions (Cornelius et al, 2008; Jenkins, 2004; Tracey, 2005).

- The research deepens knowledge about the linkages between governance, HCB and the context of mining as constituent elements of the sustainable livelihood framework.

1.6 Background of Colombia: An Overview

Colombia is a Latin American country located on the north of South America that has experienced an escalating mining growth over the last three decades. It is the main producer of coal in Latin America and the twelfth largest globally (Idarraga, A, et al., 2010, p. 19). It is the third major producer of nickel after Cuba and the Dominican Republic and is also known as a leading exporter of gold and emeralds (Torres, 2001, p. 2; Vilora de la Hoz, 2009, p. 30). Mining along with oil extraction
represented 4.6% of the national GDP in 2005 (UPME, 2006, p. 19). This section provides a brief overview of Colombia and its mining activities.

The current mining boom is vital for national development (DNP, 2010, p. 161). In response to current global mining demands mainly led by BRIC countries (Brazil, Russia, India and China), the Colombian government has embarked on a number of key strategies that drive this boom. More efficient natural resource management and sustainable development is one of such strategies (DNP, 2010, p. 169). There is also a national public policy on competitiveness, which determines the guidelines for the Colombian system for human capital capacity-building (SHCB). This system is the baseline for the HCB approach in Colombia at all levels of government and has been
regarded as a key element in building more sustainable livelihoods in economically competitive locations like the resource regions under discussion here (DNP, 2010; Ministerio de Educacion Nacional, 2006-2016, p. 86).

The resource boom is not particular to a specific region. On the contrary, as shown in Figure 1, exploration and mining operations are spread throughout the country. Such activity has been undertaken by both domestic and international companies from Canada, Australia, South Africa, United States and Switzerland (See Figure 1). There is a need, now more than ever, to plan for sustainable communities and livelihoods that last beyond the mine cycle. This will help communities cope with potential mining impacts and assist companies to collaborate more effectively in building sustainable communities through approaches such as HCB. This thesis argues that planning for social sustainability needs to be undertaken at the early stages of the life of a mine (See also Buitrago & Robertson, 2014). It thereby highlights the importance of getting mining as well as exploration companies involved in this research. For the purpose of this thesis, Antioquia and Risaralda constitute the case study areas, where both domestic and international mining and exploration companies operate. A more comprehensive examination of the Colombian context and the case studies is provided in Chapter 5.
2 LITERATURE REVIEW

2.1 Introduction

This chapter contains a literature review of the areas of research. The three key areas are aligned with three out of the five components of the sustainable livelihood approach (SLF), the conceptual framework that drives this thesis. The SLF has been pivotal in organising this literature review as well as the ideas derived from the research findings. A more detailed explanation of the conceptual framework and SLF components will be provided in Chapter 4. The SLF components that have helped map this review are: the context, governance and livelihood assets (See Figure 2). The review is also based on both scholarly and ‘grey’ literature that deals with the areas of research. Some sections of this literature review were previously published in the following journal articles and peer reviewed papers: Mining, Capacity-building and Social License: Making the links (Buitrago, 2013); Planning for Mining Regions: Building Local Government’s Capacity in a Multi-stakeholder Scenario (Buitrago, Chatterji, 2013) and Planning for Social Sustainability in Planning for Social Sustainability in Natural Resource Regions – The Colombian Case (Buitrago & Chatterji, 2014).

A more detailed description of the sustainable livelihoods framework (SLF) as modified for this thesis is given in Chapter 3. The major component used to structure this literature review (Figure 2), is the central identification of the livelihood assets of the community. These assets are effective within the general community ‘context’ and specific ‘governance’ context. From the interaction of context, governance and assets, communities develop ‘livelihood strategies’ leading to ‘livelihood outcomes’.
The literature reviewed here includes, among others, sustainable development agendas and frameworks that guide exploration and companies’ performance and accountability mechanisms as they operate in Latin American countries. Six global sustainable development (SD) frameworks were selected regarding their coverage of the research focus: International Council of Mining and Minerals Principles (ICMM), International Finance Corporation Framework, ISO 26000 Guidance for Social Responsibility, Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises and Prospects and Developers Association of Canada (PDAC) Framework and the Responsible Jewellery Council (RJC) Framework. These global norms reviewed are intended to make companies more accountable to external stakeholders, including governments and civil society. A description of each one of the frameworks is provided in Table 1.
Table 1 International Regulatory Frameworks on SD and Companies Operating in Latin America

<table>
<thead>
<tr>
<th>Level of influence</th>
<th>Voluntary regulatory frameworks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Level</td>
<td>International Council on Mining and Metals (ICMM) Sustainable Development Principles.</td>
<td>The ICMM is an international organisation that assists the mining sector to achieve a more efficient and sustainable performance (ICMM, 2005, p. 17). The Council’s members are encouraged to implement the 10 principles contained in the ICMM’s sustainability framework.</td>
</tr>
<tr>
<td></td>
<td>Responsible Jewellery Council (RJC) Standards Guidance</td>
<td>The RJC is an initiative that develops a certification system that commits its members in the mining sector to perform responsible corporate practices (RJC, 2011).</td>
</tr>
<tr>
<td></td>
<td>International Finance Corporation (IFC) Performance Standards on Social and Environmental Sustainability</td>
<td>IFC is a legally independent World Bank department. IFC finances private sector initiatives to promote sustainable economic growth in developing countries and enhance local communities’ livelihoods (IFC, 2011b). The Corporation has designed the Performance Standards on Social and Environmental Sustainability in order to make its clients aware of their roles and responsibilities when executing projects.</td>
</tr>
<tr>
<td></td>
<td>International Standardization Organisation (ISO)</td>
<td>This standard guidance about social responsibility advises the private sector to design CSR agendas so that they can improve local communities’ livelihoods. (ISO, 2010).</td>
</tr>
<tr>
<td>Regional Level</td>
<td>Prospects and Developers Association of Canada (PDAC) Principles and Guidance E3 Plus</td>
<td>The framework guides responsible exploration (PDAC, N.D, p. 26) to mitigate the adverse impacts derived from this stage in the life of a mine.</td>
</tr>
<tr>
<td></td>
<td>Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises</td>
<td>These guidelines have been developed to respond to corporate governance issues and to assist the corporate sector to perform responsible business practices (OECD, 2008). The guidelines’ objectives include but are not limited to: to assure correspondence between corporate performance and government policies; to strengthen confidence between enterprises and society and to support sustainable development (OECD, 2008)</td>
</tr>
<tr>
<td>Local level (Latin America)</td>
<td>AngloAmerican, Barrick, AngloGold Ashanti, BHP Billiton, Freeport-McMoran, Goldfields, Newmont, Rio Tinto, Vale and Xstrata, Seafield Resources</td>
<td>Sustainability reports, web sites, other accountability mechanisms of mining and exploration companies operating in Latin America and the case study areas.</td>
</tr>
</tbody>
</table>

Source: The author, 2013

The review is also based on the examination of accountability mechanisms described as corporate social responsibility (CSR) agendas, sustainability reports and web pages from a group of eleven mining and exploration companies operating in Latin America. Most of the companies were chosen on the basis of their membership of the International Council of Mining and Minerals (ICMM) and their active participation in the Latin American mining sector. However, attention is mainly paid to accountability mechanisms of multinational and domestic companies.
operating in Colombia and specifically in the regions concerned. Accountability mechanisms like CSR agendas contain corporate policies and statements regarding HCB, the focus of this research, and so are important for exploring these governance arrangements in depth.

The discussion is organised as follows: The review begins with an exploration of the mining sector and the global/local context in which it operates. This first cluster of data explores current global mining dynamics that have implications for the context in which Colombian communities are embedded. Therefore this first section is situated in the context component of the SLF (See Figure 2). The review of the context of mining is followed by an exploration of the concept of governance, the evolution from a government-centred approach to more participatory approaches like multi-stakeholder collaboration. This exploration also encompasses existing scholarly concerns about conflict-laden multi-stakeholder governance dynamics. This cluster of literature has been placed after the context of mining to map scholarly debates in accordance with the SLF structure. Following the SLF, the context has implications for the governance environment (See Figure 2). The latter also determines community’s assets and livelihoods. Following Minnery (2007), collaborative governance dynamics are affected by conflicting factors. Limitations encountered in collaboration processes for HCB can prevent communities from enhancing their assets and from building more sustainable livelihoods.

According to the SLF, both the context and the governance environment impact on a community’s livelihood assets. Therefore, the third cluster of data examines the concept of capacity-building in the light of the SLF’s livelihood assets component. Although the broader SLF comprises five forms of assets (which are: human, social, financial, physical and natural), this thesis concentrates on human capital, particularly companies’ and other stakeholders’ contributions to strengthening communities’ human capital assets through capacity-building. This third research focus contains an examination of the notion of ‘capacity-building’, its trends, evolution and definition; it also discusses the contribution of the minerals industry to community capacity-building. It finishes by exploring the concept of human capital capacity-building.
2.2 Mining: The Global/Local Context - A Review of the Literature

2.2.1 Introduction

Increasing deregulation by nation-states and globalisation of the world economy since the 1970s have significantly contributed towards the increased transnational mobility of capital, knowledge and technology. This has profoundly impacted on the mining sector by increasing cross-national investment of multinational mining corporations. Globalisation is a process that interconnects events and entities occurring in distant locations (Giddens, 1999). In the contemporary world of growing interconnections, globalisation is also shaping social relations, leading to the proliferation of social and business networks and the intensification of dispute and competition over natural resources, especially between global and local forces across the globe (Held & McGrew, 2007). Such competition has also involved national and regional actors. As discussed in the following chapters, stakeholders in these two spatial frames play a key role in natural resource extraction and the livelihoods of local communities. These tensions are also resulting in scenarios in which global forces play a key role in shaping local dynamics while local processes, in turn, are also having a significant impact at the global level. This close relationship between the global and the local is what Swyngedouw (1997, pp. 137, 160) calls ‘glocalisation’. Although the concept of glocalisation is not the focus of this research, it helps us understand the context of mining in which local communities are embedded. Hence, this review explores current global mining dynamics that have implications for communities’ livelihoods in natural resource-rich regions.

2.2.2 Implications of Globalisation for the Mining Sector Locally

There is a general agreement in the academic literature that the tensions between local and global forces have contributed to the widening of economic disparities, leading to escalation of discontent, particularly in natural resource-rich regions of developing countries (Cook, 2006; Haan & Maxwell, 1998; Harrison, 2006; Kabeer, 2000; Shankar & Shah, 2003). Increasing global trade following deregulation has generated escalating demand (coming from the newly emerging economies or BRIC
countries) for natural resources such as metals and minerals. BRIC is an acronym coined by the economist Jim O’Neill to indicate the newly emerging economies: Brazil, Russia, India and China (Giddens, 1999). Global decision-making led by multinationals and global regulatory bodies on natural resource extraction and sustainable development is raising tensions at the local level, as poor and local communities often feel that they are not being adequately consulted and/or compensated for their loss of livelihood options (Surborg, 2012). Some scholars highlight the difficulties in measuring such compensation as well as the impacts of the extractive industry on the poor (Davis & Vásquez Cordano, 2013). Empirical research in the Colombian case shows that communities’ lack of education and opportunities to work for either a company or a related local industry, further escalate poverty-related issues (Molina-Escobar & Restrepo-Baena, 2010).

The separation between employment generation at the local level and global industrial production has been mainly caused by the geographical dispersal of production and distribution nodes (Amin & Thrift, 1992). Business networks such as joint ventures and other types of strategic business alliances tend to look for cheap labour to support the growing accumulation of capital. However, some scholars argue that human capital is becoming more important than other assets such as natural resources (Shankar & Shah, 2003). They argue that regions with a skilled and educated workforce compete more successfully over physical and natural resource rich areas. However, this is not likely to happen in the resource sector, as increased demand for commodities has led the industry to expand operations into regions often rich in reserves of minerals and metals but starved of skilled human capital. Very often, communities from developing resource regions lack the technical, management and professional skills that would enable them to gain employment in the minerals industry or other relevant industries.

The shortfall in skilled human capital in active mining areas has consequently increased mobility of people across the globe, including international migration, preventing local unskilled human capital from competing against these global pressures. These circumstances are causing local tensions that very often threaten corporate investment, increasing business risks. Local communities are becoming more aware of the marginal compensation that they get from natural resource
extraction when compared with large corporate profits (Hilson, 2006; Mate, 2001). This situation has sometimes led some communities to attempt to deny multinational mining and exploration corporations a social licence to operate in regions rich in natural resources.

The social licence to operate is a term mainly used by the minerals industry and is considered as an agreement between the company and the community in which it operates. In the frame of these agreements “[companies] need to demonstrate positive benefit and engage directly in corporate social investment to ensure that host communities, particularly those directly or indirectly affected by mining operations, receive immediate benefit rather than wait for a possible ‘trickle down’ effect from governments from the receipts of taxes and royalties” (Warhurst, 2001, p. 59). The form of a social licence to operate varies amongst companies seeking community consent to start or expand operations. Given its informality and the fact that it has no legislative basis, it is not subject to global or local regulations. Therefore it is not enforceable and can be easily ignored by companies. For instance, in 2011, in Santander, Colombia, a region rich in gold, the Canadian company Greystar was denied a social licence to operate by the local communities of California and Vetas, causing significant financial losses for this corporation (Revista Dinero, 2011). However, Greystar, now called Eco Oro Minerals Corp, is determined to continue with the project.

Global agencies aware of this situation are encouraging mining and exploration companies to become more accountable to local communities (ICMM, 2005; IFC, 2011a; ISO, 2010; OECD, 2008; PDAC, N.D; RJC, 2011). In response, companies feel pressured to increase such accountability, resulting in a proliferation of response mechanisms like corporate social responsibility (CSR) agendas, sustainability reports, use of the Internet and social media, social audits, consultation and other accountability mechanisms and processes.

Existing accountability mechanisms often claim explicit corporate commitment to local community sustainability and sustainable livelihood opportunities. Multinational companies often argue that corporate initiatives are intended to raise community quality of life (AngloAmerican Chile, 2008), diversify local economies and foster
community development (Rio Tinto, 2011), create stakeholder engagement (BHP Billiton, 2009) and build more sustainable communities (Barrick Peru, 2008). Pegg (2006, p. 383) and Alizar and Scott (2009, p. 24) agree that companies are becoming more accountable to communities and that actions undertaken in compensation for the extraction of natural resources are reducing poverty and fostering employment in local populations. However, Hamann et al. (2004, p. 85) and Hilson (2006, p. 46) disagree with these arguments, stating that corporations undertake these actions in pursuit of their own interests and benefits rather than achieving community sustainable development aspirations.

The argument that corporate accountability mechanisms are effective in achieving community sustainability is also contested in the development and environmental literature. In the scholarly literature, it is claimed that corporate acknowledgement of global norms and the execution of corporate initiatives in local communities do not guarantee benefits for locals. Instead, these can be seen as ‘green-wash’ actions that legitimise corporate practices and increase reputation and profits (Bebbington et al, 2008, p. 900; Hamann & Kapelus, 2004, p. 85; Hilson, 2006, p. 44; Jenkins & Yakovleva, 2006, p. 272). This argument is reinforced through statements that show that when corporations abide by global norms, this favours corporate interests in terms of workforce recruitment and retention (PDAC, N.D, p. 20), brand image and better relationships between companies, employees and communities (RJC, 2011). Likewise, business scholars agree that social investment undertaken by multinational companies is profitable for companies, as these actions accelerate local markets and strengthen corporate goodwill (Nwankwo et al, 2007, p. 91; Tracey et al., 2005, p. 342).

However, a number of scholars situated in the business ethics area are concerned about this corporate approach. They feel that the legacies delivered by global companies to local communities are not long-term benefits intended to sustain communities but tools to fix community issues and gain reputation to favour corporate interests (Jenkins, 2004, p. 25; Tracey et al., 2005, p. 331). This limited approach makes explicit the typically narrow understanding by mining and exploration companies of community expectations (Cornelius et al, 2008, p. 363).
Despite the potential social veto over mining corporations by local communities, the need to access resources and capital at a national scale has increased along with the escalation of struggles in the local contexts where global companies operate. These mining operations more often represent a threat to traditional means of community livelihood. They are also seen as drivers of poverty, community instability, loss of land, internal conflict and rights violations. These effects have crossed local boundaries, emerging in large-scale issues such as climate change and greenhouse gas emissions (Evans, Goodman, & Lansbury, 2002). The large number of adverse impacts such as increased poverty, caused by global mining corporations have been widely explored in the literature (Arellano-Yanguas, 2011; Escobar, 1989; Evans, et al., 2002; Mate, 2001); however, the potential for companies to contribute to the eradication of those issues, particularly to build community capacity to forge sustainable livelihoods, has not been well documented yet.

Some scholars assert that the cause of these global-local struggles has to do with the absence of a mandatory legal framework at the global, national and local levels and the weak institutional capacity of local governments where the largest mining and exploration projects take place (Hilson, 2006). Global frameworks that regulate corporate performance in the minerals industry are voluntary (ICMM, 2005; IFC, 2011a; ISO, 2010; OECD, 2008; PDAC, N.D; RJC, 2011). This means that companies’ accountability and compensation for natural resource extraction are not mandatory. In this context, national governments and civil society actors are responsible for overseeing companies’ social and environmental performance. However, very often governments and civil society actors lack the capacity to enforce companies’ accountability, a problem intensified by weak governance systems particularly in developing countries (Fiszbein, 1997; IED, 2001). These issues often result in unequal negotiations between companies and local governments, regarding, for example, labour laws and environmental regulations, deriving from an imbalance of power. This can lead to situations where, despite harmful incidents caused by mining operations within communities, companies keep running projects. This is more likely to occur in locations with poor governance.
In June 2001, in Peru, the local government of the municipality of Cajamarca, where Newmont (a gold mining company) operates, came out second best during negotiations with the company after a mercury spill threatened community health. This incident demonstrated that the local government could not effectively deal with this and other related environmental hazards, requiring the intervention of civil society actors like the CBO Generacion de Capacidades and the Canadian NGO CoDevelopment to assist the local government in this regard (IED, 2001). Likewise, research conducted by the World Bank and the Colombian Planning Department (intended to examine the institutional capacity of Colombian municipalities) provided evidence that local governments did not have adequate leadership capacities (Fiszbein, 1997), preventing local administrations from effectively dealing with globally adverse impacts at the local level. These governance dynamics have increased the concern of scholars and others and emphasise the need to extensively explore governance dynamics in resource regions where global companies operate (Alizar & Scott, 2009; Bridge, 1999; United Nations, 2009; Mate, 2001).

These examples illustrate the point that there are serious tensions between the global demand for minerals and metals and the need to deliver more sustainable legacies to local communities. Such tensions have amplified the need for regulation of economic sectors like mining and exposed the difficulties of accessing skilled human capital to expand mining operations. More importantly, these tensions have also shown the challenges in adequately compensating for natural resource extraction with other forms of capital such as human capital, as well as providing communities with more sustainable livelihoods in industries other than mining.

2.2.3 Summary and Research Gap

Global-local pressures are pivotal factors in understanding the context of mining. Global demand for minerals and metals has intensified cross-national investment of multinational companies as well as creating skill shortages in the industry. The shortage of human capital has increased the mobility of people across the globe, including international migration, preventing local unskilled workers from competing against these global pressures. Local communities are becoming more aware of their marginal participation in natural resource extraction and the minor contribution
that they get in compensation for such extraction. This scenario has led some communities to deny a social licence to operate to mining and exploration companies, causing financial losses for these corporations, in situations where the non-provision of a social licence has been recognised.

Companies’ attempts to respond to these issues have increased scholarly concerns that have not been widely explored to date (Cornelius et al, 2008, p. 363). In addition, existing inequalities between global and local forces in the minerals industry have also raised scholarly concerns regarding the governance environment (Fiszbein, 1997) where large mining projects take place.

One of the questions previously introduced in Chapter 1 emerged from this cluster of literature and will in part drive this research. This question is:

- What role does the private sector play in implementing HCB to forge sustainable livelihoods in local communities in resource regions and what role could it play?

2.3 Governance - A Review of the Literature

Governance is increasingly gaining status in the scholarly literature as a description of a space in which three main stakeholders — governments, the private sector and civil society — share responsibilities and interact. The term governance, or kybernan, was used in Classical Greek as a synonym for steer or direct (Bell & Hindmoor, 2009, p. 1). This ancient understanding of governance was first embraced by schools of thought like political science, public policy and public administration and later arose in areas like planning, sustainable development and business. Although government is a key referent in the notion of governance, the two are not the same. The government is “the formal institutional structure and location of authoritative decision making in the modern state” (Stoker, 1998, p. 34). Hence, governance does not mean government; instead, governance transcends the notion of government but also incorporates it. The concept of governance will be explored here in the light of
the role of government and the other actors in governance, the role of conflict, and more participatory modes of governance like multi-stakeholder collaboration.

2.3.1 The Role of the Government

The notion of governance was first conceived in disciplines like public administration and public policy, leading to a government-centred notion of governance in which governments are the core actors (Bell & Hindmoor, 2009, p. 1; Rhodes, 1997). This approach highlights the lead role of the government in administering public issues and subordinates the role of other participants in governance processes. Literature in the natural resources arena that discusses the capacity-building approach in local communities highlights the implications of this government-centred approach to governance for resource regions. Yet scholars indicate that capacity-building actions should extend beyond the government (Labonne, 1999). Labonne (1999), for example, claims that the relationships between governments and other stakeholders are key elements in fostering social sustainability. Scholars in the planning arena have explored state actors’ involvement in helping communities gain social and economic benefits from the escalation of market-based activities. After undertaking research on tourism for poverty alleviation on Fiji Island, Scheyvens, & Russell, (2014, p. 20) concluded that, “the regulative and redistributive function of the State is essential in achieving poverty reduction objectives through tourism growth”. Under this approach, government participation is crucial for local livelihoods and capacity-building implementation in resource regions (Spiegel & Veiga, 2005) but it is not the sole influence.

A part of the natural resource and sustainable development literature criticises the participation of governments as the sole central actors in the implementation of sustainable initiatives like community capacity-building, arguing that governments on their own cannot effectively meet communities’ needs like public services provision and local participation in decision-making processes (Laplante & Spears, 2008, p. 87; Mate, 2001, p. 8). Likewise, it is argued that governance agreements between governments and companies fail to account for mining impacts given the lack of transparency and high levels of corruption at the government level (Bebbington et al, 2008, p. 894; United Nations, 2009, p. 245). Therefore, other stakeholders like civil
society groups (or even the private sector) need to be involved to help fulfil these responsibilities (Muthuri, 2007, p. 76).

2.3.2 The Role of Conflict

The assumption that these governance stakeholders interact through mutually agreed consensus, collaboration and equally shared responsibilities is what Davies (2005, p. 312) called the “governance orthodoxy”. Davies expresses his concern about this approach, arguing that both conflict and collaboration arise in governance arrangements. In the frame of the governance orthodoxy approach contested by Davies, relationships amongst stakeholders are “captured in the common use of the terms partnerships or collaborative networks” (Minnery, 2007, p. 327).

Many scholars in the corporate social responsibility arena seem to follow this orthodoxy. It is argued that the synergy amongst different actors results in positive outcomes for communities since these interrelationships build sustainable community capacity (Muthuri, 2007; Warhurst, 2001). For example, Warhurst’s work (2001) claims that in the Colombian context, multi-sector partnerships in the extractive industries facilitated the access to public services and the creation of development opportunities for locals. The governance orthodoxy approach can be seen in discussions about capacity-building implementation in global and local policy agendas. Agenda 21, the Rio Summit’s action plan, positions partnerships as an approach to pursuing capacity-building initiatives and goals in developing countries (UNDSD, 2009a). In sectors like mining, international agencies that “regulate” the mining corporate sector are becoming supporters of this approach and encourage corporations to engage in “partnerships with governments and non-governmental organisations to ensure that programs like community education are well designed and delivered” (ICMM, 2003). In response, mining corporations have adopted this governance approach to deliver capacity-building programs in Latin American communities (AngloGold Ashanti, 2011; Newmont, 2003; Rio Tinto, 2011) and elsewhere.

However, the assumptions underpinning the notion of the governance orthodoxy are challenged by scholars who highlight the possibilities of conflict in governance
processes, (Davies, 2005; Minnery, 2007). Davies (2005) argues that conflict arises due to the fact that power relations amongst actors are complex and contextually differentiated. When this happens the exercise of authority is necessary to sustain them. However, this authority has the potential for undermining the trust as well as other dynamics that sustain the networks. Following Davies (2005) and Minnery (2007), this current research accepts the possibilities of both rapport and conflict in governance processes and of the need for both options to be explored.

The potential for conflict emerges from the idea that governance includes but transcends government, that is, governance involves diverse actors, each of them with different interests and capable of influencing policy agendas in particular ways (Carroll & Carroll, 1999). The interrelationships and interactions amongst these stakeholders lead to negotiations of multiple interests, resources, responsibilities and degrees of influence, leading to conflict as well as collaboration (Minnery, 2007). “Collaboration is not an ideal solution in all cases and potential benefit will only be realised if the collaborative grouping has appropriate brokering, coordination and leadership and overcomes challenges and avoids potential pitfalls associated with forming and maintaining networks” (Bond, Everingham, & Franks, 2013, p. 10-11). In mining regions, the interactions among stakeholders like mining corporations, communities, governments and educational institutions in the implementation of capacity-building initiatives have elicited collaborative as well as conflict-laden relationships among actors. These both foster and limit the possibilities of HCB implementation in developing countries like Colombia.

2.3.3 Multi-Stakeholder Collaboration

Mining corporations in Colombia are becoming central actors in stakeholder collaboration efforts. This has not only fostered the creation of alliances and collaborative partnerships between corporations and stakeholders in the implementation of HCB initiatives, but has also generated tensions between the companies and their stakeholders. Global economic restructuring has pushed companies towards different accountability approaches, developing more participatory forms of corporate governance. Corporate governance was first conceived as a process of internal responsibility of the board and CEO to internal
shareholders (Brennan & Solomon, 2008, p. 889). However, global concerns regarding the achievement of sustainable development aspirations and global agendas that guide corporate performance are increasingly encouraging corporations to become accountable not only to their shareholders but to their stakeholders as well (ICMM, 2003). This global shift in corporate governance arrangements has increased the importance of multi-stakeholder collaboration in resource contexts.

The notion of multi-stakeholder collaboration is frequently based on the assumption that corporations and other stakeholders participate on an equal basis in decision-making processes and collaborate in the achievement of common goals (Clarkson, 1995; Gibson, 2000; Tracey et al., 2005). However, this simplistic multi-stakeholder collaboration approach can be challenged because the relationships amongst actors are very often driven by factors such as unequal power relations, lack of clarity in their roles and responsibilities, and tensions that limit the possibilities of effective collaboration. In Colombian resource regions, these multi-stakeholder relationships are becoming more complex as corporations are very often placed at the top of development agendas (Cardenas, 2011).

The argument that posits corporations as central actors has largely been explored in schools of thought like economics and business ethics. In the economic domain, Friedman’s work (1970, pp. 173-178) has been one of the most influential. His work had an impact on global neo-liberal policies, particularly on privatisation processes carried out in the 1990s. Freidman’s (1970) contribution to the ascendancy of neo-liberal policies and free-market economics was based on the argument that the social responsibility of a business is to increase profits and therefore corporations are not accountable to external stakeholders. Freidman’s work (1970) and the interest of economists between the 1960s and 1970s (Eisenhardt, 1989; Wilson, 1968, p. 58) in exploring aspects beyond risk sharing, developed theories that underpinned this argument, like the shareholder, agency (Eisenhardt, 1989, p. 59; Fontrodona & Sison, 2006, p. 34) and stewardship theories. These theories emphasise the responsibility of the CEO and Board Chair to increase shareholders’ investment returns but neglect the responsibility and the potential to develop better...
relationships and collaboration between corporations and external stakeholders like communities, governments and other relevant agents.

Friedman’s contributions therefore undermined the idea of community participation and social cohesion since they were fuelled by individualism and corporate self-interest (Stilwell, 2006, pp. 22-23). The reaction against this neo-liberal economic agenda led to civil society’s transformation and therefore to collectivist actions that encouraged private, public and privatised corporations to develop better relationships with their stakeholders and look after their social well-being and livelihoods (Beck, 2007, p. 4). Along with the proliferation of neo-liberal policies driven in part by globalisation, the need to make corporations more responsive to their external stakeholders and establish collaborative relationships with them increased.

These governance shifts allowed communities to become more active rather than remaining passive stakeholders and encouraged closer relationships between the community and other stakeholders like governments, NGOs and corporations. In the public sector, recent public administration theories like new public management (Hood, 1991; 1995, pp. 3-4) gave more importance to citizens and their participation in public administration practices. The new public management approach led to the creation of participation mechanisms intended to legitimise public administration decisions and to help citizens make sure that public administration met social needs. Similarly, NGOs were involved in governance shifts (Bell & Hindmoor, 2009, p. 5; Cashore, 2002, p. 503) which not only increased NGOs’ responsibilities at the global and the local level in terms of public goods and services provision for community well-being but also in terms of assistance to governments to govern natural resources and to demand corporate accountability (Bell & Hindmoor, 2009, p. 5; Edwards et al, 1999).

Scholars in the business ethics domain embraced these governance changes and challenged neoclassical theories that neglected the role of external stakeholders in corporate governance scenarios (Clarkson, 1995; Freeman, 1984; Gibson, 2000; Tracey et al., 2005). One of the major representatives of this corporate governance approach was Freeman (1984) and his work on stakeholder theory. This theory
made room for new approaches like stakeholder collaboration and corporate social responsibility. Freeman’s work posits the notion that corporations have social obligations and therefore need to engage with external stakeholders. In the mining sector, this idea has been recently corroborated by scholars who agree that companies have obligations to their external stakeholders who are also entitled to benefit from the surpluses coming from corporate profit (Clarkson, 1995; Gibson, 2000; Tracey et al., 2005). In part, this arises from the fact that companies are extracting resources that can be conceived of as part of a public endowment. Minerals for example, are envisaged as public goods owned by the state on behalf of the country’s citizenry, and so the companies have a moral obligation to enhance the welfare of the citizens whose resources they are extracting. In the Colombia case, for example, natural resources are a public resource and so, communities need to be compensated for resource extraction.

Recent shifts in governance processes in resource regions have led to active engagement between companies and their stakeholders (Hamann et al, 2005, pp. 61-63; Mate, 2001, p. 18; Porter, Franks, & Everingham, 2013, p. 2; Veiga, et al., 2001, p. 462). This approach is based on the assumption that stakeholders (including corporations, governments and civil society) equally participate in decision-making processes and collaborate in the implementation of common actions like HCB initiatives (Clarkson, 1995; Gibson, 2000; Tracey et al., 2005). While this latter understanding is appealing from a theoretical standpoint, there are major challenges in practice. Scholars from schools of thought like corporate social responsibility, development and environmental management argue that in reality, corporations engage with their stakeholders to pursue their own interests rather than in an effort to achieve sustainable initiatives for communities (Bebbington et al, 2008, p. 900; Hilson, 2006, p. 44; Jenkins & Yakovleva, 2006, p. 272). In addition, collaboration is posited as a win-win relationship based on permanent consensus; however, the tensions that might arise amongst stakeholders in governance scenarios have not been seriously explored. In the Colombian context, these tensions are manifested in lack of communication between corporations and their external stakeholders, low levels of trust amongst stakeholders, imperfect knowledge about stakeholders’ roles and responsibilities, and lack of infrastructure and financial
resources that prevent stakeholders from engaging with companies in the implementation of HCB initiatives (Fiszbein, 1997).

This scenario in which the company is the ‘star’ and the stakeholders are the ‘cast actors’ (Minnery, 2007) not only reveals the potential for collaboration but also the possibilities of resistance and conflict. Following Healey (2006, p. 314) and Minnery (2007, p. 341) the notion of conflict does not necessarily imply a negative connotation; on the contrary, it can be understood as a resistance to change rather than an explicit confrontation amongst parties. In this context, this research is intended to identify the stakeholders that take part in governance processes in the implementation of HCB in the Colombian mining context as well as their roles and responsibilities. But, more importantly, to recognise the factors that limit or lead to conflict and the elements that might overcome these limitations and foster more effective stakeholder collaboration in HCB implementation. The following section explores the concept of capacity-building with a particular focus on HCB. This examination highlights existing scholarly debates in HCB implementation in resource regions.

2.3.4 Summary and Research Gap

The notion of governance was first conceived in disciplines like public administration and public policy, leading to a government-centred notion of governance. However, governance is increasingly gaining status as a space in which the three main stakeholders — governments, the private sector and civil society — share responsibilities and interact. There is an assumption that these governance stakeholders interact through mutually agreed collaboration and equally shared responsibilities; nevertheless, the tensions that might arise amongst stakeholders in governance scenarios have not been seriously explored (Davies, 2005; Minnery, 2007). In developing countries like Colombia in particular, these tensions have been acknowledged but have not been explored exhaustively (Fiszbein, 1997). Hence, this research is intended to identify the stakeholders that take part in governance processes in the implementation of HCB, their roles, responsibilities and interactions and the factors that limit collaboration or lead to conflict.
Two of the questions previously introduced in Chapter 1 emerged from this cluster of literature and they drive this research. These questions are:

- Who are the stakeholders (their roles and responsibilities) for HCB in a multi-stakeholder collaboration governance scenario in resource regions?

- What are the factors that limit or foster multi-stakeholder collaboration in the implementation and development of HCB initiatives in resource regions?

2.4 Capacity-Building - Review of the Literature

Capacity-building is an evolving term that has been subject to multiple definitions. The term was first coined by the United Nations Development Program (UNDP) in 1990 and defined as a “long-term process by which individuals, organisations, networks, and societies increase their abilities to solve problems and achieve objectives” (UNDP, 1997). Since then it has begun to be introduced in developing countries as part of technical assistance programs to help communities cope with the changes caused by globalisation and economic restructuring (Amin & Thrift, 1992). Although capacity-building has applications in several contexts, this particular section of this thesis focuses on exploring definitions and characteristics of capacity-building in communities located in resource regions. Likewise, this research focuses on education for human capital development, a specific type of capacity-building. This notion will be examined in detail at the end of this section. Human capital capacity-building (HCB) is conceived here as a process that starts during and lasts after the mine-cycle (exploration, development, construction, operation and closure) and is intended to provide local communities with tangible skills and knowledge to gain meaningful employment in mining or other industries relevant to the local economy.

As defined by the United Nations, capacity-building is a long-term process that involves the commitment of multiple actors. Veiga et al (2001), for instance, state that community sustainability may be associated with local capacity-building and local governance. Similarly, the Institute for Environment and Development (2001)
argues that HCB needs to be understood as a multi-stakeholder collaboration process, intended to enhance existing skills in local communities. In addition, Loza (2004) defines capacity-building as an ongoing process that improves existing conditions in local communities and requires the development of partnerships between corporations and communities. Indeed, capacity-building cannot be considered as a reactive response from mining corporations to tackle community problems but as a long-term process that takes into consideration community aspirations (Alizar & Scott, 2009). These characteristics suggest a mutually agreed framework for capacity-building implementation; however, there is a lack of understanding about the roles and the interactions of the participants that take part in the implementation of these initiatives in mining regions.

While the idea of capacity-building as a long-term process is appealing from a theoretical standpoint, there are major difficulties in its real-life application. Capacity-building initiatives, particularly in the Colombian context, lack continuity due to the absence of a long-term commitment, resources, coordination and collaboration amongst stakeholders. This is reflected in the existing conditions of communities in the north of Colombia. Despite the past implementation of several capacity-building initiatives in areas like training and education programs, communities are still experiencing joblessness and lack of opportunities (Cardenas, 2011). The important question for this research is why is this the case? To answer this it is necessary to undertake an extensive exploration of the projects, the stakeholders’ interactions and the resultant capacity-building initiatives. This examination will identify not only collaborative but also conflict-laden interactions, providing a greater understanding of this subject and helping stakeholders perform more effectively in capacity-building implementation.

### 2.4.1 Capacity-Building: The Historical Background

To reverse the effects of global economic consequences such as inadequate compensation for the loss of livelihood options, international organisations promoted a set of technical assistance programs and capacity-building initiatives in developing countries (UNDP, 1997). These global initiatives have been the subject of analysis by scholars from various disciplines like education, economics and more recently
sustainable development and corporate social responsibility. The origins and evolution of capacity-building have been influenced by two cross-disciplinary debates since 1970. On the one hand, capacity-building has been regarded as a bottom-up approach that is situated at the local level and is intended to emancipate the poor (Eade, 1997). On the other hand, capacity-building is considered as a top-down process from the global level to build skills and allow individuals and organisations to perform specific tasks and develop skills appropriate to mining. For the purpose of this research a top-down capacity-building approach will be understood as a mining-focused approach whereas a bottom-up capacity-building approach will be understood as an economically diversified approach to development. This latter approach has mainly been adopted by companies through training programs and knowledge transfer strategies in local communities within which they operate.

The notion of capacity-building as an approach to development was first conceived by modern educational schools of thought, like critical pedagogy. Freire (1970), one of the major representatives of this educational approach, argued that education serves as a means to free the poor and the most vulnerable. Freire (1970) notes that communities need to be provided with meaningful education to meet their development aspirations, envisaging education as a political process that involves the active and critical participation of students, teachers and the society. One of the premises of Freire’s work is the notion of freedom, a concept that differs significantly amongst contexts and individuals. This idea was later embraced by Sen (1979) in the capabilities approach to development, which was intended to challenge traditional economic welfare theories. Sen’s (1979) contribution also develops the idea of emancipation that Freire (1970) first proposed. Sen (1979) argues that human beings are free to choose their life-plans. However, this notion of freedom comes from the capabilities that the person develops. In other words, more developed capabilities equal more freedom and more freedom equals more possibilities to choose the life plan that responds to one’s expectations.

Sen’s work later influenced the current global understanding of capacity-building. The World Bank (2011) and the United Nations (UNDP, 1997) conceive capacity-building as a process that allows individuals and organisations to build abilities to perform functions, achieve goals and solve problems. This global understanding of
capacity-building neglects the notion of freedom initially proposed by Freire (1970) and Sen (1979). Bypassing the notion of freedom in the capabilities approach has been contested by a segment of development practitioners. In the development literature, capacity-building is defined as a bottom-up approach to development to help the poor to free themselves and to improve their living conditions (Eade, 1997; Oxfam International, 2011). These tensions between the bottom-up and top-down approaches of capacity-building keep influencing current understandings of capacity-building in several sectors, including the mining sector.

2.4.2 Capacity-Building in the Mining Sector

Given the fact that this project concentrates on Colombian communities in resource regions, it is important to provide an overview of the scholarly and grey literature debates about the role of capacity-building issues in the minerals industry. The inclusion of capacity-building in this sector started with the discourses on corporate social responsibility (Cornelius et al, 2008; Jenkins, 2004; Tracey et al., 2005) and sustainable development (UN DSD, 2009a, 2009b, 2009c). Scholarly debates about community development (Alizar & Scott, 2009; Hilson, 2006; Veiga, et al., 2001) and business (Loza, 2004) have also contributed to this notion in the mining sector.

Previous sections highlighted the point that the mining sector has developed a strong emphasis on capacity-building in recent years. In fact, voluntary global norms that guide the corporate mining sector (ICMM, 2005; IFC, 2011a; ISO, 2010; OECD, 2008; PDAC, N.D; RJC, 2011) and companies operating in Latin America (AngloAmerican Chile, 2008; Barrick, 2011a; BHP Billiton, 2009) have employed the notion of capacity-building in their corporate rhetoric. But at the global and the corporate levels, their concept of capacity-building is clearly a top-down rather than a bottom-up approach.

The Guidance on Social Responsibility, ISO 26000 (2010), defines capacity-building as a process that assists communities to achieve social and economic development standards and that capacity-building creates lasting value to communities (International Council of Mining and Minerals ICMM, 2005). These interpretations of capacity-building position companies as the major providers of capacity-building
initiatives and neglect other stakeholders’ responsibilities in the implementation of these actions. This top-down approach may in fact prevent the mining sector from impacting communities in any positive meaningful way (Mate, 2001).

Capacity-building initiatives have the potential to foster community support and therefore increase the possibilities for companies to gain and maintain a social licence to operate in the expansion of mining operations (Warhurst, 2001). Capacity-building initiatives can also provide sustainable outcomes for communities, companies and other stakeholders involved. Therefore, it is important that companies, communities, national and local governments, educational institutions and other relevant stakeholders in the mining sector take part in their implementation so that they can create shared value, hopefully for all parties. Certainly, capacity-building involves important challenges in its implementation since multiple interactions amongst stakeholders might foster or hinder this implementation. However, in spite of the difficulties that capacity-building might experience in practice, empirical research has shown the positive potential of capacity-building approaches in Latin American contexts for creating value for communities companies, local governments and other role-players in resource contexts (IED, 2001).

Whilst global norms and corporations posit a top-down approach to capacity-building, other approaches to corporate social responsibility and sustainable development position capacity-building as a bottom-up approach to assist communities to improve their living conditions (Alizar & Scott, 2009; Loza, 2004). Most importantly, capacity-building is considered a sustainable legacy for communities which is critical to their livelihoods (United Nations, 2009; Veiga, et al., 2001). In the literature it is also stated that the implementation of capacity-building initiatives involves the participation of several actors and that it cannot rely on communities alone since they often lack education and capacities to communicate their aspirations and become active participants in their own development (Bridge, 1999; Lanzi, 2007; Mate, 2001). In those cases in which the underdeveloped conditions of local communities prevent the employment of a capacity-building approach, government participation might overcome these obstacles. Hence, capacity-building initiatives should not bypass the participation of other stakeholders
such as governments (IED, 2001) and educational institutions. In this sense, it is important to explore the collaboration of stakeholders in the mining sector and the way in which their expertise and resources can become the drivers to achieve capacity-building that is meaningful for all parties.

Although the subject of capacity-building has been well covered in the scholarly literature, there are few scholars who deal with its implementation, particularly with the roles, interactions and responsibilities of stakeholders in HCB implementation in mining contexts (Cornelius et al, 2008; Jenkins, 2004; Tracey et al., 2005). This research gap needs further exploration, specifically in developing contexts like Colombia, where capacity-building approaches for sustainable communities are essential in the face of the escalating mining boom and where stakeholder collaboration for HCB purposes is challenging and experiences serious difficulties.

Given the fact that capacity-building is a broad term, this research focuses on human capital development. The United Nations Development Program (UNDP, 2011) identifies four priority areas of capacity-building: institutional arrangements, leadership, knowledge and accountability. These were further expanded by scholars like Loza (2004, p. 301) who suggested five areas of capacity-building: human resource development, research and advocacy, information access, use and dissemination of information, organisational development and financial sustainability. This review focuses on education for human capital development. For the purposes of this thesis, human resource development capacity-building is understood as human capital capacity-building (HCB), as the notion of human capital is a core element of the SLF, the conceptual framework of this research.

### 2.4.3 Human Capital Capacity-Building

Global agencies like the United Nations Development Program (UNDP, 2011) and the scholarly literature (Loza, 2004), posit human capital development as a core area to be addressed in both developed and developing contexts. The main components of human capital capacity-building (HCB) are knowledge and education (Loza, 2004). HCB initiatives with a focus on education have become a recent subject of debate. It is argued that resource-dependent communities lack both education and
human capital (Bebbington et al, 2008; Gylfason, 2001) and therefore companies should build human capital capacity in compensation for natural resource extraction (Veiga, et al., 2001). Developing countries like Colombia face this problem, one that has adversely impacted local communities and major industries like mining. It has caused both a skilled labour shortage in the industry and a lack of employment opportunities for the local population. In addition, imported labour (due to the lack of local human capital) is causing discontent in local communities and creating an extra cost for companies.

This paradox is not unique to Colombia; indeed, it is an issue of concern across the globe. Latin American countries like Chile, Ecuador and Asian-Pacific countries like Philippines and Papua New Guinea face a skills shortage combined with a lack of employment opportunities in local communities (Fundacion Chile, 2011). Given the relevance of this issue, global frameworks that regulate corporate performance in the mining sector have encouraged mining corporations to promote educational programs that have turned into HCB initiatives. These voluntary regulatory frameworks have played an important role in encouraging the sector to assume an active role in developing capacities in local human capital (ICMM, 2005; IFC, 2006; PDAC, N.D; RJC, 2011). In the guidance on social responsibility ISO 26000 (2010, p. 154) it is stated in this regard that, “education is not only to transfer knowledge, but also to empower [communities] to act on this knowledge”. Because of the significance of human capital development in global regulatory frameworks, companies have employed HCB initiatives to respond to this call.

Companies’ HCB strategies vary according to the context and the variety of stakeholders involved in the process. In Latin America these initiatives go from building capacity in educational organisations through the provision of educational infrastructure and learning centres to enhancing educational systems in mining regions (AngloAmerican Chile, 2008; Barrick, 2011b). In addition, other initiatives have developed apprenticeship programs and university scholarships (AngloAmerican Chile, 2008), actions to enhance the quality of educational systems in mining regions (AngloAmerican Chile, 2008; Xstrata, 2008), training for educators in relevant areas for local economies (Barrick, 2008, 2011b; Freeport-McMoran
Copper & Gold, N.D) and HCB initiatives to attract and retain the workforce in mining areas (Vale, 2009).

In the Colombian context, these actions are intended to build capacity within educational institutions and attract a skilled workforce in mining regions. In addition, mining corporations in Colombia have carried out actions to increase access to formal education and therefore build capacity amongst locals (El Cerrejon Sistema de Fundaciones, 2011). Global standards keep encouraging corporations to engage with HCB initiatives and companies have responded to this guidance; however, HCB is not an isolated process undertaken either by companies or governments. HCB, is an inclusive process that depends on multi-stakeholder collaboration. Yet in the Colombian context, at least from a preliminary investigation of the situation, these initiatives appear to have achieved a very low level of success. The focus for this research is to investigate the actual level of achievement of these initiatives, to identify barriers to their successful implementation and to recommend ways of overcoming these barriers so that the companies operating in Colombia can play a stronger role in advancing HCB in helping communities forge more sustainable livelihoods.

2.4.4 Summary and Research Gaps

Coined as a long-term process to strengthen individuals’ and organisations’ skills to solve problems and achieve objectives, the notion of HCB has been well covered in the literature; however, there are few scholars who deal with its implementation (Cornelius et al, 2008; Jenkins, 2004; Tracey et al., 2005). Although the subject of HCB is appealing from a theoretical standpoint, yet in the Colombian context, these initiatives appear to have achieved a very low level of success (Cardenas, 2011). However, why this is the case has not been explored seriously. Hence, it is necessary to explore the current state of the HCB approach in Colombia.

This examination will not only recognise collaborative but also conflict-laden interactions, providing a greater understanding about this subject and helping stakeholders, including companies, governments and civil society to perform more effectively in capacity-building implementation. In addition, it is necessary to
investigate the actual level of achievement of these initiatives, to identify barriers to their successful implementation and to recommend ways of overcoming these barriers so that the companies operating in Colombia can play a strong role in helping Colombian communities achieve more sustainable livelihoods through HCB implementation.

One of the research questions previously introduced in Chapter 1 emerged from this cluster of literature and drives this research. This question is:

- What are the main priority areas for HCB and to what extent are they valuable for local communities in resource regions?
3 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology applied within this thesis. The methodology is part of the overall research design that according to Sarantakos (2005, p. 137) consists of six steps, which are: topic and methodology, methodological construction of the topic, sampling procedures, data collection, data analysis and reporting. These steps were followed to develop the research design that guides this study (Figure 3). This research design was followed when possible, as development research should take into consideration cultural and ethical matters (Scheyvens, R & Storey, D. 2003) resulting in research re-design strategies during the development of the project. In addition, limitations to the study have been included in this chapter.

![Figure 3 Steps in the Research Design](source)

Source: Based on Sarantakos (2005, pp. 112-113)

3.2 Topic and Methodology

This thesis is aimed at increasing our understanding of the processes of multi-stakeholder collaboration governance dynamics for HCB as integral elements of the SLF in Colombian mining regions. A qualitative methodological strategy is applied to develop this research. Antioquia and Risaralda, the two case studies selected, are characterised by the particularities of the contexts in which they are embedded. Such differences go beyond quantitative data and therefore cannot be broadly analysed in the light of strictly quantitative approaches. Context, policies, institutions and
processes amongst Colombian regions vary considerably and, as elsewhere “numbers cannot account for these differences” (Sarantakos, 2005, pp. 34-35).

Nevertheless, this research values the importance of quantitative analysis since it has facilitated the examination of some of the data collected, like royalty reports, corporate financial reports and other quantitative secondary data meaningful to achieve the objectives of this research. These data were collected from well-known and reliable sources: Colombian Ministry of Treasury, Deputy Director for Education Development, Colombian Ministry of Education, Deputy-Ministry of Tertiary Education, Colombian Ministry of Education, Coordination of Royalty Allocation, Colombian Planning Department, Ministry of Mines and Energy, Colombian Department of Statistics and Mining, Regional and Local Governments and Exploration and Mining corporations. In addition qualitative information was obtained through semi-structured interviews with a number of stakeholder respondents (See section 3.4.2. below).

Following respondents’ requests, corporate, government and community representatives’ identities have been protected. Therefore, companies’ names will not be disclosed and other stakeholders’ personal details will remain anonymous. Data obtained from these sources were analysed through a qualitative research strategy, given the centrality of this approach to this research; nevertheless the secondary quantitative data have been used to assess and validate the qualitative data where possible.

The qualitative strategy applied to this study involves the combination of a number of qualitative methods and techniques, reducing any bias and limitations derived from the application of single methods (Singleton & Straits, 2010, p. 431). The combination of multiple research methods is beneficial for this research, as it enhances the reliability of the collected data. In social research, the use of two or more dissimilar measuring instruments or approaches is called ‘triangulation’ (Singleton & Straits, 2010, p. 432).

According to Yin (2009, p. 116) there are four types of triangulation, which are: data triangulation (of data sources), investigator triangulation (among different
researchers), theory triangulation (of theoretical perspectives to the same data set) and methodological triangulation (of methods). For the purpose of this research, triangulation of data sources and methods will be applied. Three different groups of stakeholders were interviewed (government, corporate and civil society actors). Data obtained from both corporate and government representatives were contrasted against civil society’s responses. Government and corporate data were equally compared. In addition, research data were validated through method triangulation. Multiple methodological techniques were applied to increase data reliability: semi-structured interviews, literature review, focus groups, field observations, stakeholder analysis and document analysis.

Triangulation increases the reliability of the data collected, as it strengthens its validity. Along with the contributions derived from triangulation, the researcher’s experience undertaking empirical research in Colombian mining regions has also facilitated data collection and analysis. The researcher worked as a research analyst for government projects on human rights, public policy and education between 2002 and 2009. During this professional experience the researcher applied a wide range of qualitative research methods and techniques like interviews, focus group interviews and surveys. However, at times, undertaking fieldwork in the researcher’s home country led to certain complexities and limitations (Scheyvens, R & Storey, D. 2003) documented in coming sections.

3.3 Methodological Construction of the Topic

This stage of the research design responds to the question of how the research topic has been addressed in this study (Sarantakos, 2005, p. 105). Extractive industry-based research that deals with social issues has been mainly undertaken in the frame of qualitative approaches. Applying a qualitative approach to address social issues facilitates greater knowledge about the participating communities and stakeholders. In addition, it allows us to test assumptions regarding the study (CSRM, 2011). A qualitative research approach also permits us to “formulate and seek answers to questions about the social world” (Singleton & Straits, 2010, p. 13).
A combination of several qualitative methods and techniques has been applied to the conduct of this study. Using case studies as the basic methodological approach, the analysis used a literature review, document analysis (policy analysis), stakeholder analysis, face-to-face semi-structured interviews and group interviews. A brief description and the contributions of these methods and techniques will be provided in the following sections.

3.3.1 The Case Study Method

This research is intended to deal with diverse and multiple sets of data requiring the application of the case study method. The case studies allow for detailed and comprehensive information to be collected about a more focused issue. The collected data come from different interest groups of: private companies, governments and civil society and individual actors. These actors often have biased opinions. This fact demands the use of data triangulation in such a case study.

The literature suggests that there are multiple characteristics and values in the case study method. It allows the researcher to analyse complex contemporary social phenomena within a real-life context (Yin, 2009, p. 2). It also helps us define research topics broadly and cover contextual conditions determined by multiple and interdependent variables (Yin, 2003, p. 6). The case study is often applied when the researcher has marginal or no control over behavioural events (Yin, 2009, p. 8), which is the case in this research. Two mining regions have been examined on the basis of the application of the case study method and the community has been considered our unit of analysis. For the purpose of this study, community members are those adjacent to existing and future mining projects and who are likely to be impacted during the life of a mine. Lessons derived from this research can be applied to other developing country resource extraction contexts.

Case studies can be single or multiple (Yin, 2003, p. 5); exploratory, determining the feasibility of proposed research; and descriptive, accounting for a phenomenon within a specific context (Yin, 2003, p. 5). This research embraces a multiple exploratory approach to contrast findings and undertakes a comparative examination of two mining regions. In Colombia, multi-stakeholder collaboration for HCB occurs
all over the country but the results so far are very mixed. A comparative analysis of
two case studies potentially eliciting meaningful outcomes in the regions was
selected to unearth the complexity of multi-stakeholder collaboration processes for
HCB (See below).

3.3.2 Qualitative Techniques for Data Collection

Literature review

Any research goes through an exploratory stage in which a review of the available
literature plays an important role. The literature review comprises a secondary
analysis of available data intended to inform the readers and the researcher about
the discussion in the field of study (O'Leary, 2005, p. 56; Sarantakos, 2005, pp. 137-
138). The review of the literature also makes linkages between the previous
research and the planned study and as identified by O'Leary (2005, p. 46) helps
argue the significance of the research. In addition, it has the potential for providing a
review of the methods and techniques more suitable to develop the study
(Sarantakos, 2005, p. 138). The concept of sustainable livelihoods was derived from
this literature and later modified. It provided the conceptual framework for the
research. Then, in order to organise and highlight existing debates, issues and
scholarly concerns about the topic, the literature review then covered three key
areas of analysis. These are: the global/local context of mining, governance and
capacity-building. A critical examination of these concepts outlines the existing
scholarly debates and gaps and served as a means to draw out and refine the
research questions that drive this study.

Document analysis

Document analysis is a useful research method when studying extractive industry
issues (CSRM, 2011). Both document and policy analyses were undertaken in the
early stages of this research. Policy analysis has been pivotal to developing this
study, as it constitutes an important part of the SLF, the conceptual framework of this
research. In the SLF, policies are conceived as a fundamental component of the
governance environment in which communities are embedded (Rakodi & Lloyd-
Jones, 2002). Recent applications of the SLF highlight the need to develop a policy analysis in order to provide a more holistic view of the issue to be examined (Carney, 2003). The value of a policy analysis is that it can later be compared to a livelihood analysis, providing the basis for comparative research findings (Shankland, 2000).

A preliminary policy analysis was conducted before fieldwork to examine HCB policies that impact community livelihoods in Colombia. This analysis encompassed government policies at the national, state and local levels. It also involved international policy frameworks, corporate and government policies influencing the current governance environment in the Colombian case. Further details of the policies examined are listed in Appendix 1. The main body of the research was assisted by the fact that the companies involved have legal obligations to document relevant aspects of their activities.

**Stakeholder analysis**

For the purpose of this research a stakeholder analysis was conducted. It is a tool very often applied to extractive industry-based research and SLF applications. Stakeholder analysis has been used to identify the roles and responsibilities of key actors in the extractive industry (CSRM, 2011). Likewise, this analysis constitutes a key element of the SLF framework (Carney, 2003). This technique is usually applied to examine the PIP (policies, institutions and processes) component of the SLF. The SLF is a disaggregated framework that encompasses divergent perceptions coming from several actors at the government, private and community level (Carney, 2003, p. 15). This requires a detailed examination of the participants involved and the stakeholder analysis is a suitable tool to develop this examination.

A preliminary baseline stakeholder analysis was undertaken before fieldwork to identify the stakeholders in the Colombian governance environment, including government organisations, private sector organisations (especially mining and exploration companies) and civil society actors (small-scale miners (artisanal miners), community members, CBOs, NGOs and tertiary education institutions) influencing the governance environment in the research area. This examination was followed by a more detailed stakeholder analysis refined after the fieldwork.
Semi-structured Interviews, Focus Groups and Field Observations

Interviews with key participants are pivotal to collecting meaningful data. Field interviewing usually takes the form of semi-structured conversations pursuing a specific purpose (Singleton & Straits, 2010, p. 367). Semi-structured interviews pursue a list of pre-identified areas of conversation, although the form in which these topics are covered varied from interview to interview in this study. Interviews are usually applied to study phenomena that go beyond particular settings. Field interviewing was conducted in Bogota, Risaralda and Antioquia. Face-to-face semi-structured interviews and focus group interviews with key stakeholders at the national, state and local levels were applied to map, explore and evaluate the roles of these stakeholders and forms of collaboration (and the possibility of tension). Some individual interviews were recorded in the form of videos. Some video material has been presented when reporting about key research findings at local and international seminars. Appendix 3 contains interview questionnaires applied to conduct interviews at the community level and in the public and private sectors.

According to Singleton et al (2010, p. 367) most of the field interviewing occurs informally, in ordinary conversations “and as a natural extension of participant observation”, introducing the researcher to a broader field interviewing scope. Semi-structured interviews with groups and individuals were conducted based on preliminary research and ideas and material that arose in the field.

Although interviews are very useful methodological techniques, they have some limitations that were taken into consideration before undertaking fieldwork. The roles, aspirations, and ways various participants perceive existing collaboration dynamics differ amongst actors. Stakeholders from both public and private sectors have different interpretations about particular events. Government officers have a different approach towards collaboration, governance or development issues from corporate representatives and community members. Although some stakeholders shared common goals, particular interests transcended these aspirations. These could only be documented through deep conversations with each participant or group of participants. These differences have been identified and addressed (as far as
possible) through the various approaches to triangulation that have been incorporated into the research.

3.4 Participant Observation

According to Scheyvens & Storey, (2003) participant observation requires the researcher to get involved in the community where the research is conducted. This provides the researcher with a deeper understanding of the community’s perceptions and helps the researcher understand the community’s interpretations of their own reality. However, participant observation as a methodological approach raises a number of potential ethical and investigative problems. The researcher is originally from Colombia, facilitating her immersion in the culture and enhancing her understanding of participants’ perceptions. She also became directly involved in activities related to livelihoods in the mining region case studies: for example, on several occasions, the researcher was invited to participate in roundtables and/or related activities that discussed critical issues for community members adjacent to mining and exploration projects. However, to reduce potential bias the researcher accepted invitations to participate in community roundtables only after the research interviews had been completed. In this way she was able to participate in discussions on the basis of very preliminary findings without community expectations influencing the data from the interviews (whilst maintaining interviewee confidentially in the discussion, of course). For the purpose of this thesis community expectations are understood as the voice of community members. This is reflected in the thesis through statements of groups and individuals at the community level.

As explained in Chapter 1, the researcher also has experience working as a consultant in Colombia in areas related to the PhD research. This helped her define the research questions as well as helping emphasise the critical importance of the research topic. However, this potentially raises ethical issues about practitioner research as addressed by Drake and Heath (2011), who explored the potential difficulties facing researchers who are immersed as practitioners in the area they are researching. For the current research, the researcher used a deliberate strategy of interviewing people other than those previously known and in all cases triangulating
interview data with data from other sources. Another deliberate strategy was to use her existing network of contacts to identify stakeholders in other organisations to be interviewed rather than interviewing people from within her own existing networks of contacts. In this way the research was able to avoid many of the practitioner research problems discussed by Drake and Heath (2011).

Knowing about the Colombian context as a Colombian and being able to use (albeit indirectly) existing stakeholder networks added to the richness of the data that could be gathered for analysis, assisted in overcoming potential language and cultural barriers, and strengthened the potential practical implications of the thesis findings.

3.5 Selection Criteria for Case Study Locations and Sampling Procedure

Following Sarantakos (2005, p. 105), sampling procedures respond to the questions of where and when the topic will be studied and who the participants will be. Antioquia and Risaralda were selected as the two case study areas. A multiple case study approach was used because it facilitates a comparative examination of the two regions of interest. Selection criteria make it clear why these two case studies were selected from a number of potential cases in Colombia. The selection of the two case studies was based on three criteria: 1) regions that belong to mining districts; 2) locations where existing governance arrangements for HCB are in place and 3) places that display complexity in multi-stakeholder collaboration processes. This section provides a justification of the selection of the areas of research. A more detailed description of each case study will be provided in Chapter 5.

3.5.1 Selection Criteria for Case Study

Mining Districts

The case study areas are considered mining districts according to the governance system of Colombia’s mining sector. This not only means that they have an important participation in the minerals industry but also that they have policies,
institutions and processes in place that regulate companies’ performance and the sector as a whole. This governance system is officially supported through Mining Development Plans. These policy documents vary according to the context as resources and contextual particularities differ from one location to the other. Antioquia and Risaralda differ substantially not only geographically but also in terms of the activity of the mining sector, but they are both officially identified as mining districts.

**Antioquia Case Study: Mining District**

Antioquia is one of the case study regions examined as part of this research. Antioquia comprises Nordeste Antioqueno and Amaga-Medellin mining districts. Nordeste Antioqueno is located at the north of Medellin City, the capital city of Antioquia and one of the most developed cities in Colombia. Nordeste Antioqueno is comprised of the municipalities of Amalfi, Segovia, Remedios, Anori, San Roque, Cisneros, Maceo, Caucasia, El Bagre, Zaragoza, Nechi, Teraza and Caceres. Interviews were undertaken in Amaga in Amaga-Medillin and, Segovia, Cisneros and San Roque in Nordeste Antioqueno. These were chosen because of the increased mining activity and the escalation of community capacity-building initiatives in these municipalities. The region hosts large reserves of gold, platinum and silver. Nordeste Antioqueno produced 6,290.9 Kg of gold; 102.2 kg of silver and 2.6 kg of platinum in 2002. Its production totalled 8,395.7 kg of metals and represented 31.3% of the Colombian production in the same year (UPME, 2005, p. 52).

Medium and large mining and exploration companies are responsible for most formal operations in the region. Most of the mines in Nordeste Antioqueno are operated by small-scale domestic companies; however, there has been an increasing participation of multinational corporations as well as informal mining in recent years. International corporations own large areas of land across two municipalities. South African and Canadian companies operate in the region. The Canadian mining company owns four mine-sites with a total strike length of 5.7 Km (Providencia, El Silencio, Sandra K and Carla) (GrancolombiaGold, 2012) surrounded by local communities from the mining district Segovia-Remedios.
Another case is a South African mining company currently undertaking exploration projects in the region and owner of a large parcel of land in two municipalities, Cisneros and San Roque. Figures 4 and 5 show just one part of its property. The company is licensed to operate in this property as well as in other areas of land that go beyond the mountain that shows in Figure 5.

The property also comprises an extensive water source, Nus River, which hosts alluvial gold deposits. In addition to these formal organisations, for some community members and informal miners, alluvial mining is still the only livelihood they have. With the arrival of the multinational companies, informal mining practices have tapered off, a situation that has threatened traditional livelihoods of many community members. However, this is not the case for all small-scale miners from the region, particularly those serving in the construction materials industry. Small-scale miners have been able to negotiate with the multinational mining company and get a concession to extract construction materials from the multinational’s property. Figure 6 shows small-scale operations undertaken in the multinational’s property, in the frontier between San Roque and Cisneros municipalities in Nordeste Antioqueno Mining District.
Figure 6 Small-scale operations at multinational company’s property

Focus groups and individual interviews were also conducted in the Amaga-Medellin mining district, one of the main coal producing areas in Antioquia. Located at the south of Medellin City, the mining district of Amaga-Medellin hosts one of the largest reserves of coal in the region. Interviews were undertaken in Amaga where medium and small-scale coal mining companies operate. Interviews with government representatives at the regional level were conducted in Medellin where the administrative centre is located. Amaga-Medellin is one of the most active mining districts in the Antioquia case study. Evidence indicates that 75% of coal production from the Amaga-Medellin mining district is used for local consumption, mainly for the cement and construction industry. 24% of coal production goes to Valle del Cauca, a province located on Colombia’s Pacific region and the remaining production is exported through Buenaventura Port, located on the Pacific Ocean. Coal production totalled 780 Kt in 2003 and just 10 Kt was exported in the same year (UPME, 2005, p. 101).

Despite the large number of medium sized coal mining companies operating in the region, there is also a proliferation of informal coal mining in the Amaga-Medellin mining district. On the journey from Medellin to Amaga through Café Road, one can see quite a few informal coal operations which also represent the only livelihood of some community members inhabiting the Amaga-Medellin mining district.
The Antioquia case study is based in what is historically one of the most active mining regions in Colombia. Nordeste-Natioqueno and Amaga Medellin Mining Districts contribute substantially to Colombia’s minerals industry. Due to the increase in mining operations, livelihoods have been transformed and such transformations deserve early attention.

**Risaralda Case Study: Mining District**

The Risaralda case was selected as a case study as it is experiencing an escalation in mining and exploration projects. It is likely that communities will be impacted by mining operations in the long-term. Hence, the need to plan for sustainable communities at an early stage of mining development. In addition, choosing Risaralda as a case study has to do with its social sustainability approach. It differs considerably from the Antioquia case. As discussed in the data analysis chapters (5 to 7), Risaralda’s approach has the potential to help communities cope with potential mining impacts more effectively than in the Antioquia case.

The Risaralda province hosts the Quinchia municipality. The latter is also part of Marmato mining district. Interviews were conducted in Quinchia where Canadian and domestic exploration and mining companies undertake projects. Risaralda differs substantially from the Antioquia case as the former does not have as long a mining history as Antioquia does. Neither the province is one of the most developed regions in the country. However, the main difference is that Risaralda does not rely on mining as much as Antioquia does. At the local level Risaralda’s economy is more diversified. Coffee production and the trading of goods and services are the main economic sectors. Economic diversification has had positive implications for community livelihoods.

Large-scale mining in Risaralda is a recent development and some exploration projects are still in the preliminary stages. However, informal mining in Risaralda also provides a livelihood for some community members. Formal mining has contributed considerably to Colombia’s mining sector. Statistics show that mining production from the Marmato mining district represented 1,797.3 Kg in 2002 (UPME, 2005, p.
58). Figure 7 shows domestic coal operations undertaken in Quinchia by a medium sized domestic coal company that employs a local workforce.

Figure 7 Coal Mining operations in Quinchia, Risaralda

Source: The author, 2012

International mining and exploration companies also operate in the Marmato mining district, specifically in Quinchia’s municipality. Exploration projects currently undertaken by Canadian companies occupy large areas of land that host important reserves of gold. Informal miners who previously worked in this area are involved in ongoing negotiations with the Canadian company to explore possibilities of relocation and opportunities for their livelihood transformations. A group of informal miners has obtained a concession to keep mining the land where the Canadian company operates. Figure 8 shows the researcher with some formerly informal miners who are working at the mine site. Informal mining is undergoing a licensing process in which international companies are actively participating. This process focuses on employment generation for informal miners at the large scale mining industry. This approach is likely to have a strong impact on community livelihoods.
The provision of employment opportunities and community capacity-building appear to have become two key approaches to compensate communities for the extraction of natural resources in the Marmato mining district. The impact of those community capacity-building initiatives already in place will be discussed in depth in chapters 5 to 7.

Increasing mining and exploration activities in the mining districts where this research takes place have led to the need for delivering sustainable legacies to communities. The increasing of operations in mining districts could not be the only criterion to determine the selection of the case study areas. More importantly, there was a need to examine the complexities in multi-stakeholder collaboration for HCB. Therefore, case study areas that display such complexities were selected to determine the factors that either limit or foster multi-stakeholder collaboration governance dynamics.

**HCB and Complexity in Multi-stakeholder Collaboration**

Complexity in collaboration processes was the second criterion for selecting the case study locations. The Antioquia case study was selected because it displays important complexities. There is a strong interest in up-skilling local communities, like informal miners, in mining and related areas in this region. In 2010, local
communities from Antioquia experienced the death of between 63 and 73 artisanal miners caused by poor mining practices (Different sources give different figures. Ospina (2010) gives 63). This issue raised awareness of HCB amongst government authorities, multinational companies operating in Antioquia and local communities. Similarly, high mercury emissions derived from informal gold processing (Cordy et al, 2011) gained governments’ attention. Since then, the state government has embraced the notion of HCB in the form of education to train local communities in mining practices and to increase safety standards in mining operations. Mining companies operating in the region have also engaged in capacity-building for small-scale miners as a means to help license existing informal mine sites, and to support them in gaining a social licence to operate. These initiatives were also intended to provide communities with employment and other livelihood opportunities in large-scale mining projects.

Evidence shows that multi-stakeholder collaboration for HCB in Antioquia is a recent phenomenon and has involved a large number of stakeholders at the national, state and local level, including mining and exploration companies, local governments, tertiary institutions, local communities and other civil society actors. The state government and tertiary education institutions have driven some of these initiatives given their interests in education as a key element to foster community development in all economic sectors, including mining (Gobernacion de Antioquia, 2012, p. 17). For example, the Technological Complex for Mining, Agriculture and Entrepreneurship is a mining-oriented HCB initiative that involves governments, universities and companies operating in the region. In addition, a multi-stakeholder alliance between the National University of Colombia and the state government was set up in July 2012 to enhance community capacity in sectors like mining, agriculture and infrastructure. However, in spite of active multi-stakeholder collaboration for HCB, feelings within local communities are very mixed. Hence, this study aims to investigate the current collaborations.

On the other hand, Risaralda’s communities seem to have benefited from the outcomes derived from existing multi-stakeholder collaboration governance dynamics for HCB. Both private and public stakeholders have actively engaged with HCB initiatives. The state government has effectively implemented public policies to
encourage companies to propose and execute social responsibility agendas and HCB initiatives fitted to a community’s needs. In addition, active community engagement has elicited positive outcomes for locals and has made a positive difference for Risaralda’s communities.

Both Antioquia and Risaralda are key case studies to investigate the issues explored in this research as they seem to display dissimilar complexities in multi-stakeholder collaboration processes for HCB. This thesis aims to explore the factors that are limiting or fostering existing collaboration for HCB. Similarly, the major role that multinational companies play in the governance environment in both case study areas provides enough elements to draw up recommendations about ways of strengthening their roles in forging sustainable communities. Such understanding will hopefully also help companies, governments and civil society, in these and other regions rich in natural resources in developing countries, to perform and collaborate more effectively in HCB implementation and to plan for more sustainable communities. The selection of the case study areas, then, largely determined the stakeholders to be involved in this research.

3.5.2 Sampling Procedure

A group of mining and exploration companies operating in the case study areas, and a broad selection of representatives from the private sector, government and civil society actors participated in this study. The mining and exploration companies included domestic and international examples. The names of the corporations will remain anonymous to protect the identity of participants. This group was selected to examine their potential role in forging sustainable livelihoods in the case study areas. The choice of the case studies then determined the government representatives and NGOs and CBOs to be included, as the choice was limited to those active in the case study regions. The mining companies selected also play a major role in the governance environment of the case study areas as they are active participants in collaboration processes for HCB.

Top level government representatives involved in multi-stakeholder collaboration for HCB in mining regions participated in this research. They were recruited by using
purposive sampling from public organisations that deal with the issues that this research addresses. Government representatives from Bogota and the case study areas were contacted before fieldwork was undertaken. Over 30 representatives were contacted through personal contacts in the researcher’s professional network, most of whom agreed to be interviewed.

Information obtained by interviewing the above groups was triangulated by interviewing local civil society actors (NGOs, CBO representatives and academics). They were shortlisted through reference from other such persons of repute. Community members were selected from existing capacity-building initiatives and through relevant contacts provided by government representatives. They were contacted by email or personally for consent.

A summary of the research proposal was provided to contacted interviewees. Participants were also informed about the nature of the research questions and permission was gained for the interview to be audio-taped. The participants comprised an interview sample of 48 representatives from the private sector, government and civil society, drawn from both case study areas and Bogota city where state organisations are located as shown in Table 2. The participants were chosen as representatives of their organisation or agency. The highest proportion of participants comes from civil society and community organisations and NGOs. Civil society represents 45.8% of the total interviewees. Notice that this percentage also involves stakeholders from academia and representatives from educational institutions where community capacity-building initiatives were in place. This percentage is followed by representatives from government organisations. Top-level government officers were interviewed representing 33.3% of the participants. Company executives and private sector senior representatives comprise 20.8% of the total interviewees. The table below shows the sample in each one of the two case study research locations.
Table 2 Stakeholders interviewed in the case study areas

<table>
<thead>
<tr>
<th></th>
<th>Antioquia Case Study</th>
<th>Risaralda Case Study</th>
<th>National Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>8 interviewees</td>
<td>4 interviewees</td>
<td>4 interviewees</td>
</tr>
<tr>
<td>Private sector</td>
<td>4 interviewees</td>
<td>5 interviewees</td>
<td>1 interviewee</td>
</tr>
<tr>
<td>Civil society (community members)</td>
<td>6 interviewees</td>
<td>6 interviewees</td>
<td>-</td>
</tr>
<tr>
<td>Civil society (organisation and tertiary institutions)</td>
<td>4 interviewees</td>
<td>6 interviewees</td>
<td></td>
</tr>
</tbody>
</table>

Source: The author, 2013

The active participation of civil society stakeholders has to do with the focus of this research. One of the research questions aims to explore what the community capacity-building priority areas are. According to Eade (1997) capacity-building needs to be understood as a bottom-up rather than a top-down approach to development. Eade (1997) claims that community members, CBOs and NGOs have a better understanding of their capacity-building needs and the implications of these for developing sustainable livelihoods. This justifies the high number of community and civil society actors interviewed. However, other stakeholders such as governments and corporate representatives were also included to contrast and triangulate data collected.

Special groups within the Colombian population were not the focus of the research. Interviews did not explicitly draw attention to ethnicity or religious belief. As stated above, interviewees were previously informed of the nature and scope of the research. Participants indicated that the research protocol met the local national norms, practices and laws.

3.6 Data Collection

The qualitative research strategy applied to this research is a structure that has helped ensure systematic, consistent and reliable results, as has been the data analysis. Appendix 2 contains a comprehensive chart of the steps followed in these stages. The chart encompasses the research questions, their corresponding objectives, indicators and data collected, sources of the data and the methods applied to obtain each cluster of data. Data collection has been undertaken since the early stages of this research, applying methods and techniques like policy analysis.
and literature review. Limitations were encountered in finding up-to-date statistics, as the last census survey was undertaken in Colombia in 2005. Other techniques were applied while undertaking fieldwork. Based on the case study as a methodological approach, this research implied the use of individual face-to-face as well as group interviews with stakeholders at the national, state and local levels and participant observation.

Group interviews were conducted with key civil organisation leaders and community members participating in community capacity-building initiatives in both case study areas. Data collected have been applied to map and explore the potential of existing capacity-building initiatives and their implications for community members. Similarly, data collected from focus group discussions have helped evaluate the roles of stakeholders and forms of collaboration (and some tensions) for generating sustainable livelihoods in the case study areas.

Observations and field notes also constitute key methodological techniques for data collection procedures. Observations helped support some of the researcher's perceptions during interviews. Similarly, field notes were recorded, particularly when spontaneous multi-stakeholder collaboration occurred or when significant events that related to the questions that drive this thesis happened. The use of diverse research methods and techniques, or what Yin (2009) calls method triangulation, increased the reliability of the data collected.

### 3.7 Data Analysis

Data analysis was undertaken in three main stages, as suggested by Babbie (2013): data reduction, data display and conclusion drawing. Data went through these stages, which were also complemented with the use of Nvivo software. Nvivo was particularly useful for the data display and conclusion drawing processes.

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2 This section has been included in the International Mining for Development Centre’s (IM4DC) Action Research Final Report. IM4DC, is an AusAID initiative and funding body of the fieldwork undertaken as part of this research.
Data analysis chapters (5 to 7) were based on qualitative primary and secondary information collected from in-depth interviews with the 48 respondents identified in Table 2. In addition, there were 6 focus group discussions with community members participating in HCB initiatives, three in each case study area. The secondary information was collected from policy documents, development plans, academic and consultant reports, books, journal articles, company and government reports, websites and brochures.

3.7.1 Data Reduction

Primary data, including group and individual interviews, was collected in Spanish, the local language in both case study areas. The researcher is a Spanish native speaker, which facilitated data collection and interpretation. Data were transcribed into a Microsoft word document. Some interviews went through editing when required. Data were then incorporated into Nvivo, software for data analysis.

Once in Nvivo, data were coded according to the core themes of this research, which are: governance, livelihood assets (HCB) and context. Nvivo was also useful to identify stakeholders and group them according to their perceptions. Figure 9 shows a Nvivo cluster analysis chart. It highlights similarities amongst stakeholders’ perceptions. For example, it shows how government and private sector perceptions regarding community livelihoods are very similar; whereas tertiary institutions and community members are more likely to agree on livelihood-related matters. Other subcategories were also created from these that were identified from the data to enrich the analysis and draw meaningful conclusions. Analysis derived from the use of Nvivo was later translated into English by the researcher.
3.7.2 Data Display

Data are organised and displayed according to the structure of the SLF, the conceptual framework that drives this thesis. Data have been displayed in three clusters based on the SLF diagram: context, governance and livelihood assets (HCB).

3.7.3 Conclusion

Conclusion drawing was driven by the questions that guide this research. Following Yin (2003), Mandke (2007) identifies several tactics to facilitate conclusion drawing in research conceptually supported on the SLF. These components are: explanation building, clustering, making metaphors, triangulation, making contrasts and comparisons.

Some of these tactics were applied to this study to enable relevant conclusion drawing procedures. Making contrasts and comparisons, for example, were useful to understand the differences between the two case studies and other potential case...
studies worldwide. But mostly to determine dissimilarities amongst stakeholders. Along with triangulation, a concept previously explained in this chapter, the use of these techniques helped increase data reliability (Yin, 2009).

3.8 Reporting

According to Sarantakos (2005), reporting is the last stage of the research design. This stage has to do with the dissemination of the information collected and analysed throughout the study. The main reporting of this research is the thesis itself. In addition, some of the findings of this research have been presented at international conferences and published after peer-review procedures. The list of papers that partially comprise this study are listed in the chapter 1 of this thesis. Some parts of this research have also been included to fulfil the requirements of funding bodies’ requested submissions and reports, like the International Mining for Development Centre (IM4DC). Seminars were also delivered in Australia and overseas to disseminate research findings. These are listed at the front of this thesis.

3.9 Summary

This section outlined the research design applied to this thesis. Six overall steps were followed to conduct this research: topic and methodology, methodological construction of the topic, sampling procedures, data collection, data analysis and reporting. These steps were developed through this chapter to understand the way in which data were collected, accurately analysed, and presented.
4 CONCEPTUAL FRAMEWORK: SUSTAINABLE LIVELIHOODS FRAMEWORK (SLF)

4.1 Introduction

This chapter proposes the Sustainable Livelihood Framework (SLF) as the governing theoretical approach of this research. The Sustainable Livelihood Framework has been adopted to address the complexity and large number of issues associated with multi-stakeholder collaboration for human capital capacity building (HCB). This framework also increases our understanding of community possibilities of forging sustainable livelihoods in resource regions. The framework and some sections contained in this chapter were previously published in the peer-reviewed article *Mine Life Cycle Planning - Creating Lasting Value for Communities* (Buitrago & Robertson, 2014)

By developing an innovative application of SLF based on the Colombian situation, this chapter also helps us understand the ways in which the three key areas of research (context of mining, governance and capacity-building) connect and interact as constituent components of SLF. This research focuses on the linkages between these three areas and the SLF framework. Hence, this chapter presents a justification for the use of SLF as the conceptual framework, followed by an examination of SLF principles, their implications for communities and their relevance for this thesis. As shown in Figure 10 below, the details of the standard sustainable livelihoods framework is modified considerably for its application to the subject matter of this thesis. The ways in which it is modified are explained more fully in the rest of this chapter, but in summary the contextual component and governance component of the SLF are focused on aspects particularly relevant to resource extraction, particularly mining in Colombia, and the focus is on human capital rather than the other four forms of capital, usually used in the SLF.
4.2 Justification for the use of SLF as the Conceptual Framework

Concepts like sustainable development (SD) and sustainable livelihoods have taken centre stage in the present day development literature. The notion of SD owes its origins to environmental activists in the 19th century (Dresner, 2008, p. 19). However, in the contemporary era, SD is seen as a broad term that encompasses a wide range of social, economic, environmental and political elements. Global organisations such as the World Bank and the United Nations have embraced the Brundtland Commission’s definition of SD, one that states it is “Meet(ing) the needs of the present without compromising the ability of future generations to meet their
own needs” (World Commission on Environment and Development, 1987, p. 31). This definition is based on an anthropocentric perspective that places humans at the centre, downplaying other components that are equally important to achieve sustainability, like the environment itself. This SD approach has also made room for a proliferation of global and local agendas pertinent to development, like Agenda 21, Local Agenda 21, and SD approaches like the triple bottom line, the five capitals approach and SLF (Freeman, 1996, p. 65).

Approaches that follow the triple bottom line model posit economic, environmental and social spheres as the three core elements to consider when formulating strategies to achieve SD. This model has been applied to examine the social and environmental effects of industrial activities like mining. It is argued (Jenkins & Yakovleva, 2006; Labonne, 1999) that there is still a gap between the triple bottom line principles and concrete corporate actions to bring these principles into practice. The five capitals approach examines SD in the light of five forms of capital: natural, human, social, economic and physical capitals. The premise of the five capital approach is that for long-term sustainability the extraction of natural resources or natural capital needs to be compensated for in relation to communities by improving or increasing other forms of capital (Porritt, 2007, p. 137). However, the application of the five capitals approach has been criticised given the often marginal contributions derived from the application of this approach to local community issues (Brereton & Pattenden, 2007).

In developing nations like Colombia, the application of the five capitals approach faces serious difficulties. Empirical research in Colombia shows that communities have not been adequately compensated for natural resource extraction (Cardenas, 2011). Hence, there is a need to examine this issue broadly. Aspects like the context in which communities are embedded, governance dynamics, community assets, strategies and possibilities for development need to be examined holistically. Given the SLF holistic perspective to address development matters this framework is considered the most suitable approach within which to frame this current research.

Following the anthropocentric approach to SD, the SLF was conceived as a way of thinking about the objectives, scope and priority of development (Carney, 2003, pp.
In 1998, the British Government’s Department for International Development (DFID) adopted the SLF as an approach to assessing and evaluating developmental projects funded by it. Since then several other international organisations, like the United Nations Development Program and the NGO, CARE, have also adopted the SLF to undertake their projects (Carney, 2003, p. 11).

One of the core components of SLF is the notion of ‘livelihood’ itself which is also relevant in this research. According to DFID (1999, p. 1), a livelihood comprises the capabilities and activities required for the means of living. In addition, it is also stated that, “a livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future” (DFID, 1999, p. 1). Emerging from a combined understanding of the literature reviewed, this research uses the SLF as the main conceptual framework and develops an application of this approach to understand the linkages amongst mining, its global/local context, governance and livelihood assets (HCB). The connections amongst these components are illustrated in Figure 10.

However, despite its use by many organisations, a major criticism of the SLF is that its application neither provides an adequate role for the private sector, nor provides for broader ideas about governance dynamics (Carney, 2003, p. 48). Thus, on the one hand, this study contributes to knowledge examining how private corporations take part in creating sustainable livelihoods. On the other hand, it provides a broader understanding of more participatory governance arrangements in human capital capacity building and their implications for generating sustainable communities.

A revised version of DFID’s SLF has been adopted to map the proposed research. Following Rakodi and Lloyd-Jones (2002, p. 9), the proposed SLF application includes key components of analysis, which are: the external environment; vulnerability context; policies, institutions and processes; livelihood assets; livelihood strategies and livelihood outcomes. These key components are linked as shown in Figure 10. As indicated above, some elements of the original SLF were modified to better explain the Colombian mining case. The implications of minerals and metals extraction for communities have been identified as a trend in the context box. This
component is the principal factor for mining in Colombia and allows us to understand the context of multinational and domestic mining companies in constructing sustainable livelihoods in local communities. Governance processes constitute the core component of the policies, institutions and processes box due to the complexity of multi-stakeholder collaboration processes in the case study areas. HCB is examined as the principal focus of the livelihood assets box. A summary of these modifications, and an assessment of the value of the changes for this and future research, is given in section 8.4 below. Although the standard SLF normally comprises five forms of asset (or capital), this research focuses on human capital. Other components will not be examined as part of this thesis as they do not relate to the objectives of the research.

The SLF modified version constitutes a guide to organise this thesis. This framework also serves as a means to review existing activities, understand cause and effect relationships, and provide a structure for analysis and a checklist of ideas (Rakodi & Lloyd-Jones, 2002). The SLF can also be complemented with other tools like policy and document analysis. These tools have been applied to this research to increase our understanding of multi-stakeholder collaboration governance processes for HCB and to identify the key stakeholders involved in these dynamics, their voices, and roles and responsibilities. Other contributions from the SLF to this research come from the SLF framework principles and their implications for communities.

### 4.3 SLF Principles: Implications for Communities

The SLF is based on ten principles, which are also foundational elements in developing this thesis. Existing SLF applications engage with these principles in accordance with the scope of the study undertaken (Carney, 2003, pp. 14-15; Rakodi & Lloyd-Jones, 2002). For the purposes of this research, the ten principles are conceived as pivotal elements as they contribute to the assessment of economic activities such as mining and their contribution to local communities. This section analyses the SLF principles in the light of the objectives of this research:
### Table 3 SLF Principles

<table>
<thead>
<tr>
<th>SLF Principle</th>
<th>Linkages to this research</th>
</tr>
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<tbody>
<tr>
<td><strong>Flexible and long-term</strong></td>
<td>SLF is a flexible and adaptive framework used to address multidisciplinary issues (Carney, 2003, p. 15). The SLF applications are diverse in terms of scope and subject. They go from poverty reduction projects to empirical research that increases our understanding of the contribution from economic activities like agriculture (Carney, 2003, p. 18) and tourism (Mandke, 2007, p. 84) to communities. Hence, this framework also has the potential to assess the contribution of activities like mining to community sustainability. In the natural resource extraction scholarly literature, it is argued that a community can gain lasting benefit derived from the mining sector during the mine-cycle and beyond (Hilson, 2006; Veiga, et al., 2001). Hence, this thesis examines mining and exploration companies’ long-term contributions in forging sustainable livelihoods.</td>
</tr>
<tr>
<td><strong>Sustainable and people centred</strong></td>
<td>Achieving sustainable development aspirations requires placing people at the centre of development. This approach transcends the notion of development as economic growth and so has the potential to overcome community development limitations (often caused by community natural resource-dependence) (Jenkins, 2005). Scholarship in corporate social responsibility and business ethics argues that communities that receive paternalistic treatment by corporations encounter limitations in achieving sustainable development aspirations (Cornelius et al, 2008; Jenkins, 2004; Veiga, et al., 2001). This is what Jenkins (2004, p. 26) calls ‘false dependency’, a scenario in which corporations act as providers of services and business for communities. The picture gets worse when communities become “mere puppets in the regeneration game played out by large national, regional and local agencies” (Cornelius et al, 2008, p. 358). The SLF is a suitable approach to examine these issues. This thesis explores the extent to which communities are able to become active participants in shaping the community development agendas.</td>
</tr>
<tr>
<td><strong>Participatory and empowering</strong></td>
<td>Getting communities involved in development decision-making is pivotal for achieving SD aspirations. The natural resources arena and community development literature recognise the role of community participation in achieving SD. In addition, scholarly debates express concerns regarding the lack of empowerment and poor decision-making skills in moving community participation from theory to practice (Christensen &amp; Grant, 2007; Mabudalhasi, 2002; Muthuri, 2007). In Colombia, community participation was taken more seriously after the latest Constitution came in effect in 1991 (Congreso de la Republica de Colombia, p. 6). However, despite this important achievement for communities, they still face enormous challenges to actively participate in development agendas due to escalating inequalities (Cardenas, 2011, pp. 58-59). Community participation is undoubtedly an important factor in forging sustainable livelihoods. The role of communities in governance is crucial to create strategies and sustainable outcomes for those communities (Rakodi &amp; Lloyd-Jones, 2002).</td>
</tr>
<tr>
<td><strong>Multi-level and holistic</strong></td>
<td></td>
</tr>
</tbody>
</table>
The SLF is both a comprehensive tool and a holistic approach. It is considered a multi-level approach as it can be applied as a tool for policy-making, project design and evaluation or as a conceptual framework (Rakodi & Lloyd-Jones, 2002). The SLF helps undertake a holistic analysis of the elements that impact community livelihoods (context, governance and livelihood assets (HCB)) and understand the linkages between these elements. However, despite the SLF’s holistic approach, a detailed examination of individual components can also be undertaken without overlooking other elements. This research meaningfully benefits from this holistic approach, as it allows us to build knowledge of the linkages between the three areas of concern (context, governance and livelihood assets (HCB)) as constituent components of the SLF framework.

Conducted in partnership and disaggregated

Previous SLF applications illustrate a marginal examination of the governance environment that surrounds communities. Multi-stakeholder collaboration between the private sector, governments and civil society actors and academic institutions are envisaged as key elements in strengthening community capacities and/or assets and to help build sustainable communities (Carney, 2003, p. 15). Following Muthuri (2007) and Warhurst (2001), the synergy between these actors serves as a means to address development issues. To understand the relationships of these stakeholders, previous SLF applications have suggested an examination of the ways in which different actors perceive development and related issues in relation to a specific community. Such analysis is conducted in this research to undertake a more comprehensive examination of the processes of multi-stakeholder collaboration in a governance scenario for HCB.


4.4 Understanding the SLF for this Research

To frame this research, an adaptation of the SLF is proposed (See Figure 10). This framework also helps to map and organise this thesis. The SLF application developed is used in this document to examine the three SLF components in the light of the Colombian case. Policy and document analyses were applied to support this examination. This thesis also aims to examine the livelihood strategies and outcomes components of the SLF.

This section provides a brief explanation of the elements that constitute the proposed SLF application to justify the modifications made to the original SLF (Rakodi & Lloyd-Jones, 2002) and to enable it to be applied to the Colombian mining situation. ‘The context’, ‘governance’ and ‘HCB’ are the major constituent components of this research and have also been identified as key areas of analysis in the SLF.
components (‘context’, ‘policies institutions and policies’ and ‘livelihood assets’): The context is the first component to be examined. Major attention will be placed on the SLF element of trends (implications of changing company social performance for communities). ‘Governance processes’ is the component of analysis in the policies, institutions and processes box, and ‘capacity-building’ (which relates to human capital), is the core element of analysis in the livelihood assets box.

4.4.1 Context SLF Component

The broader term ‘context’ is used here rather than the original term ‘vulnerability context’ found in the SLF literature. Trends are the principal factor for mining in Colombia and therefore constitute the key area of analysis in the SLF vulnerability context component. Colombian communities are diverse. Hence, mining impacts on locals and the benefit they get from the industry are quite different across its various regions. There are some locations where the compensation for natural resource extraction has positively impacted on communities, therefore, they cannot always be categorised as vulnerable (Warhurst, 2001). Other elements of the context component (such as cycles and shocks) are considered in the thesis; however, the component of trends is exhaustively analysed as it constitutes the core area of analysis in the context component of SLF for this research. Following the SLF, there are resource trends that impact on communities. For the purpose of this research such trends comprise existing reserves of natural resources (minerals and metals) in Colombia. Mineral and metal extraction in Colombia started long before colonial times but has recently played a stronger role with the arrival of multinational mining and exploration companies (West, 1952).

According to the SLF literature, the trends can be positive or negative, national or international and have a strong influence on community livelihoods, whereas the cycles pertain to recurrent economic shifts and employment opportunities (Rakodi & Lloyd-Jones, 2002, p. 14). For the purpose of this research the original SLF concept of ‘seasonality’ has been replaced by cycles. The current mining boom is fostering important global mining and exploration projects across Colombia. These resource cycles have also had implications for the domestic economy and local communities’
livelihoods, particularly in terms of regular fluctuations in the value of minerals and livelihood and employment opportunities.

The context SLF component also includes the concept of shocks. The shocks lead to shifts that might destroy community assets resulting in or from conflicts or wars (Rakodi & Lloyd-Jones, 2002, p. 14). This section proposes the Colombian internal conflict (or civil war) as a shock. It is also argued that internal conflict and local demands have been a determinant in the transformation of the Colombian governance environment, an argument that is explored later in the research.

4.4.2 Policies, Institutions and Processes

A broader examination of the governance environment is developed in the light of the SLF component of policies, institutions and processes (PIP) (Figure 10). This component deals with the governance environment in which livelihoods are constructed (Rakodi & Lloyd-Jones, 2002, pp. 15-16). For the purpose of this research governance processes for HCB include the interactions between three stakeholders: government, the private sector (particularly mining and exploration companies) and civil society. This section also develops an analysis that aims at increasing our understanding of the roles that stakeholders and existing policies play in the Colombian governance environment for HCB.

4.4.3 Livelihood Assets SLF Component

Capacity-building relating to human capital constitutes the core area of analysis in this research. Human capital capacity building is the principal focus of the livelihood assets SLF component used here. According to DFID (1999, p. 1), a livelihood comprises the capacities required for the means of living. People’s livelihoods or capacities are the core elements of SLF. This perspective positions people as active participants in the development of their particular context rather than as passive or deprived actors starved of assets. Community assets are diverse and vary across individuals, households and communities. Colombian communities are often starved of financial and skilled human capital (Cardenas, 2011). Strengthening community assets can help locals forge more sustainable livelihoods (Rakodi & Lloyd-Jones,
The SLF version adopted in this research involves five forms of capital, which are: human, social, physical, financial and natural capitals as shown in Figure 11. However, this current research focuses specifically on human capital. Data analysis chapters (5 to 7) will identify five forms of human capital that need to be further enhanced in resource regions of Colombia. These are shown in Figure 11, but the justification for using them is contained in Chapter 7.

Figure 11 Five forms of capital

4.4.4 Livelihood Strategies SLF Component

The assets available or stock of capital at the community level can be accumulated, restored, exchanged or depleted and put to work to generate income (Rakodi & Lloyd-Jones, 2002, p. 10). The transformation of assets in any of these forms constitutes the livelihood strategies in the light of the SLF. Such strategies are more likely to be effective if communities become active participants in their own development (Rakodi & Lloyd-Jones, 2002, p. 10). However, this argument needs to be examined carefully, as communities might not have the capacities or skills to develop their own sustainable livelihood strategies (Eade, 2007). Hence, strategies
in place might be temporary rather than sustainable in the long-term. They may also be of varying degrees of relevance for locals. Although this is not a core area of this research, this thesis will briefly develop this component in the recommendation section contained in Chapter 8.

Following Scoones (in Mandke 2007), livelihood strategies can be examined in consideration of five aspects: combination, substitution, sequencing, clustering and trade-offs. The first three strategies will be examined in conclusion chapter 8 to recommend alternative ways of forging more sustainable livelihoods in resource regions in Colombia. Trade-offs will not be analysed as they account for the tensions between livelihood outcomes and sustainability. Instead, these tensions are explored to answer the fourth question that drives this thesis intended to examine the priority areas of HCB and their value in forging sustainable livelihoods. This analysis builds knowledge about the tensions between community aspirations and existing livelihood options derived from HCB implementation.

4.4.5 Livelihood Opportunities and Outcomes SLF Components

The strengthening or misuse of capacities or assets might bring either positive or adverse livelihood opportunities or outcomes for communities. For instance, an increase in economic activities can foster labour market opportunities. If communities are well equipped in terms of capacities or assets they can gain valuable benefits resulting in significant livelihood outcomes. These outcomes derive from the combination of livelihood opportunities and community assets (Rakodi & Lloyd-Jones, 2002, p. 16). Therefore, if a community’s capacities match gainful livelihood opportunities they might be able to increase income and improve their existing conditions. An examination of livelihood opportunities will also be provided in the recommendation section in chapter 8.

4.5 Summary

This chapter proposed the Sustainable Livelihood Framework as the governing theoretical approach of this research. The innovative application of SLF based on the
Colombian case, helps us understand the way in which the three key areas of research (context, governance and livelihood assets (HCB)) connect and interact as constituent components of the SLF. It has also highlighted that this research focuses on the linkages between these three areas of research and the SLF framework. Similarly, it is argued that this framework increases our understanding of community possibilities of forging sustainable livelihoods in resource regions. This chapter also presented a justification for the use of the SLF as the conceptual framework, followed by an examination of the SLF principles, their implications for communities and relevance for this thesis. The chapter also underlines the way in which the SLF has been modified for application to this research.
5 SLF APPLICATION: THE CONTEXT OF MINING IN COLOMBIA

5.1 Introduction

This chapter explains the context of mining in which Colombian communities are embedded. It is the first of three analysis chapters in this thesis. It serves two main purposes. First, it provides some background to the research location and case study areas. Secondly, and more importantly in terms of the development of the thesis, this chapter contains the first practical application of the elements of the sustainable livelihoods framework 'context' component.

Three contextual factors that are identified through the sustainable livelihood framework have been analysed: cycles (the Colombian mining boom), trends (resource trends and community livelihoods) and shocks (internal conflict). In order to respond to the objectives of this research, this chapter analysis pays most attention to the SLF component of trends, although the other elements of shocks and cycles will also be investigated. According to the SLF, undertaking the trends analysis can provide a wider understanding of the interactions of global and local forces and their implications for the context where communities are embedded. Therefore, this section focuses on examining the contributions of both multinational and domestic mining and exploration corporations to local communities' livelihoods.

The major challenge that companies face when engaging in sustainable livelihood transformations has to do with constraints in formulating and implementing social responsibility agendas that integrate relevant HCB initiatives for communities. This section posits the idea that these limitations prevent mining and exploration companies from playing a stronger role in implementing HCB initiatives intended to forge sustainable livelihoods. The chapter is organised as follows: it begins by providing some research location background. This is followed by an introduction of the case study areas, and it finishes with an exploration of the Colombian mining context in the light of the SLF context element.
5.2 Colombia: The National Location and Background

This section provides an overview of the current state of the mining sector in Colombia as well as a characterisation of the communities that participated in this research. Mining is not a new enterprise in Colombia. On the contrary, it precedes colonial times (West, 1952) and is now one of the most active economic sectors in the country. There are large reserves of commodities country-wide such as coal, copper, platinum, silver, gold, iron and emeralds (DNP, 2010, p. 169; Torres, 2001). However, despite Colombia’s long mining history and large resource reserves, the sector faces serious challenges particularly in terms of responsible mining. Mostly, these challenges are in relation to community livelihoods transformations:

The greatest challenge in Colombia is our unawareness of the mining industry. Mining is a traditional sector in Colombia. Mining dates from our indigenous ancestors. They were salt and gold miners. We extract the best emeralds in the world. We also extract coal all over the country. In the past we did not give mining the importance we are giving it now. This perception changed radically five years ago due to the development of new mining projects and questions around the possibilities of undertaking responsible mining in the country (Senior Representative from the Private Sector, Interview, November, 2012).

According to the Colombian Planning Department (2010, p. 161), the current mining boom is pivotal for national development and stakeholders are developing strategies to maximise economic and social growth in mining regions. In order to respond to current global mining demands, the Colombian government has embarked on four main strategies, which are: international and domestic investment; promotion and consolidation of clusters or providers of services for the mining sector; formulation and implementation of public policies to drive the mining sector; and more efficient natural resource management to foster better allocation of mining revenues and sustainable development (DNP, 2010, p. 169). However, despite a range of government policies in place, many communities still live in vulnerable conditions and have not been able to create sustainable livelihoods for themselves.
For the purpose of this thesis, communities are those whose livelihoods are dependent on mining and/or have been transformed due to the escalation of exploration and mining operations. Although this research also involved the participation of mining company executives, managers, government representatives dealing with mining issues, academics and CBOs, it focuses on communities and their livelihoods. Similarly, the research took into account the participation of informal miners as they have become key stakeholders in the Colombian mining context. In addition, recent issues around informal mining have increased stakeholder difficulties in building sustainable livelihoods in the case study areas. Although informal mining is not the focus of this research, some top-down or mining-focused HCB initiatives in the Antioquia case aim to build miners’ capacity. Hence, the importance of characterising this stakeholder group.

Complexities around informal mining have been driven mainly by market pressures at the global level and environmental and social and economic issues at the local level. The escalation of global investment in the Colombian mining sector has put pressure on regulatory bodies to secure land access for multinational projects. As informal miners currently operate where large-scale mining projects take place, government authorities have embarked on strategies to either eradicate informal mining or to formalise these mining activities. Lessons need to be learned from the Antioquia case where large-scale companies, participating in the study, are engaging with informal mining, creating lasting value for all parties. This engagement process will be documented in further sections. In addition, poor mining practices at the local level (Cordy et al., 2011) and social issues, associated with female and child labour have further escalated the complexities around informal mining, creating an array of intensifying challenges for companies.

My friends and I worked for the mine. You know... when you are young, you are motivated to work and do many things. I am not working at the present time. My son asked me not to do it. I have been working at the mine since I was 7 years old. I know this mine as the palm of my hand. The mine was not like it is now. I remember I could still see coffee crops. It is sad to see how the mine looks now... there are accidents due to landslides at all times. (Informal female miner, Interview, November, 2013).
In both case study areas, some community members come from low-income mining families. Locals who do not work at the mine own small businesses or belong to community organisations linked to mining activities being undertaken in the region. There are cases in which community members have been able to cope with the escalation of mining more successfully than others. However, why this is the case and what the factors are that either limit or foster a community’s abilities to become more sustainable will be explored in chapter 6.

The mining boom is not particular to a specific region. Hence, there are major implications for communities across the country. Mining is expanding all over Colombia. Such expansion has been undertaken by both the domestic and multinational exploration and mining companies originally from Canada, Australia, South Africa, United States and Switzerland. However, for the purpose of this thesis, Antioquia and Risaralda constitute the case study areas, where South African, Canadian and domestic mining and exploration companies operate (See Figure 1 in Chapter 1). The following section discusses the background of these case study areas.

5.3 Case Study Areas

The Antioquia and Risaralda case study areas differ substantially geographically and politically. More importantly, there are significant differences regarding the complexities around multi-stakeholder collaboration governance processes for HCB and therefore livelihood transformations. Table 4 shows some of the differences and similarities between the two cases:

<table>
<thead>
<tr>
<th>Data</th>
<th>Antioquia Case Study</th>
<th>Risaralda Case Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>5,601,507</td>
<td>1,524,770</td>
</tr>
<tr>
<td>Urban Population</td>
<td>77.5%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Non-urban Population</td>
<td>22.5%</td>
<td>43.6%</td>
</tr>
<tr>
<td>Female Population</td>
<td>51.7%</td>
<td>51.3%</td>
</tr>
<tr>
<td>Male Population</td>
<td>48.3%</td>
<td>48.7%</td>
</tr>
<tr>
<td>Illiteracy Level</td>
<td>7.5%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

Source: (Data from Colombian census register in 2005)
5.3.1 Antioquia Case Study Area

The State of Antioquia is located on the north Pacific Coast of Colombia (See Figure 12). The region is going through a mining boom that has increased the complexities in multi-stakeholder collaboration governance processes. This situation challenges communities’ possibilities to develop sustainable livelihoods. Antioquia has as an active mining industry, as it holds the largest reserves of gold, silver, coal, platinum and construction materials in Colombia. The industry also has a long history in the region:

Spanish people came to Remedios as it was considered a gold-rich region. This district was known as our Lady of Remedios. During the independence, there was a dispute as Spanish people did not want to lose this region. Simon Bolivar (a political leader during the Latin America independence period), donated this land to the Catholic Church in exchange for sponsorship. At that time English and French were also promised these mines and English people came over. I was told that my ancestor Gomez-Plata lived in this region. However, he was not a miner. He supplied mines with wood. His children (my grandparents) worked with him…. Due to war pressures, English gave these mines to Americans around 1945. Americans also bought Silencio mine. However, as the other mines did not have an owner, they founded Cordoba, Marmajito and Sucre mines. When Americans came over they were no longer interested in these mines because they did not find them profitable. However, they still worked at the Silencio, Cogote and Sandra K mines. Sandra K was given this name because Mr. Knab had a friend whose daughter’s name was Sandra…he was her god-father and he name the mine after her and his last name Sandra K (Community Leader, Interview, February, 2014).
Mining projects currently operated by domestic and multinational companies have significant implications for local communities (Camara de Comercio de Medellin para Antioquia, 2010, p. 14; Sistema de Informacion Minero Energetico Colombiano, 2010, pp. 16-17). Antioquia hosts a diverse population inhabiting urban, peri-urban and rural areas. Data from the actual census register of 2005, (see Table 4), shows that Antioquia had an urban population of 4,340,744 inhabitants and 1,260,763 people inhabiting non-urban areas in 2005. Out of the total population, 51.7% were female and 48.3% male. Antioquia also hosted a total of 1,458,193 households in the same year. In addition, the illiteracy level in Antioquia was 7.5% for those members of the population older than fifteen years. However, in the same year a considerable percentage of the population had completed at least one level of education: elementary school (37.4%), followed by secondary (33.3%), undergraduate and postgraduate (11.3%) and vocational education (3.6%) (DANE, 2010).

**Mining and communities in Antioquia**

Some interviewees in Antioquia acknowledge that reserves of minerals and metals will not last forever and therefore sustainable livelihood options for locals need to be developed:

Mining and agriculture are key sectors for this region. Current government agendas are intended to promote these two sectors. At the end of the day we
do not know if we will continue being farmers or end up being miners. At the very moment, multinationals have not helped much. Hopefully we get some help in the future. Sooner or later mining will be finished. Our goal is to keep developing agriculture as a livelihood when this time comes. Our purpose is also to couple both, agriculture and mining (Mining-agriculture CBO, February, 2014).

However, existing limitations in multi-stakeholder collaboration governance present major challenges in the delivery of lasting legacies for communities over the mine-cycle and beyond (Buitrago & Robertson, 2014). As will be explained below, companies operating in the region have embarked on some HCB projects to enhance locals’ assets and help them cope with livelihood transformations.

Although there are HCB initiatives in place, most of them benefit informal miners. Nevertheless, such initiatives need to be extended to the 23% of the population who still live in poverty (DANE, 2010), so they can develop sustainable livelihoods. This is a very high rate in a region where mining is the main economic sector and where royalties totalled $US 22 million in the last two years (Sistema General de Regalías, 2013) while employment estimates in 2009 showed that mining operations employed a total of 18,200 people in the region (Camara de Comercio de Medellin para Antioquia, 2010, p. 18). Despite the private sector’s contribution and investment in HCB in the regional economy, social problems persist.

Both multinational and domestic companies are involved in supporting HCB but this has not resulted in their playing a stronger role in creating sustainable livelihoods. The domestic mining company participating in this study owns one of the largest coal mine sites neighbouring communities in the south of Antioquia and has embraced an HCB approach intended to “build skills amongst locals to attract and retain its workforce” (Corporate Representative, Interview, October, 2012). Similarly, both the South African mining and Canadian companies operating in the region, owners of the San Roque project, as well as Providencia, El Silencio, Sandra K and Carla, the largest gold reserve in the area, have partnered with government organisations to build capacity amongst informal miners and other community members adjacent to exploration and mining operations.
Multinational companies operating in the region are also committed to promoting community development and have collaborated with other actors to achieve this goal (GrancolombiaGold, 2012; AngloGold Ashanti, 2008, p. 3). However, despite existing collaboration there are mixed feelings in local communities. Factors like lack of articulation between development aspirations and corporate agendas and limited collaboration amongst stakeholders are some of the aspects that prevent stakeholders from helping communities benefit more from the mining bonanza:

This is a mining town. Mining is the only livelihood for 80% of community members. We have experiencing some difficulties in engaging with informal miners as they operate in our land title. However, we have been trying to develop better relationships by providing them with contracts to operate on legal basis" (Corporate Representative, February, 2014).

Although multi-stakeholder collaboration processes for HCB are in place, they still face challenges. This is diminishing local community capacity to overcome existing social and political limitations:

I think in the coming years this town will disappear. Companies promised us development and better opportunities for small miners. Where are the multinationals that promised us employment? There are a couple of companies that do provide us with jobs but what about the other companies? For example, there are no employment opportunities for small miners. People live here out of “rebusque”... If it is 5 or 6 pm and my children are starving and I have not made any income during the day. What do you think I should do? I go and steal something to feed my children, right? that is “rebusque” (Community Members, Interview, February, 2014).

In this context, this study explores the existing conflict-laden processes that are preventing companies and other stakeholders in the region from providing locals with more sustainable livelihood options. Further development of these issues will be explored in forthcoming chapter 6.
5.3.2 Risaralda Case Study Area

Risaralda is a region located in the Colombian Andes mountain range. This geographical area is one of the most active producers of minerals and metals in Colombia. With the escalation of mining operations, stakeholders in Risaralda have attempted to maximise social benefits from mining and exploration operations. Governments, the private sector and civil society have joined in efforts to develop an HCB approach that tackles key community issues. Collaboration processes for HCB are characterised by active community engagement. Mining is part of Risaralda’s cultural and political/economic life; however, the recent escalation of mining operations undertaken mainly by international companies has not prevented communities from creating alternative livelihoods and benefiting from existing HCB governance arrangements.

![Figure 13 Risaralda case study area location](http://commons.wikimedia.org/wiki/File:Colombia_Risaralda_loc_map.svg)

Mining and exploration projects operated in Risaralda impact on local communities in both urban and non-urban areas. According to the census, Risaralda hosted a population of 859,666 people in 2005. Out of the total population 665,104 people inhabited urban areas, whereas 194,562 were located in peri-urban and rural areas. 51.3% of the population was female and 48.7% male. Statistics also show that Risaralda hosted 230,532 households in urban and non-urban areas. The illiteracy rate of people older than fifteen years old was 6.8% in 2005, a lower percentage compared to the Antioquia case study. By 2005, most of the population had
completed at least one level of education: elementary school (40.3%), followed by enrolments in secondary education (32.8%), undergraduate and postgraduate (9.8%) and vocational education (3.9%) (DANE, 2005).

**Mining and Communities in Risaralda**

Recent development of mining and exploration projects has positioned this activity as one of the main economic activities in the region. Operations have been undertaken by Canadian and domestic exploration and mining companies. Metals production in Risaralda represented 6.71% of Colombia’s total production in 2005 (UPME, 2005). Effective multi-stakeholder collaboration processes along with economic benefits derived from mining have driven social development.

Existing exploration and mining projects have helped communities to achieve their development aspirations. This has been possible due to some governance processes and factors in place that have allowed companies to play a strong role in promoting community development leading to more sustainable livelihoods. Data analysis shows that active community engagement, state government’s HCB public policies and effective governance arrangements for HCB are factors that foster multi-stakeholder dynamics and have therefore contributed to building sustainable livelihoods (See Chapter 6).

*Figure 14* Risaralda’s women participating in a dress making HCB initiative

*Source: The author, 2012*
One of the most significant findings in the Risaralda case study has to do with active community engagement. This will be demonstrated in later chapters 6 and 7. Communities have played a strong role in the formulation of local development agendas, becoming active participants in achieving their development aspirations during the mine’s cycle (exploration, construction, production and closure and post-closure). Locals have benefited from HCB actions intended to help them cope with livelihood transformations. Such initiatives comprise activities, like agribusiness, dress-making (see Figure 14), jewellery, coffee production and agriculture. Former informal miners and miners’ wives have been provided by the company with dress-making training to create an alternative livelihood. These actions have been implemented either as a result of effective government-corporation partnerships or as a response to the community requests. However, Risaralda needs to learn lessons from Antioquia as engagement processes with informal miners are becoming complex and there is an absence of top-down or mining-orientated HCB approaches to help informal miners further develop their livelihood. Further details about the factors that led bottom-up (economically diversified) HCB initiatives resulting in positive outcomes for communities will be provided in Chapter 6.

5.4 SLF Context: Cycles, Trends and Shocks

According to the SLF, the context in which communities are embedded has strong implications for the sustainable livelihoods of those communities. The SLF posits that governance dynamics and community assets (and strategies put in place to strengthen those assets) are also influenced by contextual factors (Rakodi & Lloyd-Jones, 2002, p. 14). An examination of the context shows how susceptible communities are to threats and/or how resilient they are. In other words, it helps make explicit a community’s ability to mobilise assets to explore new livelihood opportunities and recover from adverse impacts (Rakodi & Lloyd-Jones, 2002, pp. 14-15). An examination of the context in which those transformations take place is essential to understand community possibilities. Hence, this section identifies the practical application of the SLF context component to the Colombian case (see Figure 15).
Following the SLF, the contextual factors include trends, cycles and shocks that impact on the communities in question. As stated in previous sections, trends comprise changes in the natural resource base, demographic trends, and global and local forces that influence livelihoods (in other words, elements that change over time). Cycles have to do with seasonal shifts of prices and employment opportunities (or elements that are based on a pattern of regular recurrence) and shocks are understood as conflicts and natural disasters (or elements with a sudden and substantial impact). (Rakodi & Lloyd-Jones, 2002, p. 14). As explained earlier, the SLF was originally developed to address poverty in agriculturally-based rural areas, so in applying the framework to an activity such as mining that occurs in both urban and non-urban areas there is a need to modify the elements to make them more applicable to this context. In this case, for example, cycles refer to the cyclical nature of mining booms and downturns relating to fluctuations in the international prices of minerals and the fluctuating demand for goods that are made from these raw materials.
5.4.1 Cycles: The Mining Boom in Colombia

The Colombian mining boom led by both multinational and domestic mining and exploration companies in the last three decades has resulted in livelihood transformations and fluctuations at the local level. This situation has led stakeholders in the mining sector to explore how to help communities cope with such transformations and to develop sustainable livelihoods. The Colombian mining boom and the ongoing implications for communities are here examined as part of the cycle component of the SLF. Mining has become a cyclical economic sector dependent on global demand for minerals and metals. These global economic processes determine mining production at the local level, which has strong implications for local communities, particularly for informal miners, workforce recruitment and legacies for locals living adjacent to mining operations. However, in spite of mining’s overall escalating contribution to economic growth, such financial improvements have not had the same positive impacts in social terms.

Colombia’s mining boom has led the country to reorganise and re-classify the segments of the sector to better respond to global and local demands. The mining sector operates across the entire country and can be classified in terms of the participation of mining and exploration companies in the domestic and the global market. The Colombian mining sector consists of four segments (UPME, 2007). The mining groups and corporations that occur in each segment appear in Figure 16, and are organised from the lowest level of participation of mining groups and companies in the national and global market to the highest level of participation.

The first segment of the mining sector comprises small-scale mining activities that rarely have a recognisable organisational structure. In this segment, mining is considered as part of the cultural heritage and is an artisanal, small-scale or informal activity rather than a major practice. The second consists of industrial companies. These corporations have a marginal participation in international capital markets. The next segment encompasses companies undertaking exploration projects. The last segment includes the multinational mining and exploration companies operating in Colombia. There is important participation by domestic mining companies, but
foreign corporations have a major presence and therefore contribute significantly to the Colombian mining sector.

Figure 16 Participation of mining corporations in the national and international market

Mining contributions have strongly supported the national economy. Revenues derived from the mining sector amounted to nearly $US 856,701 million in 2009 (Ponce, 2010, p. 384). Colombia’s economy has also benefited from exports of minerals and metals. Between 2003 and 2006 minerals and metals exports represented nearly 30% of the value of all national exports (UPME, 2007, p. 10). Likewise, small and large-scale mining have increased employment rates in mining regions (Villas & Beinhoff, 2002, p. 228).

Although mining significantly contributes to economic growth, the scholarly literature and consultancy work indicate that the Colombian mining sector experiences challenges in social and environmental sustainability as well as in access to skilled human capital. Colombia faces serious problems regarding human capital skill shortages in mining regions:

On the one hand, we have very specialised human capital working for the oil and gas sectors. On the other hand, we have informal labour. The latter works in very unsafe and unhealthy conditions. This has led to poor environmental
and social responsibility practices in the mining sector (Senior Government Representative, Interview, November, 2013).

These practices inhibit mining development and slow wider development in mining regions (Molina-Escobar & Restrepo-Baena, 2010, p. 149; Villas & Beinhoff, 2002). Similarly, Colombian communities lack skills and education to directly and indirectly engage with the mining sector or other relevant sectors (Cardenas, 2011). As interviews for this research showed:

Communities are not educated enough to manage the benefits derived from the sector. When they get resources they spend all of what they have. They do not have the education to make decisions about their life plans and therefore generate more sustainable livelihoods (NGO Representative, Antioquia, Interview, November, 2012)

I know a miner called “Toma leche” that earned USD$ 700,000 after finding a gold deposit. That happened a few years ago. At the present time he has a handicapped daughter and lives in very poor conditions… when miners get money they spend it in a very short time. This explains why there is much prostitution and alcoholism in the town (Miner and Community member, Antioquia, Interview, February, 2014)

This problem has led companies and governments to tackle these issues through the formulation of HCB approaches to provide local communities with better education and higher-level skills to access gainful employment opportunities and so develop sustainable livelihoods (DNP, 2010, p. 49). However, at times these corporate social responsibility approaches for HCB bypass regional development aspirations and therefore do not contribute to building sustainable livelihoods, resulting in an escalation of discontent amongst locals and a dearth of gainful opportunities and livelihood options.
5.4.2 Trends: Resource Trends

The current resource trend or mining boom has led to changes over time. These transformations also have implications for local communities. Companies operating in resource regions have sometimes induced such changes through their corporate social responsibility agendas (CSR). These accountability mechanisms have been essential to shape livelihood transformations in the research locations. Corporations operating in Colombia often embark on CSR agendas as a way of obtaining a ‘social licence to operate’ or community acceptance. HCB initiatives in the form of education and training are becoming part of such agendas; however, there is lack of understanding regarding the formulation of these initiatives and the potential benefits for the relevant communities. Bottom-up, locally-driven and more economically diversified social responsibility approaches implemented by corporations in Colombia can become one of the main drivers for local development and sustainable livelihood aspirations. Developing bottom-up rather than top-down social responsibility agendas and therefore HCB approaches for development has positive implications for communities. This will be demonstrated in later sections.

Multinational companies operating in the case study areas have embarked on social responsibility agendas focused on HCB and have developed governance arrangements to implement those initiatives. However, very often those agendas tend to bypass community expectations. This is an issue that threatens community livelihoods:

“We informal miners think we do not get much support from multinationals. We feel oppressed instead. We feel threatened by mining companies, government and criminal bands” (Informal miners, Focus group, February, 2014).

Although interviewed companies operating in Risaralda seem to have overcome this barrier, existing inadequacies of top-down corporate social responsibility approaches is one of the major challenges that participant companies in Antioquia face.
In Antioquia existing corporate approaches of participant companies appear to be unsustainable as they do not often meet community expectations. In some cases, these companies have not developed community-based social responsibility agendas to effectively implement HCB initiatives, tackle livelihood-related issues and respond to adverse mining impacts. However, even when these mechanisms are in place they seem to bypass civil society’s voice. According to a senior government representative at the national level:

Global corporations invest on projects that are convenient for their business such as infrastructure and facilities for mine’s workers rather than on more sustainable legacies for communities adjacent to their operations. This corporate approach is preventing local communities from achieving development aspirations which questions the notion of sustainable and responsible mining in the region (Senior Government Representative, Interview, February, 2013).

Despite existing corporate engagement in the Antioquia case study, many companies still continue to develop their social responsibility agendas on the basis of three premises, which are: taxes, royalties and infrastructure. “Social Responsibility does not go beyond some little help for infrastructure, royalties and taxes” (Civil Society Representative, Interview, October, 2012). Although other initiatives such as HCB more often become part of such agendas, in most cases those offer a minimal contribution to non-mining livelihood options. In the Antioquia case, for example, successful HCB initiatives are mainly intended to overcome the skills shortage in the industry rather than providing other livelihood options for locals or helping them cope with ongoing livelihood transformations. These actions can be replicated in other sectors relevant for the local economy:

There is a project called Biored intended to build informal miners’ capacity. Biored is an USAID initiative. The multinational company asked Biored members to set a partnership to develop a characterisation of existing informal mines. This process resulted in contracts between the multinational company and informal miners. The partnership also involves HCB for informal
miners to improve mineral processing and environmental practices (Independent Consultant, Interview, February, 2014).

Similarly, existing corporate engagement with community livelihood transformations has been circumstantial. A case in point is an accident in 2010, which led to the deaths of 63 miners, caused by poor mining practices at the south of Antioquia. The accident was caused due to poor safety practices. This incident acted as a wake-up call for the companies operating in the region to improve their operational practices, including engagement with the local communities (Ospina, 2010). This resulted in psychological support to miners' widows and close family members. In addition, families were promised compensation in the form of money and infrastructure. Additionally, HCB also became part of the corporate agenda as the company is currently working closely with local foundations and community organisations to promote education and training programs in health and safety: “HCB in the form of education is a key element for this corporation, as it creates value to the mining company and the community” (Manager, Corporate Social Responsibility, interview, October, 2012). This HCB top-down (mining orientated) approach has improved safety standards remarkably. However, more attention needs to be paid to the broader community to help it cope with mining-led transformations.

Risaralda’s case differs from Antioquia as corporate social responsibility, and therefore HCB agendas, are more community orientated and economically diversified. This approach has meaningfully contributed to meeting community aspirations. Risaralda’s state and local governments have pushed companies towards a more bottom-up and community-orientated agenda. This scenario has been beneficial for local communities as they have been better compensated for natural resource extraction:

Companies operating in the region have embarked on social investment ... one of the companies has helped us increase our productivity by providing us some financial assistance, capacity-building and some machinery to grow our local business (Community Leader, Interview, October, 2012).
Community organisations for coffee, blackberry and jewellery production and commercialisation have been able to further develop livelihood options more attuned to their life’s plans and intended to last after the mine’s closure. Figure 17 shows a community member who belongs to a coffee production community organisation. In addition, Figure 18 shows the researcher along with the head of a blackberry production community organisation.

Source: The author, 2012

While corporations operating in Antioquia seem to embrace a top-down (mining focused) HCB approach, the scenario in Risaralda suggests that companies there have a broader understanding due to active corporate-community engagement. The companies’ social responsibility managers as well as other senior decision-makers within mining and exploration companies are often former local government representatives and community leaders. This has helped the community to easily engage with the company and express their concerns and demands, resulting in effective and more accurate community HCB approaches and opportunities to gainful options.

Bottom-up, economically diversified approaches for HCB in the frame of corporate social responsibility agendas have the potential of becoming key drivers of development and sustainable livelihoods for local communities. Existing HCB approaches need to go beyond mining practices and provide locals with alternative livelihood options more in tune with their life’s plans. Promoting employment in
mining as the only driver for local development does not provide communities with sustainable legacies. Instead, this top-down and mining focused approach increases discontent amongst local communities as they cannot achieve their development aspirations:

Our organisation was created from the need to build different livelihood options. Women in this town did not have any value... We were labelled either as witches and/or prostitutes. We have been provided with some training by government organisations... A company donated us three machines... that was long time ago. There are small mines we have some contracts with and we also get some contribution from the government but nothing else apart from that (Women CBO, Focus group, January, 2014)

Similarly, this approach exacerbates internal conflict dynamics that also have adverse implications for the context where these communities are embedded.

5.4.3 Shocks: Civil Conflict

The escalation of mining operations has increased levels of civil conflict in both regions and this has had adverse impacts on communities. The participation of illegal groups in mining revenue-allocation procedures is one of the main causes of conflict in these natural resource-rich regions. National and regional governments have embarked on decentralisation of powers and authority in order to better allocate mining revenues and so reduce the power of illegal groups over the economic benefits derived from mining, thus helping mitigate internal conflict. However, in spite of government attempts to reduce conflict, the escalation of informal mining mostly driven by illegal groups has worsened the situation. This section, therefore, describes internal conflict dynamics that limit the possibilities of forging sustainable livelihoods in communities.

Scholars agree that the internal conflicts that the country faced about two decades ago prevented domestic and multinational companies from undertaking projects in remote regions, very often rich in natural resources (Fiszbein, 1997; Guaqueta, 2003). However, this scenario has shifted substantially due to harder to access
reserves of minerals and metals worldwide. Lack of resources to be extracted has led companies to undertake operations in resource regions facing intense conflict and political instability. Civil conflict has also increased due to the tension between globally focused and local informal mining. This situation is preventing Colombians in remote natural resource-rich regions from achieving sustainable livelihoods, particularly in the Antioquia case where illegal groups own informal mine-sites adjacent to multinational mining projects. This scenario has not only involved civil society and mining companies but also government organisations.

Government arrangements to mitigate internal conflict began in Colombia in the 1980s with decentralisation processes. Decentralisation also fostered more participatory modes of governance to promote a more efficient revenue management. Internal conflict not only prevented the potential for mining development but also the possibilities to create more sustainable livelihoods through mining revenue allocation. Likewise, armed conflict led to the Colombian government embarking on more participatory governance arrangements to increase accountability in natural resource-rich regions and to reduce the power of illegal groups such as the guerrillas.

Decentralisation began to allocate accountabilities to local governments like the provision of public services and the administration of public resources. According to Fiszbein (1997, p. 1030) the central government did not take into account either the amount of new responsibilities given to these municipalities or their weak institutional capacity. This led to an unsustainable situation mainly characterised by the inefficient utilisation of resources such as oil and mining revenues. This not only prevented communities from benefiting from natural resource extraction but also resulted in high levels of corruption within local administrations located in mining and oil extractive regions.

Illegal guerrilla groups, specifically Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia – FARC) and Army for National Freedom (Ejercito de Liberation Nacional – ELN), pressured local administrations through coercion and corruption to inflate social investment and infrastructure contracts coming from mining revenues. These groups undertook these practices in
exchange for a safe environment to operate and for potential electoral backing for politicians who sympathised with them (EITI, 2009, p. 69). Arauca’s communities, located in the South-East of Colombia, were the first victims of the disputes between legal and illegal actors over mining revenues. Both FARC and ELN, the two largest guerrilla groups, intensified the armed conflict since both were interested in tapping into mining royalties.

In order to target this issue, the Colombian government attempted to create more participatory governance arrangements, through the promulgation of the National Constitution that came into effect in 1991, and more recent accountability mechanisms like the centralisation of mining revenues. Along with the National Constitution, the last national administration developed a set of legal frameworks, public policies and more participatory governance arrangements that served as a means to control governments’ and corporations’ performance and to enhance community participation. Control is a core element of governance and accountability (Cendon, 2000, p. 559; Coumans, 2010; Mulgan, 2000). The control of natural resource extraction revenues was first based on articles 360 and 361 of the Constitution, which gave local authorities from mining areas the legal control over the administration of these resources (Congreso de la Republica de Colombia, 1991a).

Along with the Constitution, more participatory governance arrangements were developed in the form of policies, institutions and processes that will be described in Chapter 6. However, despite the proliferation of accountability mechanisms and more participatory modes of governance, the inefficient administration of mining royalties and internal conflict dynamics in resource regions remained, leading the national government to make more drastic decisions in this regard.

On 26th December 2011, Decree 4923 came in effect, centralising the resources derived from oil and mining extraction. The Decree also intends to make official the new royalty allocation system called Management and Decision-making Collegiate Entity (Organos Colegiados de Administracion y Decision, or OCAD). This regulation fosters the achievement of sustainable development and enhances transparency in relation to the administration of financial resources in mining regions (Ministerio de Hacienda y Credito Publico, 2011), by modifying articles 360 and 361 of the
Constitution. This Decree seeks to constrain the power of local authorities in this regard. Since January, 2012, local governments received 50%, instead of 100%, of these revenues. A gradual reduction of these resources has already been set for the coming years. It is expected that this percentage will keep decreasing in the coming years so that local governments will get 10% of these resources by 2015. This regulation has already elicited reactions amongst stakeholders, particularly amongst government representatives:

This new system aims to get more people involved in decision-making processes regarding royalty allocation. Three institutions are involved in these processes: local, state and national governments. I would not like to sound pessimistic but ... I am not sure whether this new approach will help mitigate existing issues around royalty allocation procedures. In addition, local administrations are not modern enough to respond to the demands of this new system. Local administrations are unable to identify regional needs and determine the type of projects that best can achieve development aspirations. Royalties keep being invested on particular interest projects rather than on public interest initiatives. This situation has led to several economic and social conflicts in the regions. (Senior National Government Representative, Interview, January, 2013).

Although the new royalty allocation system constrains local government power and thus is intended to limit the ability of armed groups to use local governments to access mining revenues, this situation has ironically increased internal conflict. This situation has threatened livelihoods mostly in the Antioquia case. “Guerrilla, paramilitary and bacrim (criminal bands) not only own informal mines in Antioquia but also extort money from mining companies operating in the region” (Government Tertiary Institution Representative and NGO Director from Antioquia, Interview, November, 2012). This is also leading to severe tensions between local and global forces in the mining sector. Unfortunately, communities are in the frame of this conflict and cannot develop sustainable livelihoods or access to gainful employment opportunities as a result:
Why do you think there is violence in the world? What do you do when you have a family to support and you do not have a job? ... you do whatever to get some income to feed your children, right? Well, there are many people experiencing this situation in this region, even though this is a mining region ... The situation is very complex in these towns. At least 3 to 4 people are killed every day ... This has got worse during the last three months. (NGO Director from Antioquia, Interview, November, 2012).

The escalation of internal conflict is a key variable in understanding the context where communities are embedded, because it has become a limiting factor to many aspects of community development, including the forging of community livelihoods (Fiszbein, 1997; Guaqueta, 2003; Gutierrez & Lobo, 2007). More participatory governance arrangements and accountability mechanisms to enhance transparency and fairly allocate financial mining resources need to be developed to help mitigate internal conflict (Guaqueta, 2003, p. 23). These contextual factors need to be further examined in the light of the notion of governance to better understand and recommend strategies in this regard. Hence, a deeper examination of existing governance processes needs to be undertaken. This will allow us to understand the factors that limit and foster these processes and identify the stakeholders’ roles and contributions to forging sustainable livelihoods. This is the task of Chapter 6.

5.5 Summary

This chapter is the first of three analysis chapters (5 to 7) of this thesis. It not only provided some background to the research location and the case study areas. More importantly it discussed the context of mining in Colombia as a practical application of the SLF context component. Three SLF contextual elements were analysed: cycles (The Colombian mining), trends (resource trends) and shocks (internal conflict). Major attention was given to the trends SLF component. An analysis of the situation shows that companies’ major challenge in contributing to the development of sustainable livelihoods is the formulation of corporate social responsibility agendas that include relevant HCB initiatives for locals. The next chapter will
explore the governance environment in Colombia and its implications for community livelihoods.
6 SLF APPLICATION: HCB GOVERNANCE ENVIRONMENT

6.1 Introduction

This chapter examines the governance environment for human capital capacity building (HCB) in Colombian resource regions. This section is the second of three data analysis chapters. The chapter presents a practical application of the Sustainable Livelihood Framework’s (SLF) governance component. It also identifies the implications for the governance environment for Colombian communities adjacent to exploration and mining operations. According to the SLF, the governance environment consists of policies, institutions and processes (PIP) and has a strong impact on local communities and their possibilities to forge sustainable livelihoods (Rakodi & Lloyd-Jones, 2002, p. 15) (see Figure 19). Policies comprise the norms, laws and other regulations that might influence governance arrangements. Institutions and organisations can be either private or public and they are in permanent interaction through governance arrangements like partnerships or multi-stakeholder collaborations and so impact on sustainable livelihoods. The SLF component of processes has a strong influence on the way stakeholders and organisations relate, interact and collaborate. The processes can be formal, semi-formal or informal. These governance components will be analysed here in depth, in the light of the Colombian mining sector.
Both the governance environment and the context of mining SLF components influence community livelihood assets or capacities, as shown in Figure 19. This analysis is based on fieldwork findings, stakeholder interviews and policy analysis. The chapter begins by analysing the HCB policy framework at all levels of governance (local, regional and national). This is followed by a stakeholder analysis to identify the actors and their roles in the HCB governance environment. The chapter finishes with an examination of existing multi-stakeholder collaboration for HCB. Most attention will be paid to the last section, as multi-stakeholder collaboration is a key element in this research. Relationships between stakeholders,
limiting and fostering factors of existing collaboration will be highlighted in an effort to respond to the questions that drive this research.

6.2 Policies

The current governance environment in Colombia is based on participatory and accountable policy frameworks that have significant implications for HCB and sustainable livelihoods. This section provides an examination of HCB policies as a constituent part of what, in this thesis, is called the governance environment of the SLF. The Colombian governance environment can be described as a multi-stakeholder collaboration scenario in which governments, the private sector and civil society actors interact on a participatory basis to achieve common goals that impact on community livelihoods. This scenario is supported by a policy framework for HCB. Figure 20 shows the HCB policy framework according to the levels of governance in the Colombian mining context. The Constitution is the baseline of the governance policy framework, followed by national policies that set the guidelines for HCB across the country. The third segment comprises regional and local policies in place in the case study locations. This segment also includes international regulations and corporate policies, as they determine corporate social performance and accountability for HCB at the local level.
The notion of governance in the Colombian context of mining is linked to the concept of accountability. As argued in Chapter 5, internal conflict in mining regions led the government to develop more accountable and participatory mechanisms when internal disputes arose caused by the intervention of illegal groups in mining revenue distribution. These accountability mechanisms also affected the relationships between legitimate stakeholders and illegal groups and therefore helped establish the current multi-stakeholder collaboration governance dynamics.

The implementation of accountability policies in the form of public participation mechanisms impacted the governance environment across the country. As discussed above, structures of official accountability in Colombia were enhanced after the revised Colombian Constitution that came into effect in 1991. The Constitution is not only the baseline of the current participatory governance arrangements, but also serves as a means to increase government’s, the private sector’s and civil society’s responsibilities in development-related activities (Congreso de la Republica de Colombia, 1991a). The Constitution empowered national and local administrations to increase accountability. Likewise, it underlined the participation and accountability of the private sector and underscored more
participatory governance arrangements within civil society. In other words, it increased stakeholders’ participation and accountability in the administration of sustainable development-based initiatives that were previously considered the government’s responsibility. Following article 80 in the Colombian Constitution (1991a), “the State is accountable for managing and taking advantage of natural resources to guarantee their sustainable development. In addition, the State is responsible for preventing and monitoring environmental impacts and commencing legal actions against stakeholders responsible for fostering adverse environmental effects”. However, it is not only the government accountable for looking after natural resources. “It is every person’s and citizen’s accountability to protect cultural and natural resources and promote education to do so” (Congreso de la Republica de Colombia, 1991a). As a result, actions like HCB (usually in the form of training and education) have become part of the sustainable development agendas of a range of stakeholders.

Stakeholders embark on HCB initiatives either as a genuine gesture to forge sustainable livelihoods or to respond to external demands. The Colombian system for human capital capacity-building is the baseline for the HCB approach and has been considered as a key element to support more sustainable livelihoods across the country (DNP, 2010; Ministerio de Educacion Nacional, 2006-2016, p. 86). This system was first developed under the previous government administration (2002-2010). It then, gained importance after the publication of the National Development Plan 2010. The HCB system is a constituent component of the public policy for sustainable development and competitiveness (DNP, 2010, p. 86; Ministerio de Educacion Nacional, 2006-2016, p. 20).

Following this policy framework, the Colombian government proposed the implementation of a Colombian system for human capital capacity-building (SHCB). The system is an effort to develop sustainable human capital and build work-related competences to respond to the mining sector’s needs and local economic demands (DNP, 2010, p. 86; Ministerio de Educacion Nacional, 2006-2016, p. 20). The system is the baseline of the key areas for sustainable development at the state level and includes innovation, competitiveness, employment, poverty reduction and economic growth goals. According to the state government, sectors like mining will help the
country to meet sustainable development aspirations. (DNP, 2010, p. 50). However, in trying to achieve this, the current administration has encountered a major difficulty. Qualified human capital is required to realistically achieve development goals, but there is an inadequate supply. The government itself has not been able to overcome this constraint. Hence, multi-stakeholder collaboration amongst public and private actors has been considered as one pivotal approach to build the capacities of potential human capital in Colombian regions (DNP, 2010; Ministerio de Educacion Nacional, 2006-2016, p. 24).

The national government has proposed eight capacity-building phases (with a focus on education) in the frame of the Colombian system for human capital capacity-building (SHCB). These are: early childhood, elementary education, secondary education, high school and tertiary education. The latter is divided into vocational education and training (professional technician), vocational education and training (technological), undergraduate and postgraduate education (Ministerio de Educacion Nacional, 2006, p. 26) (see Figure 21). These capacity-building stages are also based on a competence-building approach intended to strengthen the linkages between education and work domains. The approach allows individuals to learn and apply knowledge and information in different settings so that they can meet their own needs and develop relevant livelihoods in their region (DNP, 2010; Ministerio de Educacion Nacional, 2006-2016, p. 86). This approach is moving the country towards more vocational and professional education to respond to global demands, like filling skill shortage gaps in the mining industry (Ministerio de Educacion Nacional, 2006-2016, p. 20).
The competence-building approach on which the system is based involves three types of competences (basic, general and specific). These are intended to be developed in accordance with the capacity-building stages proposed by this approach (see Figure 21). This figure was taken from the Ministry of Education’s official policy document. The original figure also introduces three types of competences, despite there being four levels in the figure. Following the HCB system, basic competences include mathematics, communicative, scientific and citizenship competences (DNP, 2010, p. 86). General work competences are understood as essential knowledge to work for any productive sector. Individuals are meant to build these competences from high school onwards (DNP, 2010, pp. 86-87). The last set of competences to be developed is specific, professional and work-related. They have to do with the application of capacities or skills in specialised types of knowledge or work sectors. They are mostly developed during tertiary education (DNP, 2010, pp. 86-87) (see Figure 21).

Given increasing foreign investment in sectors like mining, housing and transport, the national government has placed a major emphasis on work-related competences
(both general and specific) (DNP, 2010, p. 98). These are developed from high school to tertiary education and are pivotal in developing human capital and to achieving sustainable development goals across the country (DNP, 2010, p. 84). In this context, this research focuses on HCB initiatives that address the gap in general and specific work-related competences in mining and non-mining sectors without entirely neglecting the contributions from stakeholders to HCB in early childhood, elementary and secondary education.

The SHCB has been implemented through development plans at the regional and local levels of governance. Other policy frameworks such as corporate policies and international standards that regulate corporate performance in mining regions have also had implications for its implementation at the local level. Policy analysis shows that HCB is a key element in regional and local government agendas.

6.2.1 HCB Policy Analysis: Risaralda Case

Following national sustainable development aspirations, Risaralda’s government authorities have embarked on a number of HCB initiatives. Risaralda’s development plan is based on the premise that HCB can enhance regional competitiveness. It also states that HCB promotes competitive economic clusters in key sectors like mining, construction and tourism. To achieve this, Risaralda’s policy framework is based on three HCB approaches: education, knowledge transfer and entrepreneurship (Asamblea Departamental de Risaralda, 2012, p. 6). It is believed that successful implementation of these approaches, will not only up-skill communities but will also contribute to meeting national competitiveness standards in the region, for example in achieving sustainable development aspirations (DNP, 2010).

Risaralda’s Government authorities agree that mining is essential to meet regional competitiveness standards and achieve sustainable development goals. Therefore, regional government authorities have allowed mining and exploration companies to undertake operations. However, companies are accountable for meeting acceptable social responsibility requirements and are asked to have a strong commitment to regional development. In addition, the government is committed to providing
communities with relevant HCB initiatives that allow them to meet sustainable development aspirations:

We are working with other stakeholders to provide informal miners with education so they can build knowledge to work at a mine and get involved in potential mining projects... We also want to educate people to help us oversee companies’ performance while operating in the region (Local Government Representative, Interview, November, 2012).

This has resulted in the implementation of several strategies linked to HCB and sustainable livelihood options. Some of these strategies include but are not limited to relevant capacity-building in the form of education and providing qualified human capital in the labour market (Asamblea Departamental de Risaralda, 2012, p. 6).

HCB, as a constituent component of Risaralda’s governance framework, is considered as a fostering factor to develop less mining-dependent communities and help them create more sustainable livelihood options. Government authorities agree there is a need to up-skill communities in mining and operational effectiveness in mining practices. Nevertheless, HCB policy frameworks also highlight the importance of developing community capacity in other sectors different from mining but relevant for the local economy. This approach has the potential for driving local development and contributing to Risaralda’s competitiveness standards in the long-term:

We do not want mining-dependent communities. Instead, we need to develop sustainable supply chains and entrepreneurship amongst community members. People usually think competitiveness is an overnight process. This is a false expectation. It is a long-term commitment that will allow us to forge more sustainable communities. (Senior Government Representative from Risaralda, Interview, October, 2012).

At the local level, global voluntary frameworks that influence corporate social and environmental performance have also helped existing HCB policy frameworks. Global governance arrangements often encourage mining companies to take the idea of HCB more seriously. International policy frameworks embrace HCB as a key
element in supporting local communities and helping meet social and economic development standards (ICMM, 2005; ISO, 2010; RJC, 2011, p. 11). The literature review chapter provided an examination of existing global policies and current international understanding of HCB. However, this section specifically analyses these policies in the light of the governance environment in the case study locations.

Multinational companies operating in the case study areas are aligned with global guidelines intended to help the private sector improve their social and environmental performance. As these contain high standards, there is little or no participation of medium and small-scale companies in global governance arrangements. Large companies align with international policy frameworks on a voluntary basis and can commit to meeting global standards in the regions where they operate.

HCB is a key element of global policy frameworks and so companies are encouraged to include HCB as a core theme in their corporate social responsibility agendas (CSR). Global policy frameworks underline the importance of capacity-building and education as key elements for social sustainability. For example, the ICMM principles and the Standard Guidance for Social Responsibility (ISO 26000) encourage companies to build capacity in communities (ICMM, 2005, p. 17; ISO, 2010). The Responsible Jewellery Council (RJC) and the Organisation for Economic Cooperation and Development (OECD) through the guidelines for multinational enterprise, go beyond ICMM’s understanding of HCB, suggesting the development of HCB actions through collaborative partnerships (OECD, 2008; RJC, 2011b). Similarly, the Prospectors and Developers Association of Canada (PDAC) understands HCB as “a managed process of skills upgrading, both general and specific competences” (Prospectors and Developers Association of Canada, N.D, p. 26).

Other global norms like the International Financial Corporation’s (IFC) standards keep increasing awareness amongst their clients of the potential of HCB for creating sustainable livelihoods. These standards encourage the private sector to build capacities and up-skill communities in priority areas defined by the communities themselves (IFC, 2011b). According to the latest United Nations Global Compact's report, a voluntary policy framework that supports UN goals, “companies cited
education atop of the list” of sustainable development challenges (United Nations Global Compact, 2013, p. 7). These global governance arrangements are having a significant impact on the way mining corporations embrace HCB in Risaralda.

Following the international guidance framework, Risaralda’s minerals industry often includes HCB in their CSR agendas. The mining sector participating in this study in Risaralda consists of Canadian exploration companies, domestic mining corporations and informal mining. The largest Canadian company operating in the region has voluntarily adhered to the United Nations Global Compact principles. The company’s CSR agenda consists of three pillars, which are: socio-economic aspects, community assistance and environmental initiatives. Capacity-building in the form of knowledge transfer “is one of the most significant contributions” to HCB and tackles two out of the three CSR components (Seafield Resources, 2013). The company strongly believes that employing local people and up-skilling local communities instead of importing labour not only creates value to the community but also to the company. However, the private sector in the Risaralda case still experiences difficulties in engaging and delivering relevant HCB to informal miners. In addition, there is an interest in promoting local initiatives that are not necessarily mining-orientated but help communities to develop sustainable livelihoods (Seafield Resources, 2013).

At the local level, development plans clearly state the need to develop HCB for entrepreneurship to create gainful employment opportunities and achieve locally relevant development. (DNP, 2010). A local government representative agrees that “capacity-building in the form of education is essential to community development” (Local Government Representative, Interview, November, 2013). As will be explored in Chapter 6, the governance environment for HCB in Risaralda has delivered positive outcomes for locals. Nevertheless, in Antioquia the non-mining population find it difficult to benefit from HCB or develop alternative livelihood options due to both contextual factors and the governance arrangements in place.
6.2.2 HCB Policy Analysis: Antioquia Case

The Antioquia case study is an example in which a strong HCB policy framework has not improved the development of relevant livelihood options for locals. Antioquia’s development plan “Antioquia la mas educada” (Antioquia the most educated) puts HCB in the form of education at the centre of development (Gobernacion de Antioquia, 2012). This policy also reflects the current administration’s commitment to make this region Colombia’s capital for entrepreneurship and innovation. However, despite increasing recognition of HCB in regional policy frameworks, communities still struggle to achieve their development aspirations. “Poverty is increasing ... It cannot be possible that there is poverty where there is mining....It cannot be possible that there is poverty where there is wealth” (Fajardo, 2012).

Compared to Risaralda, Antioquia has a longer mining history. This factor has not only escalated socio-environmental impacts but has also prevented Antioquia from sustaining a more diversified economy in active mining locations: “Some mining towns in Antioquia have a strong dependence on mining. This situation has diminished the possibilities of sustaining communities in the long-term” (Government Representative, Interview, January, 2013).

At the local level, Mayors are responsible for the implementation of some aspects of HCB as part of local development plans. They are also accountable for creating conditions to foster social sustainability. Capacity-building in the form of education is a constituent part of local government agendas, such as Segovia’s and San Roque’s Local Development Plan (Alcaldia de San Roque, 2012, p. 233). However, it seems that there is a gap between HCB policy and practice at this level of governance. In addition, there are contextual factors detrimental to existing HCB policy agendas. San Roque, a municipality that hosts the largest exploration project in Antioquia, faced major conflict disadvantages for communities and government institutions.

Locals still remember the days when illegal groups were actively involved in the town. Informal conversations with community members still reflect the fear they experienced during those violent times. At least two or three people were killed on a daily basis. Illegal groups destroyed traditional livelihoods for locals like small-scale
mining. Conflict dynamics threatened community livelihoods and the possibilities for development. This resulted in poor governance due to government agencies’ inability to negotiate with or control illegal groups and provide communities with adequate security conditions. With the arrival of mining companies, locals became dependant on short-term mining benefits. As there were no employment opportunities, cash and small donations from companies operating in the region were well received by community members:

Large-scale mining companies contribute somehow to social sustainability. However, communities rely so much on these companies and find it very difficult to become self sustainable and independent. I am a miner and I am aware of the wealth that mining brings; however, I do not think mining is sustainable itself (Miner and Community member, Interview, February, 2014).

Although conflict and associated detrimental factors for communities remain, they have been mitigated substantially. With the implementation of State security policies and stronger accountability mechanisms, internal conflict dynamics have reduced across the country and radically changed the scenario in mining locations. A healthier governance environment has strengthened government agencies, resulting in more accountable institutions and stronger governance arrangements:

We need multinationals to invest on the region. However, we cannot neglect the government. We cannot allow locals to forget they are part of a community that the local government represents. The community cannot become a beggar of multinationals… In the past, communities used to get little things from the company: ones asked for lollies for children’s’ parties, others asked for paintings for schools, clothes, etc. When I was appointed as Mayor … I said to the company I disagreed with the lollies for parties, clothes, drinks, etc. I stood my point and clarified we needed sustainable development projects (Government Representative Interview, October 2013).

The shift that occurred in the context and governance environment in Antioquia has been pivotal for HCB policy frameworks at the local level. According to the SLF, both the context and governance components impact on community assets and
opportunities to develop livelihoods (Rakodi & Lloyd-Jones, 2002). Although this shift, along with internal conflict mitigation, has had a positive impact on local communities, there are still major challenges in effective HCB implementation. Communities need to recover from past detrimental factors that affected their potential to achieve development aspirations.

Conflict and livelihood destruction have prevented locals from benefiting from HCB initiatives already in place. Existing HCB initiatives do not tackle issues that deserve immediate intervention. Hence, these initiatives are wasted, misused or both: “My son was enrolled in a vocational program in mining here in Antioquia. He attended three or four times but he still got his degree. He says that it was worth to do it because it looks good on his CV. However, he did not really get much from it… There is lots of capacity-building but very mediocre (Community Member, Interview, February, 2014).

Some other community members participating in HCB initiatives cannot understand how these actions can help them find gainful employment opportunities or establish sustainable livelihoods: “We need to be prepared when opportunities arise. I was asked by the mining company to submit my CV… hopefully there will be some opportunities to work there… but not sure” (Community Member, Focus Group, October, 2012).

The multinational mining company that has promised jobs to locals is aligned with global frameworks. Hence, it is committed to including HCB as a constituent part of its CSR agenda. Nevertheless, the company’s HCB approach is a top-down (mining-focused) approach to development. The company has implemented HCB initiatives to up-skill local miners and potentially engage them in large-scale mining projects. According to the company, it has also contributed to physical infrastructure for the development of entrepreneurship HCB initiatives (Corporate Representative, Interview, October, 2014); however, the reality appears to be less than satisfactory. Figure 22 shows two tutors and the researcher in the teacher boardroom of an educational institution currently delivering HCB initiatives. Teachers there did not have essential physical and technological resources, like computers and desks, for a considerable number of the tutors.
The governance environment around HCB is supported by policy frameworks in which a wide number of global, national and local stakeholders, like governments, the private sector (especially mining companies) and community members, interact through governance adaptive arrangements such as collaborative partnerships and alliances. Although Risaralda’s communities have benefited from such arrangements, Antioquia’s communities have not been able to do so to the same extent. Basic needs still have to be met and mining-led conflict dynamics around informal mining need to be resolved to meaningfully benefit communities from HCB initiatives. The following section provides a stakeholder analysis of the actors that take part in HCB governance processes in the case study areas.

6.3 Institutions

Based on stakeholder analysis, this examination identifies and analyses stakeholders’ roles in the governance processes for HCB. According to Carney (2003) stakeholder analysis is a key tool to identify and understand the roles of actors involved for community livelihoods. The group of stakeholders involved in this research belongs to the government, private sector and civil society. These actors have played key roles in HCB governance dynamics in the case study locations.

6.3.1 Governments

Governments are assuming a more active role in the HCB governance environment. Colombian governments at all levels were criticised in the past for their weak
institutional capacity and therefore for their inadequate involvement in governance arrangements (Fiszbein, 1997, p. 1030). However, the implementation of more participatory governance mechanisms has had a major effect regarding government’s performance in sectors like mining. The adoption of more participatory governance approaches led to improvements in government accountability, to community participation and to government achieving a leading role in the implementation of development initiatives (Congreso de la Republica de Colombia, 1991a; DNP, 2010; Guaqueta, 2003). As discussed in the previous section HCB is one of the key components in the development agenda of government organisations in the case study locations and had been effective in at least one of the cases. These governance shifts at the government level contest scholarly literature that claims the ineffectiveness of governments at developing participation and accountability mechanisms in mining regions (Laplante & Spears, 2008, p. 87; Mate, 2001, p. 8).

Nevertheless, an aspect that remains problematic at the government level is the government’s capacity for mining revenue administration and its lack of financial resources. This has not only been detrimental for the effectiveness of HCB initiatives, but has also impacted negatively on participant communities. Lack of government capacity for revenue management is not just a particular characteristic of the Colombian case. Instead, it is becoming a global issue in active resource regions (United Nations, 2009, p. 248). Supporting the analysis by Pegg (2006, p. 380) and Laplante et al (2008, p. 77), a local interview confirmed that the lack of good or effective government capacity for revenue administration does not have to do with shifts in governance approaches but rather with governments’ dependence on mining taxation (Government Representative, Interview January, 2013). This element is acknowledged but is not explored further in this research. Instead, major attention is paid on increasing participation and government’s leading role in the implementation of HCB in communities adjacent to mining operations. Similarly, this and the following subsections account for government’s collaborative relationships for HCB implementation with other levels of government, the private sector and civil society.
At the national level, the government has engaged with a wide range of public actors to achieve the overall strategies of the HCB system. Six public institutions at this level collaborate for the implementation of the HCB system: The Colombian Ministry of Education (Ministerio de Educacion Nacional) —the lead institution in the Colombian educational sector; The Ministry of Commerce; Ministry of Industry and Tourism; the Colombian Centre for Research Development (Colciencias); the Colombian Learning Service (Servicio Nacional de Aprendizaje-SENA); and the Ministry of Labour and Social Protection (Ministerio de Proteccion Social). The last is responsible for leading and coordinating national HCB initiatives and strategies carried out in the frame of this collaborative partnership and for the fulfilment of other responsibilities towards HCB implementation (DNP, 2010, p. 96). A description of the role of these actors in HCB implementation is provided in Chapter 8. These national institutions have regional and local representation that deals with HCB implementation in the case study areas.

At the regional and the local levels these institutions work in partnership with the State government (Gobernacion) and with the local government (Alcaldias). Secretariats of Education are the key government units responsible for administering resources for HCB implementation in the form of education. Secretariats of Education also work in collaboration with public schools, tertiary education institutions, non-formal educational institutions, regional centres for tertiary education and government-funded organisations. The latter is also a key actor in non-education HCB implementation at the local level. These secretariats are responsible for implementing national policy frameworks and also have a strong influence on the policy-making process at the national level (Ministerio de Educacion Nacional, 2012).

National and local governments have also allied themselves with the private sector to build human capacity through strategic alliances called university-company-state collaborative partnerships. These collaborations have been forged with important sectors of the national economy, including those like mining (Ministerio de Educacion Nacional, 2012). These institutions work together to implement HCB initiatives so that Colombians can respond to the productive sector’s needs and global demands, foster economic growth, have access to gainful employment opportunities and develop more sustainable livelihoods (DNP, 2010).
The Colombian government at all levels has assumed a major role in HCB implementation. Although this is not a new undertaking, the novel element in this scenario is that the government is actively engaging in the frame of more collaborative approaches to implement HCB initiatives. This collaborative governance approach involves the active participation of mining and exploration companies and civil society in HCB implementation, causing tensions as well as supportive efforts amongst the participants. These factors might limit or foster HCB implementation and therefore are explored more closely in this research.

6.3.2 The Private Sector: Mining and Exploration Companies

Mining companies operating in Colombia often embark on governance arrangements around HCB through their corporate social responsibility (CSR) agendas. CSR has emerged as a tool to increase corporate accountability. The latter is also an important element in governance arrangements (Jones, 2008, pp. 1070-1072). There is a growing scholarly debate that underlines the strong link between the concepts of accountability and responsibility (Dubnick, 2003, p. 406; Mulgan, 2000, pp. 557-558; Romzek & Dubnick, 1987, p. 260). Mulgan (2000, pp. 557-558) states that accountability is a type of responsibility. Valor (2005, p. 191) further develops this argument and posits that CSR is an accountability mechanism. As discussed in Chapter 2 there is a general agreement in the literature that corporations should be accountable to external stakeholders and CSR has served as means to do so (Clarkson, 1995; Freeman, 1984; Gibson, 2000; Tracey et al., 2005). The concept of CSR as an accountability mechanism has permeated scholarly debates in business, accountability and sustainability literature. Following these scholarly debates, CSR is here considered as a pivotal element to understand the involvement of corporations in the Colombian governance environment, particularly in HCB implementation.

Companies have been encouraged to account for their performance at the global, regional and local levels. This has resulted in corporate initiatives like HCB. CSR has become a key mechanism to promote HCB initiatives and strengthen collaboration with other stakeholders, like government and civil society. However, scholarly debates continue to discuss whether conventional governance and accountability
mechanisms including CSR and corporate reporting against SD global agendas can lead to more sustainable livelihoods or whether they are tools that merely legitimate existing corporate practices and therefore benefit private interests rather than local communities (Bebbington et al, 2008, p. 900; Hamann & Kapelus, 2004, p. 85; Hilson, 2006, p. 44; Jenkins & Yakovleva, 2006, p. 272). However, as will be discussed in chapter 8, companies’ accountability depends on the governance and context dynamics in place.

Evidence demonstrates that each company has taken its own approach to the notion of HCB as a constituent part of its CSR agenda. At the global level, mining companies embrace the term differently and in accordance with their own policies. HCB can be defined as a catalyst through which partnerships can forge more sustainable communities (Newmont, 2003; Xstrata, 2008). It is also considered a process that involves social organisation enhancement and development of capacities within local communities (AngloGold Ashanti, 2010). HCB can maximise working opportunities, provide education and training for employees and community members and can also become a driver to promote entrepreneurship, community empowerment and skills transfer (Goldfields, 2010; Newmont, 2003). This corporate understanding of HCB has led companies to develop HCB initiatives and participate in multi-stakeholder collaboration to implement these actions in both case study locations. The particular value that companies bring to HCB in the case study areas will be discussed in Chapter 7.

Canadian and domestic companies operating in Risaralda have a CSR approach that puts people at the centre. The minerals industry participating in this case study area is actively engaged with local communities. Locals occupy positions that go from miners to community relations practitioners. For example a Canadian company’s community relations practitioner was formerly a senior representative at the local government level. This approach has helped the company engage effectively with the local community from Quinchia, Risaralda. Quinchia is a small town with a strong sense of community. Locals are supportive of one another and very often gather together to discuss issues relevant to all. These after-work informal catch-up meetings take place at the main square or in the public park. In those meetings, small groups of company staff, community members and government
representatives get together to discuss topics that have an impact on the community. Observations undertaken during fieldwork show that the agreements that resulted from these informal meetings were often more effective than those formally established. Positive stakeholder engagement has been built on the basis of these informal meetings. This has helped the company effectively relate to the community and contribute through HCB initiatives that meet community expectations. Most of community members interviewed agree they have good relationships with the company: “We have outstanding relations with the company. They are supporting our projects. It does not mean we cannot perceive their environmental impacts. We are aware of that. However, our relationships have been outstanding so far” (Community Members, Focus Group, November, 2012).

A more people-centred CSR approach for HCB has also allowed the company to play a key role for HCB implementation and contribute to developing sustainable livelihoods. As previously mentioned, the Canadian company is aligned with global regulatory frameworks like the Global Compact (United Nations Global Compact, 2013). The CSR agenda is based on this global framework, having a positive impact on communities: “We adhered with UN Global Compact because our CSR baseline consists of respect for human rights” (Corporate Representative, Interview, October, 2012). Undoubtedly, the company cares about people and puts this approach in practice in all actions implemented, including HCB.

The company collaborates in several HCB initiatives that place people at the centre of development. The company has embarked on HCB for local entrepreneurs and vulnerable groups. These initiatives are aimed to help locals access better business opportunities (Seafield Resources, 2013). Likewise, it is engaged with actions to develop basic and work-related capacities in communities adjacent to mining operations to build livelihood options in tune with local development aspirations: “the company has helped us with our local business. We have participated in HCB initiatives and they have also sponsored our participation in several events at the national level where we sell the jewellery we make” (Community Member from Risaralda, Interview, October, 2012).
In fact, international companies have played a key role in the governance environment; however, domestic corporations are also active participants in the HCB governance environment. In Risaralda, the domestic mining company is named after the town which creates a sense of strong belongingness amongst community members. The company has been undertaking operations in the area for nearly 30 years. Coal produced by the company is sold to construction material companies and surrounding regions. Mineral processing practices are underdeveloped and coal extraction is undertaken manually or through mechanical procedures. Blasting (use of explosives) is forbidden as the region has been considered as a high risk location. Nearly 800 to 1000 tons per month of thermal coal are produced and 300 are sold to material construction companies. In addition, 99% of the human resources working at the company come from the region (Senior Corporate Representative, Interview, November, 2013).

There is evidence of strong corporate commitment to the local community. This has been translated into minimum social and environmental impacts: “Mining is an activity that can cause adverse effects. However, as you see we have a strong commitment to the region....regulatory agencies have visited us and get surprised about our commitment to community members... our overall goal is to provide locals with economic sustainable benefits” (Corporate Representative, Interview, November, 2012). Corporations in Risaralda are active participants of the governance environment. More importantly, they have been proactive in implementing HCB initiatives to achieve social sustainability.

Companies operating in Antioquia are also engaged with the notion of HCB. Their initiatives include the provision of infrastructure, educational programs and training for educators (Ministerio de Educacion Nacional, 2011). However, HCB actions as part of CSR agendas are either becoming a replication of existing HCB efforts undertaken by the government or other institutions or do not necessarily address community’ needs, making them irrelevant for communities. This situation has resulted in serious complexities around multi-stakeholder collaboration. Mining and exploration companies operating in Antioquia are both international and domestic. International companies currently undertaking exploration projects for gold, hire
locals as community relations practitioners. This has helped them gain more acceptability and minimised reputational risk in the region.

One company has a social development plan in place as part of its CSR agenda. The plan involves a physical and economic resettlement in which HCB plays a key role. However, the current HCB corporate approach is mainly focused on mining orientated initiatives or HCB to provide locals with skills to engage with large industry: “The idea is that locals put their skills at the company’s disposal so that later on, they can get gainful employment opportunities... At the end of the day we want communities to operate the mine”. This top-down approach to development (mining-focused) is being replicated by domestic coal mining companies operating in the region.

A medium-size coal mining company operating in Amaga-Medellín, Antioquia is also engaged with HCB. Senior staff consists of engineers who previously worked for multinational companies operating in the north of Colombia. Miners are locals and community members from other mining towns in Antioquia. The company’s approach is based on the notion of culture: “We have been working for four years on regional culture. We are trying to implement a culture around safety. Mining practices in the region are unsafe and illegal” (Corporate Representative, Interview, October, 2012). Following this approach the company has implemented HCB initiatives in partnership with government and educational institutions. However, HCB is mainly mining-orientated. Current HCB actions in the form of training and knowledge transfer are aimed at enhancing safety standards and mining practices, neglecting other areas equally relevant for local development such as creation of business opportunities and non-mining employment opportunities.

A mining focused HCB approach has become irrelevant for many community members as they need to be engaged with HCB actions to develop livelihoods different from mining. There is a general consensus from community members that mining will not last for long and communities need to be up-skilled in non-mining areas: “We have a few vocational programs in place. The centre for learning service (SENA) has some programs on environmental management and small-scale mining. Around 120 people applied but just 40 were accepted. This is what the community is
asking for, however, we cannot just deliver (mining programs). These companies are now operating but they might leave tomorrow. It is very uncertain” (Community Leader, Interview, November, 2012). A further discussion of HCB priority areas relevant for communities will be provided in Chapter 7.

Government and company participation in HCB governance arrangements has increased along with civil society’s role in these governance dynamics. At least in the Risaralda case, civil society organisations are playing a key role that not only focuses on demanding corporate accountability regarding HCB but also on collaborating in HCB implementation and follow-up of those initiatives (see below). However, evidence also indicates that civil society’s active role can deteriorate due to contextual factors. Chapter 5 showed how, for instance, informal mining and internal conflict has undermined civil society’s participation in HCB implementation.

6.3.3 Civil Society

This section discusses the role of civil society actors in the governance environment for HCB. Civil society participation in HCB governance arrangements is widely discussed in the literature. However, there has not been a serious examination of the Colombian case. A segment of scholars in business ethics and CSR arenas argue that HCB actions delivered as part of mining company CSR agendas do not achieve local development expectations but can exacerbate community dependency, resulting in passive and unsustainable communities (Jenkins, 2004, p. 25; Tracey et al., 2005, p. 329). This argument is contested by other scholars who argue that social awareness and community action for capacity-building is increasing (United Nations, 2009, p. 248; Spiegel & Veiga, 2005, p. 336).

In the Risaralda case, community members have been proactive in demanding relevant HCB from companies operating in the region: “I asked (community relation practitioner) to give us a dress making or hairdressing course…. 15 days later he called me and asked me to organise a meeting with a group of women from the region. (The company) brought along some representatives from the learning service centre (SENA)... and this is how we started” (Community Leader, Interview, November, 2012).
After undertaking an exploration of HCB factors in two Latin American countries (Peru and Ecuador), Mate (2001, p. 12) argues that in spite of civil society’s efforts to increase community awareness, communities are still the weakest actors politically. There is a major concern regarding the limited community participation in the development of HCB actions. Hence, this research is based on fieldwork findings and is intended to clarify the actual role of civil society organisations like CBOs and NGOs in HCB governance arrangements in the case study areas.

Civil society organisations in the case study locations are playing a major role in the HCB governance environment; however, their participation in existing multi-stakeholder collaboration processes is still very limited. CBOs are taking an active role in the development of HCB initiatives. The baseline of civil society organisations’ work is on sustainable livelihoods, cultural and community development and the achievement of sustainable development aspirations in resource regions. For instance, the Cultural Association for Antioquia’s Social Development has embarked on HCB initiatives to help Afro-descendants forge sustainable livelihoods (CBO Representatives, Interview, October, 2012).

Civil society organisations are also delivering vocational HCB programs to up-skill communities to get gainful employment in resource regions. The nature of these actions is diverse, including HCB programs in areas like construction, entrepreneurship and environmental management (Colombia Emprendedora, 2012; Fundacion Codesarrollo, 2012). The focus of these initiatives is mainly on vulnerable groups involving the participation of unemployed people, women, young people, children and indigenous peoples (Corfimujer, 2012; Jovenes Marcando la Diferencia, 2012). The active participation of CBOs and NGOs in Colombia is being strengthened through collaborative partnerships with the regional and local governments and the private sector, particularly with entrepreneurs and small business in the region, but with the marginal engagement of mining and exploration companies.

Interestingly, an examination of the situation demonstrates that there is limited engagement between mining companies, NGOs and CBOs in Colombian resource regions. Some mining companies have created their own foundations to implement
HCB initiatives or prefer to engage with other more formal stakeholders like the local and national governments rather than establishing direct linkages with civil society actors. For example, the multinational company operating in Antioquia is currently engaged with the state and local governments in order to implement its corporate agenda and HCB approach in the region. However, the engagement between NGOs, CBOs and this global mining company is very limited, illustrating a minimal participation of civil society in multi-stakeholder collaboration processes for HCB in the Antioquia case. Lack of trust often undermines relationships between civil society and more powerful actors, leading to passive community participation in decision-making processes: “There are communities who do not want mining companies to operate... these communities have been threatened as well as community leaders... this is happening... nobody wants to acknowledge this because civil society, particularly CBOs, can be targeted” (CBO Representative, October, 2012).

On the other hand, Risaralda’s case shows effective civil society participation. Supported by the state government, CBOs have been empowered and therefore have been able to play a stronger role than Antioquia’s civil society in governance processes for HCB. Community leaders are aware of their needs and have learned to express their demands and development expectations. This has helped them develop a strong local economy based on alternative livelihood options such as agriculture, jewellery and blackberry production. In addition, civil society has also engaged with governments and tertiary institutions in order to develop HCB initiatives that meet their needs. Figure 23 shows the researcher and community associates at the workshop where the CBO for jewellery design operates.
We are a group of twelve community members. We got organised to create employment opportunities in the region. We have delivered jewellery design courses for the community so they will be able to work with us in the future. By the end of the year we might be able to employ more people. Our purpose is to benefit all community members who work with us (Community Leader, Interview, October, 2012).

The role of civil society organisations varies according to the region. However, evidence indicates that civil society’s role in the HCB governance environment is essential for creating sustainable livelihood options. In the Risaralda case, civil society based organisations show a strong commitment to strengthening community assets to generate alternative livelihood options. However, this is not the case in Antioquia. In spite of civil society’s work in HCB approaches, limited community-corporate engagement has prevented these organisations from having a strong impact on communities through the HCB approaches in place. HCB initiatives tend to be isolated actions that cannot be sustainable over time due to limited collaboration from other stakeholders involved. A further examination of this multi-stakeholder collaboration scenario is provided in the following section.
6.4 Multi-stakeholder Collaboration Governance Processes for HCB

Effective multi-stakeholder collaboration processes for HCB are key drivers in establishing sustainable livelihoods in resource locations; however, there are factors that can either limit or foster those processes. This section examines multi-stakeholder collaboration processes for HCB as a constituent component of the SLF governance environment. This examination pays special attention to stakeholder relationships in HCB collaboration processes and highlights the factors that limit or foster those dynamics. An examination of the situation shows that existing multi-stakeholder collaboration approaches for HCB experience major difficulties in the area of the Antioquia case study. It seems that HCB initiatives may be irrelevant for locals, or work only in the short-term.

This section also aims to highlight the strengths and complexities of existing stakeholder engagement in both case study locations. This examination has been undertaken in the light of the three actors in governance: civil society organisations and community members, the private sector (mining and exploration companies) and governments.

6.4.1 Stakeholder Engagement for HCB in Antioquia

Complex governance dynamics compromise stakeholder collaboration efforts to create lasting legacies for communities through HCB. Issues associated with gaps between corporate agendas and regional development aspirations, lack of community engagement, informal mining and lack of articulation between corporate and government agendas are some of the factors that limit multi-stakeholder collaborations HCB in the region. Nevertheless, effective governance arrangements and positive relationships amongst stakeholders (companies and governments) and adequate communication are factors that have the potential for overcoming existing barriers and fostering successful HCB implementation.

The Antioquia case study shows that more attention needs to be paid to linking existing HCB approaches and local development aspirations. However, this process
requires stronger stakeholder capacity to engage with HCB implementation processes. An examination of current stakeholder engagement shows that civil society, particularly community members, struggle to engage with other stakeholders and so benefit from existing collaboration processes. As was explored in Chapter 5, internal conflict is one of the bases of this struggle. HCB has been positioned as a key engaging factor for these and other stakeholders in Antioquia. However, more articulation between these initiatives and regional needs is imperative to make HCB a more effective approach to development:

Late in the 90s, we thought that there was a skill shortage in the region and we embarked on up-skilling communities in mining. Out of 60 students, just 2 of them are currently working in mining; the rest of them became taxi drivers and bartenders… Similarly, high school students can hardly access tertiary education due to lack of economic resources. Indeed, there is a proliferation of HCB initiatives, however, the quality of these actions and their effectiveness to meet regional needs are aspects that need major attention (Civil Society, Focus Group Interview, November, 2012).

HCB approaches in place need to be reformulated to meet all parties’ expectations, including the community’s. Community members are passive rather than active participants in HCB implementation. Current HCB initiatives are perceived by locals as an opportunity to access employment opportunities at the company. Figure 24 shows a group of young participants in an HCB initiative. In a focus group discussion they stated they are passively waiting for future employment options at the mine-site (Community Members, Focus Group, Interview, October, 2012). Mining-focused HCB approaches and low community engagement are making communities highly dependent on mining companies.

However, for other community members, disconnection between existing HCB approaches and local needs is the cause of resentment and discontent: “Governments make business with multinationals without consulting with communities...there is not multi-stakeholder collaboration, as such; there is a business in which multinationals provide governments with some resources to operate in the region” (Community Members, Focus Group, Interview, October,
Civil society groups perceive HCB as simply a means to enable companies to obtain a social license to operate and get human resources rather than a genuine approach to develop sustainable livelihood options (Buitrago, 2013). This perception further increases the gap between existing HCB approaches and local development aspirations.

![HCB initiative participants in Antioquia](image)

**Figure 24 HCB initiative participants in Antioquia**

This top-down and single-focus HCB approach, as well as informal mining-induced issues, limit stakeholder engagement for HCB and therefore deserve early attention. The escalation of global mining in the region is causing resentment amongst locals whose livelihoods are mining-orientated. For some community members, informal mining is considered part of their cultural heritage, whereas for those who depend on it, this activity is seen as the only employment opportunity and therefore the only livelihood option. Most of the interviewees at the community level have some involvement with informal mining. They are active informal miners, former informal miners or informal miners’ family members participating in HCB initiatives.

Governments and corporations very often engage in HCB for artisanal miners. These initiatives are intended to help small miners develop more efficient practices and get formal employment opportunities. According to corporate representatives the HCB approach undertaken by the multinational company in conjunction with the state government is intended to formalise 162 miners and community members. The strategy consists of four components: HCB for employment, HCB for sustainable livelihoods, donations and other types of compensation. So far, 62 people have been
trained in mining and have been offered a position at the mine. Others are currently participating in HCB initiatives in key areas relevant to the company. In accordance with the community relations practitioner this training might provide them with “alternative livelihoods and productive projects” (Community Relations Practitioner, Interview, October, 2012).

However, this HCB approach has resulted in a lack of community engagement, in community discontent, and in involvement by illegal groups and therefore the escalation of armed conflict. As previously discussed, these are illegal groups like guerrillas, paramilitary and more recently by criminal groups called “bacrim” who own a large number of informal mines. These groups have permeated civil society organisations making community engagement difficult for HCB (Interview, Senior Regional Government Representative, October, 2012). Despite governance arrangements in place to solve this issue, governments and companies still feel incapable to deal and engage with these groups.

Antioquia’s communities have become passive actors and cannot actively engage through HCB with other stakeholders as they feel threatened by the influence of these illegal groups. This has not only exacerbated violence in remote mining areas, but has also diminished the community’s possibilities to benefit from corporate-government collaboration for HCB.

These illegal bands have found mining as a way to financially support their groups, as their previous criminal activities, including kidnapping, extortion and drug trafficking are no longer profitable... Gold has become more profitable than cocaine and this is the reason why these bands are keen on controlling our territories rich in minerals and metals (Community Member from Antioquia, Interview, October, 2012).

This situation has also made it difficult for governments and companies to tell the difference between legitimate and illegitimate informal miners. In this context, both community members and government organisations prefer to collaborate for HCB implementation with other civil society actors like universities. Educational institutions are perceived as good counterparts by both actors as they “have been able to gain
more credibility within the community” (Government Representative, Interview, October, 2012).

University representatives and some academics confirm the fact that deteriorated relationships between some stakeholders are due to inherited cultural and context particularities in which local communities are embedded:

We collaborate to implement mineral processing plants to enhance artisanal miners’ skills in mining. These plants were donated by the Canadian government and were intended to help informal miners develop more efficient ore extraction and mineral processing activities. They were meant to help miners make mining a more profitable livelihood option. However, these plants have not been used so far... Similarly, the Regional government has spent millions of pesos in mining for development... It is very difficult to make HCB initiatives work in the region (Civil Society Representative, Interview, October, 2012).

There is a strong feeling of frustration amongst civil society actors which prevents them from positively engaging with other stakeholders. In addition, negative community perception of large scale mining further exacerbates the problem. Some artisanal miners and community members in Antioquia perceive large scale mining and exploration projects as a threat. The expansion of mining operations and the opening of new projects have partially licensed land that informal miners previously occupied. This has also made corporate-community engagement a complex process. Domestic companies, for example, find it very difficult to engage with civil society organisations: “We have tried to approach NGOs and CBOs to work on HCB for community entrepreneurship but we have not got any positive answer so far” (Senior Corporate representative, Interview, October, 2012). However, in informal conversations with community members, they recognise a need to engage with other stakeholders, particularly with companies. Some locals enrol in HCB initiatives to engage with the company. They strongly believe they will be eventually hired by the company, as they were already promised jobs in the large-scale project. (Community Members, Focus Group, November, 2012.).
According to the community relations practitioner of a multinational company operating in Antioquia “(they) have engaged with countrymen and small-scale miners and have carried out several agreements with these groups. These have been materialised in HCB projects and other types of compensation” (Community Relations Practitioner, Interview, October, 2012). Corporate policies also reinforce this statement:

As we advance our activities in Colombia, with our joint venture partners and in some cases on our own, we look forward to engaging with legitimate activists and groups to visit our sites to form their opinions about what we are doing well and where we can do better. It is through such interventions that we can improve our interactions with the communities in which we work (AngloGold Ashanti, 2008).

HCB as part of informal mining licensing processes is an engaging element for both companies and governments. Likewise, issues around informal mining are factors that have led to conflict between parties. The regional government claims that communities are already benefiting from informal mining licensing outcomes, particularly those based on HCB: “Small businesses around mining such as restaurants, laundries and transport agencies have been created… (The) purpose (of these initiatives) is to help community members get organised and stop working on informal basis” (Senior State Government Representative from Antioquia, Interview, October, 2012). The community practitioner of the global company operating in Antioquia, however, states that these small businesses are part of the agenda but they have not materialised yet (Community Relations Practitioner, Interview, October, 2012). It is significant that corporate and government statements regarding HCB implementation differ.

Lack of coordination in multi-stakeholder agendas is another limiting factor in governance processes for HCB. This factor diminishes stakeholder possibilities to better respond to issues relevant for the community. In addition, these barriers have resulted in a waste of resources. Hence, multi-stakeholder agendas for HCB need to be developed on the basis of stronger collaborative practices. Otherwise, these
limitations might not only compromise local development aspirations but also mining companies’ productivity and opportunities to fashion sustainable livelihoods.

Another critical factor in company-government engagement has to do with the lack of resources for HCB implementation. The regional government is an active supporter of mining and exploration companies operating in Antioquia. However, at times company-government relationships become difficult due to lack of resources at the government level: “We have established an Association for miners’ widows after the accident in 2010, however, the regional government has not helped us with this... It seems that the government is more supportive when it has resources. When it does not, there is no engagement” (Corporate Representative, Interview, October, 2012). The government tends to engage with companies that provide resources for HCB implementation. State actors usually request corporate assistance and resources under the rubric of social responsibility: “Companies have a social responsibility and therefore they must engage with HCB initiatives through their CSR agendas” (Interview, Senior Representative Government-funded Educational Institution, October, 2012).

Besides the lack of resources, the development of top-down (mining focused) HCB approaches have also become a constraint in existing stakeholder engagement. However, despite the type of government-corporate engagement, it has mostly resulted in mining-related HCB initiatives for locals. Some of these actions are intended to address safety or mineral processing issues (Corporate Representative, Interview, October, 2012). At times, these actions can also be perceived by community members as an opportunistic approach implemented by powerful stakeholders rather than a real attempt to up-skill communities and provide them with sustainable livelihood options. A further examination of the current state of HCB in the Colombian context will be provided in Chapter 7.

Despite existing limitations in HCB governance arrangements, there are other factors that are worth mentioning as they foster HCB effectiveness in Antioquia. Identifying these factors and enhancing them in the frame of multi-stakeholder collaboration processes could potentially help stakeholders to overcome the aforementioned barriers. The regional government is currently developing alliances with tertiary
institutions to implement HCB across the region. Recent initiatives such as the Technological Complex for Mining, Agriculture and Entrepreneurship, to be located in the north of Antioquia are intended to deliver HCB initiatives in areas such as agriculture and business but mostly in mining (Complejo Tecnologico Minero Agroempresarial, 2012). Governance arrangements in place, specifically adequate communication and information procedures, have facilitated discussions on the implementation of this and other HCB actions in Antioquia:

The way we work is the following: We meet with 16 majors and design initiatives intended to respond to the region’s development plan. In doing so, we work closely with governments, companies and mining communities to agree on the development approach that the community needs. We try to develop initiatives relevant for these communities... However, all cases are different. There are times when those agreements are not very productive; however, when they take place, these initiatives have a positive impact on communities (Government Tertiary Institution Senior Representative, Interview, November, 2012).

Informal mining licensing is another HCB initiative that evidences adequate communication and positive stakeholder engagement. Government representatives and a Canadian mining company operating in the region signed an agreement to license informal miners. Due to positive communication between both parties, 35 contracts between the large scale mining company and small miners have been signed. Other positive outcomes have been the following (Focus Group, Antioquia, February, 2014):

- Small-mining licensing
- Reduction of amount of mercury used
- Reduction of public health issues
- Fostering good mining practices

Effective communication occurs mostly between companies and government representatives. However, this approach needs to be enhanced at the community
level. Stakeholders have strategies in place to facilitate effective implementation of HCB. However, good governance practices need to be further developed. This will help stakeholders overcome the factors that currently limit the implementation of meaningful HCB approaches for local communities.

6.4.2 Stakeholder Engagement for HCB in Risaralda

Stakeholders in Risaralda have been involved in many effective governance processes for HCB. These dynamics have allowed them to overcome potential barriers and limitations in stakeholder engagement for HCB implementation. More importantly, HCB has helped local communities to achieve many of their development aspirations. Some of the strengths of existing stakeholder engagement include but are not limited to: stronger government role, public policies that encourage corporations to take part in local development, active community engagement and organisation and positive corporate-community relations.

As in the Antioquia case, Risaralda is also going through a licensing process of informal mining. However, this and other limiting factors such as local government’s lack of resources and governance capacity have not prevented Risaralda’s communities from benefiting from HCB approaches and generating sustainable livelihoods. The company operating in the region in collaboration with the state government, has set up a mining roundtable (see Figure 25) to address key issues in mining regions of Risaralda. This involves company representatives, government actors, the police and non-state actors like community members and small miners. In a meeting held on 12th March 2014, issues associated with the participation of children in informal mining and the importance of up-skilling informal miners were discussed. According to a corporate representative “Following the national government’s recommendations, this approach (mining roundtable) will be replicated in other regions due to its success in Risaralda” (Focus Group Interview, Risaralda, March, 2014). Figure 25 shows the researcher sharing preliminary findings with participants at the mining roundtable in Risaralda held on 12th, March, 2014.
The role of the regional government has been essential in shaping existing stakeholder engagement. Government representatives are committed to community sustainability and so request mining and exploration companies to help locals develop their livelihoods and contribute to relevant local development. Figure 26 shows a group of CBO associates selling their local products at a mining fair. The participation of community members in this event was financed by the company after a formal request from both the regional government and the CBO. As a result of their participation, CBO’s associates were able to set up strategic alliances to export their goods internationally. As with this one, there are many initiatives in which the regional government has played a key role to negotiate benefits for communities and help them achieve their development aspirations.
We do not want mining and exploration companies operating in Risaralda to extract our resources and leave the town without any legacies for the communities. We do not ask them for money—apart from the royalties and taxes they are obliged to pay. Instead, we want them to build community capacity so that we can export our local goods internationally. This does not cost much to the company but benefits substantially the community (Risaralda’s Senior State Government Representative, Interview, October, 2012).

The regional government and clear public policies in place regarding CSR play a strong role in overseeing corporate social performance and supporting communities. This governance approach has become advantageous for locals as companies have become more accountable. Government’s support to communities has also resulted in more active community engagement. Although some community members lack education and skills to express their development aspirations, active community engagement has helped them become more aware of their needs. More importantly, they are more capable of expressing their HCB requirements to both governments and corporations. Figure 27 shows two community leaders, including an active female leader who, despite her lack of education, has been able to negotiate HCB actions with the company and advocate for women in the region. As a child she had to choose between studying and working as an informal miner. Lack of opportunities for her family during violent times led her and her siblings to choose work over study.
I have been working in mining since I was 7 years old. The company has provided us with some resources to participate in a dress-making course. I asked the company for HCB initiatives in which we women could get some knowledge to sustain ourselves in the long-term. The company, in partnership with a government VET institution, implemented this initiative. However, we need more of these initiatives, as this one in Risaralda. Hopefully there are more coming up (Risaralda Community Leader, November, 2012).

Community engagement has been a pivotal factor in the HCB process. Different from the Antioquia case, locals have been able to successfully organise themselves around key livelihood options relevant to the local economy. This has resulted in more independent communities that do not perceive mining companies as responsible actors in regional development agendas: “If the government brings mining to this region it is because they went through a legal process to undertake operations… we respect that decision but it is not our business… fortunately we have had no problems so far” (CBO Representative, Risaralda, November, 2012).

Mining and exploration companies operating in the region are seen mainly as counterparts rather than as a threat. Communities are economically independent and are proud of their own achievements and active engagement in HCB implementation: “Sometimes we self-fund some initiatives… as a community organisation we keep growing and therefore need more resources... In case we need
something from the mining company we approach them directly” – (Jewellery Association Leader, Interview, November 2012).

When communities approach companies operating in the region, corporations have been responsive to community requests. A few locals perceive that corporate-community engagement tends to occur more often in locations closer to mining and exploration projects. However, for most of the interviewees: “corporations are open to discuss local issues with the whole community. This has resulted in positive consultation processes led by the company” (Community Leaders, Interviews, November, 2012). In this regard, a Senior Government Representative states “the company is keen to engage with the whole community to deliver social benefits and raise awareness of responsible mining in the region” (Interview, November, 2012).

Positive community-corporate engagement has prevailed even in complex scenarios like informal mining. In contrast to Antioquia where relationships with artisanal miners are difficult and have deteriorated, companies operating in Risaralda have successfully engaged with them: “informal miners are resistant to change in their practices and culture. However, we have been able to set clear agreements that benefit all parties” (Senior Corporate Representative, Interview, November, 2012). Companies have successfully established negotiation and collaboration mechanisms with these community groups which have also created an environment of trust for all stakeholders: “mining companies have a very good relationship with communities, particularly with artisanal miners. Some of them keep developing their livelihoods in land owned by the multinational” (Community Leader, Interview, November 2012).

Although community-corporate engagement has been positive and beneficial for both parties, at times community-local government relationships can be challenging. Notice that local and regional governments are very different authorities and therefore play different roles in the region. As discussed above, regional governments play a key and positive role in fostering community-corporate engagement and in helping communities develop sustainable livelihoods. Interviews with community members indicate that very often the local government lacks resources to help them out with community projects (Community Leaders, Interview, November, 2012). In an interview with the Mayor, this issue was discussed. He said
that the local government has financial constraints that sometimes prevent this organisation from assisting communities. When lack of resources becomes an issue, the local government engages with the company to overcome this limiting factor. The Mayor states that this has not been detrimental for government-company relationships (Interview, November, 2012). Instead, companies are very supportive of the local government and are willing to collaborate on a regular basis. However, lack of capacities at the local level to effectively plan mining regions and administer resources to promote local development is an issue that can limit social sustainability in the long term (Buitrago, 2013).

6.5 Summary

This chapter discussed the governance environment for HCB as a constituent part of the SLF framework. Based on policy and stakeholder analysis, policies, institutions and processes in both case study areas were reviewed and examined. The analysis shows that active community engagement and a stronger government role are some of the factors that can foster multi-stakeholder government processes for HCB. In addition, there is a need to foster adequate stakeholder engagement to help lead to sustainable communities. Otherwise, existing limitations like lack of coordination amongst stakeholders, gaps between HCB approaches and local development aspirations and lack of suitable agreements around informal mining will end up having adverse implications for community livelihood assets and for stakeholder governance processes themselves.
7 SLF APPLICATION: LIVELIHOOD ASSETS—HUMAN CAPITAL CAPACITY-BUILDING

This chapter aims to develop an empirical understanding of the linkages between mining and livelihood assets with a focus on human capital capacity-building (HCB). This is the last of three data analysis chapters and provides an exploration of community human capital assets as a constituent component of the Sustainable Livelihood Framework (SLF) (see Figure 28). Although the livelihood asset component of the original SLF identifies the five forms of livelihood assets (i.e., financial, human, social, physical and natural) this thesis concentrates on human capital.

Figure 28 SLF Application: Human Capital Livelihood Assets

This chapter also equips us with a broader understanding of the relationships between the mining industry and human capital. The investigation identified five key
forms of human capital. These were identified from the data derived from the fieldwork and interviews. This inductive derivation indicates their critical importance. They need to be protected and further built on to enhance community resilience in resource regions of Colombia. These assets are: income, employment, education, work experience and infrastructure for HCB. Despite other forms of human capital (leadership, culture, etc) sometimes being mentioned, these five were constantly identified as central. The following sections justify why these five assets need to be further enhanced. It will also be argued that without appropriate HCB approaches in place to develop these primary assets, the ability of local communities to interact with mining agencies will be compromised. Both positive and negative mining impacts were identified in the literature review chapter. Hence, it is not the purpose of this chapter to readdress mining-induced effects but to understand how HCB approaches can contribute to enhancing community assets.

The research has shown that there are dissimilar outcomes for communities in the Antioquia and Risaralda case study areas, probably led by transformations resulting from HCB implementation. According to Eade (1997), HCB approaches that have a positive impact on communities are those that best respond to their needs and expectations. However, the case studies show that stakeholders sometimes embark on HCB approaches irrelevant to locals. An illustration of such approaches is provided by the current state of HCB in the Antioquia case, where the initiatives led by companies, governments or in partnership are mainly mining-oriented. As will be shown in this chapter, evidence indicates that this approach is unsuitable for communities. In addition, there is a strong perception by locals that this approach is not able to protect the community assets concerned. Conversely, Risaralda’s communities participating in this research have been able to develop community-based assets in both mining and non-mining areas resulting in livelihood options more reflective of residents’ needs and aspirations. As will be discussed later, the bottom-up (economically diverse) HCB approach in Risaralda is based mainly on priority areas identified by communities. This approach is more likely to contribute to the achievement of sustainable development gains. The HCB approaches now in place need to be revisited to address priority capacity-building areas and therefore build communities that are more resilient to mining-induced changes.
This chapter begins by examining the current state of HCB approaches in each case study area. This is followed by the identification of community human capital assets. This analysis will also help answer one of the research questions underpinning this thesis: What are the priority areas of HCB and to what extent are they valuable for communities adjacent to mining operations? A deeper discussion of priority HCB areas for local communities in Risaralda and Antioquia will be presented in the concluding chapter.

7.1 The Current Status of HCB in Antioquia

The current HCB approach in Antioquia led by stakeholders in the region (companies, governments and civil society actors) is intended to attract and retain human capital for the mining industry. Hence, human capital at the community level is becoming insufficiently resilient to withstand mining-induced changes. The research identified three factors that are the main determinants of the inappropriateness of HCB approaches in Antioquia: overinvestment in irrelevant HCB initiatives, limited understanding of HCB as an approach to development and HCB approaches that do not reach the broader community but only the mining industry’s current and potential employees. These aspects have led to the escalation of social problems such as discontent and resentment amongst locals. More importantly, it has also had adverse implications for local economic development.

There is overinvestment in poorly focused HCB initiatives in the Antioquia case region. Communities have been equipped with training and education in areas they find do not help them access gainful employment opportunities in sectors other than mining. “What is worse is that these actions are delivered over and over, becoming a waste of resources” (Civil Society Representative, Interview, October, 2012). There is a strong perception from government representatives that there is an increasing interest coming from stakeholders, (particularly governments and companies) in up-skilling communities: “We are interested in demonstrating that we can do responsible mining...we want mining to provide us with wealth. However, it is not just about money, it is also about accessing other services such as education” (Government Representative, Interview, October, 2012).
However, the current HCB approach is not effective for locals. HCB has become a reactive rather than a proactive and genuine approach. As it will be demonstrated later, the research indicates that communities no longer need more HCB in the form of just education but need a combination of this primary asset with other forms of human capital like employment opportunities and income generation. This will result in the development of sustainable livelihood options different from mining and more accurate to Antioquia’s context. A deeper analysis of this particular issue is presented in the following section, further highlighting education as a primary asset for communities.

A second factor concerns the limited understanding of HCB as an approach to development. According to Eade (1997), HCB is itself an approach to development based on a community’s aspirations. However, the mining industry’s narrow understanding of the potential of HCB diminishes the possibilities of achieving locally relevant development: “We do not implement HCB initiatives different from mining because we do not have direct relationship with other sectors...we think that tourism or agriculture are sectors in which we do not fit. For this reason we focus on education for mining” (Senior Corporate Representative, Interview, October, 2012). Thus, this narrow conception of knowledge about HCB appears to be strong at the corporate level. However, in an interview with a miner and former educator, he strongly criticised the existing educational system and expressed his concern regarding community sustainability: “communities in the region find very difficult to become self-sustainable. I am miner but I do not think mining can be a driver for development” (Interview, February, 2014).

Despite the large number of HCB programs in place, most of them target employed miners and only a few involve the broader community. This is a third factor that leads to the irrelevance of many HCB approaches in Antioquia. “A domestic mining company operating in the region is currently building capacity of 500 miners but these actions have been wasted or misused... the domestic company has spent much money in unnecessary mining training for us” (Local Miners, Focus Group, October, 2012). “HCB initiatives include, but are not limited to, partnerships between mining companies and tertiary institutions to develop undergraduate practicum projects and mining student tours” (Mining Engineering Students from Antioquia,
Focus Group, October, 2012). Figure 29 shows a group of undergraduate students who are participating in these initiatives. However, if these HCB initiatives do not go beyond a mining-orientated approach that helps students become active actors in achieving their development aspirations, these initiatives will end up in dreams of development (Murray, 1997). Similarly, mining companies in partnership with local governments are running HCB initiatives to build high school students’ and locals’ capacity in mining practices. Although these actions have helped communities get a broader understanding of the industry, they have not met the community’s expectations yet.

Figure 29 Focus Group with university students from Antioquia

Source: The author, 2014

HCB in Antioquia has resulted in a skills enhancement process rather than an approach to community development. Miners and community members acknowledge mining as a livelihood option but not the only one. They agree companies and governments should support alternative livelihoods more attuned to community members’ life plans. Following Sen (1979), capacity-building should be a process in which the individual is free to choose his/her life plan. However, in the Antioquia case, mining has been positioned by the minerals industry as the predominant livelihood and HCB initiatives are in place reinforce this approach. Companies are more often implementing HCB initiatives in mining in order to supply the skill shortage in the industry, and neglecting other sectors equally important for the region.
The lack of alternative livelihood options accompanied by a dearth of opportunities to develop primary human capital assets have exacerbated civil society members’ frustration and discontent. As one of the miners states: “the company is currently helping me finish high school but I would like to specialise in gastronomy” (Miner, Interview, October, 2012). In addition, community members and miners more often encourage their children and family members to abandon the town to look for better study and employment opportunities, as they do not want them to be part of the mining industry. Negative community attitudes towards mining have increased levels of frustration and uncertainty regarding the lack of livelihood options in the region. In this context, permanent migration or temporary migration to seek seasonal employment and access education in urban areas is a common way of coping with adverse mining impacts. With the escalation of adverse mining impacts, entire families may need to resettle elsewhere. Figure 30 shows a group of local miners, many of whose families have either migrated or are considering resettling in surrounding regions:

Figure 30 Focus group with miners and community members in Antioquia

I am the only miner in my family. I have three children and want them to study. I am aware of the risks of working at the mine and I did not want them to be part of the industry. This is a mining town… a person who does not go to school becomes a miner. Most of us do not know anything else than mining, hence, we have to work here and sustain our family members with the little income we get” (Community Member, Focus Group, October, 2012).
In addition to the community resentment, the existing top-down (mining focused) HCB approach has had adverse implications for economic and social development at the local level. According to academics from Antioquia’s tertiary institutions undertaking research in the region, the local economy has become more speculative with the increase of mining operations. The adverse social impacts are also creating social issues and undermining the possibilities of developing more relevant livelihoods:

Other industries have been displaced as companies and local traders import goods and services, instead of investing and supporting local production in mining towns. Sectors like agriculture and manufacturing are threatened as mining companies pay higher wages to local farmers who have chosen mining over their traditional livelihoods. In addition, community members who have participated in educational programs have not been able to find gainful employment opportunities. Most of the 600 children who finish high school per year become miners and bartenders. These results lead to questions about whether existing HCB approaches can create sustainable livelihoods in Antioquia (Academic from Antioquia, Interview, October, 2012).

HCB initiatives are still led by mining companies, but they need to go beyond mining practices. The existing HCB approach has resulted in a large number of issues that deserve early attention by the stakeholders involved.

7.2 Antioquia: Community Livelihood Assets

7.2.1 Income

Mining is, for many, becoming the only source of income in Antioquia. The lack of economic diversification at the local level further escalates dependency on the industry. However, despite the increased involvement of locals in the mining sector, most contacted during this research did not feel properly compensated for the extraction of natural resources. Incomes are not enough to cover their basic needs or those of their families:
10 to 15 years ago those mountains were coffee plantations but at the present time there is nothing. Our only source of income is mining. We do not have any other options available. I earn (AUS $330) a month. However, I have been working for the mining sector for 18 years and have not been able to afford a house. This is the government’s responsibility... the government does not support miners in the region (Local Miners, Focus Group, October, 2012).

However, as will be shown in the conclusion chapter, all stakeholders involved (governments, companies and civil society actors) should share responsibilities in HCB implementation. It is not only governments’ responsibility to account for effective HCB and help local communities enhance assets like income generation.

While local communities blame the government, companies blame locals’ low level of education for low income rates. This has led the mining company to undertake HCB initiatives to qualify locals for higher salary rates. However, this investment is perceived by locals as opportunistic and merely a strategy to “get human resources that know about mining and are capable to solve problems” (Civil Society Representative, Interview, October, 2012). This statement was supported by a company interviewee who said that “Due to very low educational level in the region, the company’s approach is to get locals trained through HCB. This adds value to both the company and local people, as they get education in mining to increase their income” (CSR Corporate Representative Multinational Company, Interview, October, 2012). This claim suggests that illiteracy levels and lack of expertise in mining practices are preventing communities from getting higher incomes. However, well-educated locals and young learners from surrounding regions currently enrolled in the undergraduate mining programs challenge this argument: “We chose this program because it represents high income. However, this is not the case. There are other sectors in which we could get higher salary rates” (Civil Society Representatives, Focus Group, October, 2012). Perceptions regarding income are usually accompanied by employment concerns; hence, the importance of exploring this community asset in more detail.
7.2.2 Employment

The claim by the Colombian System for HCB is that the higher the level of education, the higher Colombians’ possibilities to access gainful employment opportunities in economically competitive locations like mining regions (Departamento Nacional de Planeacion, 2010). However, this is not the case in Antioquia where interviewees and active participants in HCB initiatives at the graduate level cannot gain employment opportunities appropriate to their level of education: “I have got lots of friends that went to the university. Some of them are engineers and are currently working as taxi drivers... we need education that (meets) employment (aspirations)” (Local Miners, Focus Group, October, 2012). Other civil society actors reinforce this statement; however, they highlight the point that lack of community organisation and engagement has prevented some communities from benefiting from HCB initiatives and accessing gainful employment opportunities:

There have been a number of initiatives to employ people from the region. For example there is an initiative called “entrepreneurship complex” in which the large mining company employs workers from four or five small mines. Unfortunately, other small mines cannot get involved because they lack organisation and a formal structure. They are self-employed small groups who do not hold any planning or knowledge. They practice informal “subsistence mining” (Civil Society Representative, Interview, October, 2012).

In this context, governments in partnership with companies are developing an HCB approach intended to up-skill community members working in informal mining and non-mining areas. As discussed in Chapter 6, this initiative has funded 162 artisanal miners. Some of them already hold skills to work at the company. As the mining corporation has a skill shortage, this approach will be also beneficial for the corporation... [In addition], we are partnering with some educational institutions to train [locals]. There are 62 people ready to join the company. There is another group of people who do not want to become miners as they want to be entrepreneurs and so, we are helping them
develop businesses around mining (Regional Government Representative, Interview, October, 2012).

Educational institutions agree they are actively participating in this HCB initiative and that they are currently delivering training programs on entrepreneurship: “We work with people that have informal businesses. We train them so that they can formalise their businesses. Our focus is on small business around sugar cane” (Government funded Educational Institution, Interview, October, 2012). Notice that the corporate representative stated that this initiative will lead to the development of businesses around mining, whereas the implementing body says most of the businesses will be associated with sugar cane. This is another example of poor coordination in HCB implementation. This is a governance issue that has already been documented in Chapter 6, but it illustrates the divergent views of education providers and the mining companies behind the initiative.

This multi-sector partnership for HCB is in fact perceived by civil society as an unsustainable and top-down (mining focused) approach for development. It is also considered as inappropriate as it does not target key community needs: “Initiatives in partnership between governments and universities are unsustainable. Many people have participated in programs for entrepreneurship but they cannot any longer employ those skills or get jobs. I cannot understand what is going on” (Civil Society Representative, Interview, October, 2012). Instead, of equipping locals for self-sustainability and gainful employment opportunities, current HCB initiatives in the form of education are aimed at meeting company aspirations. It is important to keep in mind, however, that income and employment would benefit substantially from the investments in the education sector if they were properly targeted and implemented.

7.2.3 Education

As noted earlier, HCB in the form of education is mainly a mining-orientated approach in the Antioquia case study. Education is perceived by companies, the government and the people themselves as a tool to up-skill communities rather than as a driver for people’s empowerment and freedom to choose their life plan. Education, as a primary asset, is analysed in the frame of the competence building
The approach proposed by the Colombian System for HCB (Departamento Nacional de Planeacion, 2010). This examination focuses on professional and non-professional tertiary education. The former is offered by well-known universities in Antioquia. These institutions are located in Medellin, Antioquia’s capital city, a geographical location hardly accessible for locals adjacent to mining and exploration projects. Locals who are able to enrol at the higher educational level are usually those who already had a good education, usually provided at private schools located in the capital city: “I come from a good school. This made a difference because I was prepared enough to take the exam and enrol at the university program”. (Civil Society Representative, Focus Group, October, 2013). Lack of economic resources to access tertiary education is perceived as another determining factor that prevents locals from benefiting from professional HCB in the form of education:

Education is free. The national constitution says that education is free from elementary to higher education....We are defending free education in partnership with universities. We have engaged in a national initiative called national student roundtable. We have been working since 2011 to [support free access to education]. (Civil Society- NGO- Representatives, Focus Group, October, 2012).

Non-professional education is more accessible to locals; however, it also raises issues that deserve early attention. In the structure of the Colombian System for HCB, non-professional education consists of vocational and informal training. There are government-funded educational institutions that have active participation in the implementation of HCB initiatives for non-professional education. These institutions have a more active participation at the local level and have reached locals who have difficulty accessing professional tertiary education due to geographical or economic constraints.

Following national policy frameworks, the existing HCB approach is meant to drive competitiveness and local sustainable development aspirations (Departamento Nacional de Planeacion, 2010). However, this approach is becoming unsuitable for locals. As noted earlier, communities are being educated in mining-related skills like minerals processing, safety, and construction, among others. However, these
actions provide them with limited opportunities to pursue their own interests and achieve their own development aspirations: “we had training on safety at this mine... the same training was delivered at two other mine sites where I previously worked... It is basically the same course, same methodology with two or three different things... hence, these initiatives have not delivered positive outcomes for us” (Local Miners, Focus Group, October, 2012). Issues associated with the provision of education as a primary asset are also linked to lack of opportunities to gain meaningful work experience.

7.2.4 Work Experience/Apprenticeships

Work experience in the form of traineeships and apprenticeships is a potential asset that needs to be further developed amongst Antioquia’s communities who were interviewed. Lack of such work experience at the community level has prevented locals from accessing employment opportunities or pursuing professional HCB in the form of education. Major attention should be given to how communities can gain meaningful work experience. However, the research shows that HCB governance and contextual dynamics have compromised locals’ abilities to further develop this asset.

Following Rakodi and Lloyd-Jones (2002), assets can be employed, deployed or depleted. Work experience is a primary community asset in promoting access to gainful employment opportunities and supporting other assets such as skills and education. According to civil society actors (Local Miners, Focus Group, October, 2012), education in isolation is not an effective approach for locals. Instead, a combination of education and meaningful work experience is necessary to make existing HCB approaches more appropriate to local circumstances:

HCB in the form of education is not an issue, what is critical is that young people who were involved in those initiatives are not given jobs. For example, they could do an internship and later work for the company. There is no point to graduate 20 or 30 students so that later they get stuck at home because they do not have relevant work experience to work for the industry. (Former HCB participants) are currently working on irrelevant things because they
were not given the opportunity to gain meaningful work experience. (Others) migrate to the city to look for better opportunities. Once there, they cannot find jobs in their area because they are asked to have one or two years of work experience. Where are they supposed to work if they are not given the opportunity to gain such experience? (Local Miners, Focus Group, October, 2012).

In fact, following the United Nations (1997) principles on HCB, it should be understood as a long-term process and its implementation implies monitoring and follow-up strategies to ensure its success. Some of these strategies involve the enhancement of coping capacities and actions like provision of employment opportunities for participants in HCB activities. In Antioquia this post-implementation stage has often been either neglected or underestimated, which is causing issues for locals and stakeholders involved in HCB implementation. However, communities also need to be proactive and creative in finding opportunities after their participation in training or education. There is a strong perception amongst some local community members employed at a domestic company that it is up to community members themselves to make existing HCB approaches drivers to develop and protect their assets:

I have said to my colleagues, that they need to learn different things. They need to put themselves out there and say I know this or this. For example if they are interested in mechanics, they should ask the company to provide opportunities to get involve in mechanics. Then, they will be given training and education to improve their skills and hopefully become mechanical engineers. ... A good professional is not the one who studies or has a certificate. A good professional is the one who does his work with dedication and determination (Local Miners, Focus Group, October, 2012).

This proactive approach applies to locals who have gained work experience either in the industry or elsewhere. However, it is not applicable to community members currently unemployed and in search of job opportunities. Civil society actors, specifically academics and tertiary education experts explain that many problems related to work experience lie, in fact, with the Colombian HCB system. Policies and
procedures that regulate the current system diminish the possibilities for locals to access employment opportunities at the professional level:

There is something called propaedeutic cycles. Some institutions apply them to give students credit for any work experience they might have. Most of the universities in the region ask future students to take an examination to access professional studies. These institutions entirely neglect previous work experience. A person with five or 10 years working in the mining industry will not ever become an engineer unless the person has taken maths and physics courses... Some other universities welcome students with relevant work experience because they value the human capital they have (Civil Society Representative, October, 2012).

The existing Colombian HCB system limits the capacity of locals to get relevant work experience. The participation of locals in training does not guarantee they will gain work experience. And at the present time, work experience cannot help communities access some professionally-orientated education. Existing HCB governance and context dynamics go beyond locals’ capacities to develop this asset, compromising their opportunities to achieve development gains.

7.2.5 Infrastructure for HCB

Infrastructure is the last asset and form of human capital examined here. Infrastructure has been categorised by Rakodi and Lloyd-Jones (2002) in their description of the mainstream SLF, as physical capital. However, it is here analysed as part of human capital assets, as it has implications for HCB implementation. This research investigation showed that the lack of infrastructure for HCB initiatives has become a factor that limits the successful implementation of these actions: “There is a lack of resources, particularly dearth of infrastructure to deliver HCB initiatives. However, this is due to poor coordination and governance arrangements between parties that lead such implementation” (Local Government Authority, Interview, October, 2012). Stakeholders involved in HCB implementation, like governments and mining companies, are unaware of their roles and responsibilities in the allocation of
resources for HCB. This situation questions the effectiveness of HCB actions in place:

There was an educational institution in the town some time ago. This institution does not exist anymore due to lack of support from the government. There are not similar institutions that can build young people’s capacity. If young learners cannot access education due to lack of infrastructure, the only option they have is to work at the mine ... The town should have a school or university. Many poor people have to travel to the city to be able to study. It is a shame they cannot study here (Focus Group, Miners, October, 2012).

Stakeholders (usually governments and companies) leading the implementation of HCB make a partial contribution to this. A domestic company operating in the region has two boardrooms that at times are used as classrooms. Most of the HCB initiatives delivered in these locations are offered to employees but a few involve the participation of the broader community. A mining lesson offered to high school students has problems due to lack of infrastructure like teaching rooms and accessibility to the mine-site. According to a CSR practitioner interviewed (Interview, October, 2012), “the local government has already questioned the effectiveness of this action, as practice is fundamental to undertake these kind of initiatives”. Since students cannot practise at the mine-site and have not been provided with adequate physical resources, this initiative is not very useful for them. Similarly the company comments on the challenges of infrastructure for HCB in the region: “We have two rural and one urban educational institution. For us the rural area is very important because it is less accessible. It takes us one hour from the mine to go to the school and the other school located in the urban area was closed” (CSR Senior Corporate Representative, October, 2012).

Indeed, lack of infrastructure for HCB has become an issue for stakeholders involved in HCB implementation. Locals cannot engage in these actions given the lack of educational institutions and adequate resources. However, this issue is a symptom of a more complex problem in the governance of HCB. Lack of articulation between stakeholders in the delivery of HCB actions is itself a limiting factor in existing collaboration dynamics for HCB.
7.3 Current Status of HCB in Risaralda

While many of the current HCB mining approach faces some challenges in Antioquia, key findings of this research showed that many HCB approaches in Risaralda have helped locals develop coping capacities to deal with mining-induced changes. Mining will eventually affect the livelihood of farmers, agricultural labourers and other rural workers whose jobs currently depend on agriculture. Farmers are choosing mining over agriculture which might displace traditional livelihood options in the long-term. However, it is mainly due to active community participation, broader understanding of HCB as an approach to development and good governance that mining-induced changes will have less severe impacts on the communities of Risaralda. Active participation in HCB decision making has also helped some communities to proactively request HCB initiatives intended to positively transform their assets and help cope with potential mining impacts. Existing HCB approaches have also helped many communities achieve their development goals and forge sustainable livelihood options.

Based on Risaralda’s community aspirations and HCB expectations, corporations and governments have embarked on HCB-orientated social responsibility agendas. This has had positive impacts on locals, as HCB is more in tune with local circumstances. Generally, HCB is itself perceived as an approach to development by stakeholders involved in its implementation. Community consultation in relation to needs and expectations is highly appreciated in the development of these initiatives, resulting in immediate benefits for locals. For example, local coffee and jewellery producers, as well as female leaders have already experienced the benefits of these initiatives: “We have trained in jewellery design ... the company has also provided us with some financial assistance to attend international fairs so that we can promote and sell our products” (Community Members, Interview, October, 2012). Figure 31 shows the researcher and Community Based-Organisation (CBO) members from Risaralda, advertising their products at an international mining fair.
There is a close relationship between good governance and HCB effectiveness. Collaboration for HCB amongst stakeholders has been a driver to enhance resilient and developed community assets. As discussed earlier, governance is not restricted just to the role of government but also involves other parties such as the private sector and civil society (Davies, 2005). It is part of the role of these three parties to help communities develop asset-based adaptation strategies to respond to mining impacts. The governance component will not be the subject of analysis in this section as the previous chapter focused on governance dynamics. However, it is worth emphasising the implications of good governance for community assets. Hence, some examples of good governance and successful multi-stakeholder collaboration for HCB will be provided in the next section.

Lessons can be learnt from the Risaralda case. HCB approaches need to be further developed according to community expectations and needs. This bottom-up (economically diversified) rather than top-down (mining focused) approach to development is already having significant effects in many of Risaralda’s communities and equipping them with more resilient assets that will help sustain their livelihoods in the long-term. However, if existing top-down approaches keep being implemented, this will not only be detrimental for locals but also for companies operating in mining regions as it will escalate community discontent and resentment towards the industry. This will threaten the expansion of future projects, increase the skill
shortage in the industry and may compromise the social licence to operate in some extractive resource regions of Colombia.

7.4 Risaralda: Community Livelihood Assets

7.4.1 Income

The form of community income has undergone substantial transformation in parts of Risaralda and so has had an impact on its role as a community asset. Violent times in Risaralda diminished community opportunities to develop livelihood options other than mining. The low income that some communities got from small-scale gold mining was inefficiently spent, and power dynamics amongst small miners increased internal conflict in the community. In addition, “low educational level impeded [gold miners] in effectively administering the income they got from gold extraction” (Community Leader, Interview, November, 2012). Informal miners did not know how to handle the benefits derived from small scale mining; neither did they realise the magnitude of the social and environmental problems triggered by poor mining practices. This situation led to some local authorities partnering with community members and other local stakeholders to provide HCB (for example, a vocational program on making jewellery), providing locals with alternative employment and livelihood options.

In 2008, government authorities extended the impact of this initiative and agreed with communities that they were going to add value to gold extracted in the region. This was the beginning of successful multi-stakeholder collaboration in which “governments and civil society actors partnered to create a jewellery association—a community-based organisation” (Community Leader, Jewellery CBO, Interview, November, 2012). The association is one of a number of income generators at the local level. At the present time, the organisation is self-sustainable and employs locals. The arrival of multinational companies in the region has further strengthened the work of CBOs in Risaralda. A Canadian company operating in the region strongly supports this initiative as they are keen to “promote social sustainability in other industries relevant for the community... [Similarly, the international corporation] is in
a permanent dialogue with State actors to know more about community’s needs and be able to assist civil society organisations to increase income” (Corporate Representative, Interview, October, 2012).

Collaborative approaches for HCB implementation have resulted in positive outcomes for the communities involved. For example, “the company helped the municipality to open a plant for waste collection which has the potential for generating income for the local community” (Community Leader, Jewellery CBO, Interview, November, 2012). Ongoing collaboration between companies, educational institutions and civil society organisations has also helped communities to create asset-based strategies to increase local income: “Universities located in the region are helping us undertake market analysis to improve cost production and increase income ... this is very important for us because we are a key stakeholder for [Risaralda’s agriculture sector]” (Community Leader, Blackberry CBO, November, 2012).

Income generation has also been driven by the need for economic diversification. This has led to some positive livelihood transformations, as locals have been able to generate income from industries other than mining. In addition, supported by private and government organisations, community associations are not only increasing income but also fostering employment in jewellery design and sales. This has reduced the relevant community dependency on both small and large scale mining and has strengthened existing community assets.

7.4.2 Employment

With the support of government and companies, community-based organisations have played a key role in transforming livelihood assets. Employment as a primary asset has also undergone positive transformations, mainly led by civil society actors. “Locals have a strong sense of community organisation. They own agriculture-based community associations that stimulate the local economy and foster employment. For example, they own associations for blackberry and coffee production and commercialisation” (Corporate Representative, Interview, October, 2012). Active community participation has led to the creation of local initiatives for social
sustainability. It has also become the driver for enhancing many communities’ coping capacity through employment generation.

Driven by strong links of reciprocity and empathy, locals more often partner with other civil groups or local stakeholders to develop community associations. The importance of becoming self-sustainable reinforces their desire for a high level of economic independence and points to a need to enhance these organisations. This will not only strengthen their capacity to respond to potential mining impacts but also assist them in the generation of local employment. To date community-based organisations have contributed strongly to protecting and enhancing employment assets in Risaralda. Community organisations provide employment opportunities to 616 households (see Table 5) and they expect to play a stronger role in the coming years. A representative of one of these CBOs said: “At the present time we are benefiting 11 households through employment generation ... In the future it will not only be 11 but 20, 30, 50 families benefited from this organisation” (Community Leader, Jewellery CBO, Interview, November, 2012). Table 5 shows three community organisations’ contributions to employment generation in the region. Community members of these organisations have participated in HCB initiatives led by the government. According to the Ministry of Education, 76% former participants in HCB actions have been able to access gainful employment opportunities from these initiatives (Ministerio de Educacion Nacional, 2014).

Table 5 Three CBOs and employment generation

<table>
<thead>
<tr>
<th>Type of Association</th>
<th>Households benefited from CBO’s employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association for coffee production and commercialisation (APECAFE)</td>
<td>499</td>
</tr>
<tr>
<td>Association for blackberry production and commercialisation (AMORQUIN)</td>
<td>106</td>
</tr>
<tr>
<td>Association for jewellery production and commercialisation</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: The Author, 2014. Based on data collected from field interviews

State actors have also taken part in fostering social sustainability by supporting these organisations. The regional government often encourages exploration and mining companies to engage with CBOs to develop such community livelihood assets. In response, companies have committed to supporting the community
endeavours; however, they also have a particular interest in linking community organisations’ work with company goals. Local authorities acknowledge that the mining industry plays a key role, and actions need to be undertaken to generate mining-related employment opportunities. Nevertheless, companies willing to employ community members also need to contribute to local development aspirations: “We want mining companies to operate socially responsible. We want most of their employees to be locals. Employees should also be equipped with suitable conditions to perform their jobs with high safety standards” (Senior Local Government Representative, November, 2012).

Creating sustainable livelihoods is a long-term process (Rakodi & Lloyd-Jones, 2002). Hence, if mining is to support the long-term development of work opportunities outside mining, the industry needs to come up with strategies to protect and enhance livelihood assets from the start of advanced exploration through mining development stages of the mining cycle and also after mine closure. Corporate representatives state that “during the exploration stage (they) are hiring locals to support current drilling projects...The local community board gives (the company) potential workers’ CVs and (the company) selects them through an internal process” (Corporate Representative, Interview, October, 2012).

Other corporate initiatives for employment generation are based on the implementation of bottom-up HCB approaches. However, these initiatives are still in a very early stage and so their impact on communities cannot yet be measured. For example, dress-making educational programs in which female leaders are participating, are one of the existing bottom-up initiatives in place: “This training will help us get employed either by the company or educational institutions to make the company workers’ or school students’ uniforms” (Community Representatives, Focus Group, November, 2012).

Various factors have helped to enhance employment as a primary livelihood asset. Addressing the long-term effects of the gradual escalation of mining operations on local employment will be more effectively done by enhancing existing self-sustainability, community independence and multi-stakeholder collaborations. However, employment generation has also been possible in some cases due to the
implementation of relevant and bottom-up HCB initiatives in the form of education and training. This is another pivotal factor that will help communities adapt to the impact of mining projects in the region.

### 7.4.3 Education

HCB in the form of education in the Risaralda case comprises both non-mining and mining-orientated initiatives. The current approach explored in the examples in Risaralda differs substantially from that in the Antioquia examples. This concerns four main aspects. First, HCB approaches are generally based on community needs and expectations. Second, the existing HCB approach acknowledges community diversity. Civil society groups are different and stakeholders involved in HCB implementation pay particular attention to these differences. For example, gender is a highly valued variable in the implementation of HCB initiatives. Third, corporations undertaking projects in the area are aware of the importance of HCB as an approach to development and have embraced this approach as a constituent component of their CSR agendas. And fourth, community members have also been educated to understand the principles of social responsibility though workshops and seminars. These aspects have, in the cases explored here, helped local stakeholders develop an HCB approach to development tailored to local circumstances.

Existing HCB approaches seem to meet community development aspirations. This is helping locals to positively transform their assets and prepare to deal with potential mining impacts. Initiatives now in place cover a wide range of priority areas for locals, such as agriculture, jewellery and social responsibility. Locals have also been involved in other relevant HCB initiatives like human relations, conflict resolution and dress-making. The main determinant of the success of these HCB initiatives in Risaralda is the involvement of the community in decision-making processes.

Non-mining HCB actions are usually demanded by, and at times implemented by civil society actors. Locals very often promote collective action to request what they consider relevant to develop their livelihoods (The World Bank, 2010). “The company provided us with training in coffee making and coffee tasting. We have also requested support from companies and governments resulting in the implementation
of jointly funded HCB actions” (Community Leaders, Focus Group, October, 2012). Findings indicate that this approach has positive results for communities. “We have been involved in several HCB initiatives delivered by different organisations such as Artesanias de Colombia, government-funded educational institutions and NGOs. We have experienced the benefit of these initiatives. It is reflected in the products that we design” (Community Leader, Jewellery CBO, Interview, November, 2012).

Where non-mining HCB initiatives are led by local stakeholders they take into account community differences. HCB initiatives are tailored according to community distinctions such as gender: “Women in the region identified their HCB priority area. They said they wanted to be trained in dress-making. We hired a trainer from a government-funded educational institution and allocated other resources, like dress-making machines” (Corporate Representative, Interview, October, 2012). Female leaders see this initiative as a means to build resilience to potential mining impacts. As noted in earlier chapters, females currently undertaking HCB initiatives in Risaralda often have associations with mining. They are small-scale miner’s wives, employees, or wives of employees, and some of them are small-scale miners themselves. It is worth emphasising that equipping mining-dependent individuals with assets in areas other than mining is highly important in fostering social sustainability: “I am happy with the mining company’s contribution. They provided us with a trainer and other resources. I am very happy; we have been able to benefit from this (program)” (Female Community Leader, Interview, November, 2012).

Men and children have different needs for HCB. Men are currently undergoing a process of livelihood transformation. They have been involved in consultation processes to identify their HCB needs and expectations. There is a strong perception amongst men that agriculture needs to be further developed as a livelihood option. Males “identified banana plantation as a HCB priority area. In partnership with a government-funded educational institution we are assisting [them] with some resources to begin their own plantations (in coffee, plantain, etc)” (Corporate Representative, Interview, October, 2012). Companies have also partnered with schools to provide children with initiatives such as reading and writing workshops.
Another central determinant to the success of the existing approach is related to the intrinsic link between HCB and Corporate Social Responsibility (CSR). HCB has been considered as a constituent part of CSR and some training in CSR has been delivered as an HCB initiative. For example, one of the companies operating in the region provides education on social responsibility. This is intended to increase community members’ awareness of CSR principles and help them “identify the stakeholders involved in CSR at the local level ... most of the people in town including government representatives are part of this initiative” (Community Representative, Interview, November, 2012).

The HCB initiative on CSR is led by the company and involves key areas relevant for locals. In the frame of this program, community members have been given education in human relations, food security, family guidance and conflict resolution (Community Representatives, Focus Group, November, 2012). Community members have a strong perception that education in social responsibility has assisted them cope with shocks like internal conflict. One of the respondents agrees that being exposed to this initiative has helped him and the community organisation he represents “prevent conflicts within (the) association” (Community Leader, Interview, November, 2012).

Both non-mining and mining HCB programs are being implemented in Risaralda and despite a mining HCB approach in place these actions have been implemented without any detriment to community livelihood assets. The difference between the Risaralda and Antioquia cases studied lies in the fact that the relevant Risaralda communities do not perceive mining as the only priority area. It is only one of the options available to develop livelihood assets. Despite being implemented in a partnership between governments and companies, the mining-orientated approach used in Risaralda involves community consultation and decision-making. Locals understand their livelihoods have to adapt to changes triggered by mining. This implies engaging with the industry but not depending on it. “We have initiatives related to mining in place. Some of them involve artisanal mining, environment, etc. However our people cannot only rely on these initiatives as companies might leave in the future” (Community Representative, Interview November, 2012). Other mining-related HCB areas include but are not limited to “safety, occupational health, labour risk, blasting and drilling” (Local Miners, Focus Group, November, 2012).
combination of mining and non-mining HCB initiatives in the form of education has served as a means to build long-term sustainability. This has delivered positive outcomes for locals as they have been able to employ their assets in vital areas for their life plans. Education as a primary asset has also equipped locals to gain meaningful employment and therefore relevant work experience.

7.4.4 Work Experience /apprenticeships

Education, employment and work experience are strongly connected in the communities in the Risaralda case. Community members have been able to gain meaningful work experience as a result of appropriate education. In addition to this, work experience in the form of apprenticeships has improved their livelihood conditions as they have been able to access jobs themselves as well as foster employment opportunities for other locals. Community members can get gainful work experience because they have been enrolled in high school. However, in contrast to the examples in the Antioquia case, work experience is not limited to mining but involves other areas equally important for local development. The government has played a key role in the development of work experience and so helped foster its worth as a livelihood asset. Local authorities administer the centres for occupations and skills. This educational institution is intended to up-skill students in bakery, electricity and other occupations in high demand at the local and regional levels. Once students finish school, they are certified with relevant experience in their field (Government Representative, Interview, November, 2012).

It is part of the role of government to contribute to building resilient livelihood assets. However, other stakeholders are equally responsible for this. Roles and responsibilities for HCB will be identified in the concluding chapter. In Risaralda, governments and other stakeholders are taking part in the establishment of strategies to provide locals with opportunities to gain work experience. The private sector and civil society actors are committed to supporting community organisations though HCB initiatives to help them gain expertise in key areas for local development:
We have an agreement with a higher education institution. It consists of promoting HCB initiatives for productive chains. We supported the participation of a community leader from a CBO for blackberry production. This organisation lacked expertise in this area and therefore we strongly supported his involvement in this HCB initiative (Corporate Representative, Interview, October, 2012).

Both state and non-state actors have actively contributed to strengthening the possibilities for work experience as a primary asset. Other more tangible community assets like infrastructure for HCB have also been enhanced by local stakeholders.

### 7.4.5 Infrastructure for HCB

Infrastructure and local facility improvements are often perceived as key strategies to mobilise human capital assets. This is reflected in local stakeholders’ increased interest in incorporating infrastructure for HCB as a constituent element of their social agendas. Companies for example “have been proactive in the provision of infrastructure....(for example), they provide infrastructure and facilities to educational institutions and community members” (Government Representative, Interview, November, 2012). Infrastructure has been provided to foster long-term improvements in livelihoods and to physically equip educational institutions for the delivery of HCB initiatives.

The development of adequate facilities has improved many communities’ capacity to cope with mining impacts. Mining may threaten existing food and food storage systems in Risaralda, with immediate effects on traditional agrarian livelihoods and food security itself. The industry may also affect local crops. Because many locals obtain most of their food from local agriculture, infrastructure to strengthen existing agrarian systems has become a key priority for local stakeholders: “One of the mining companies is helping us design some plants for blackberry production... we have no problems with company representatives. Instead, we have to thank them for their support” (Community Leader, Interview, November, 2012). In this regard, corporate representatives state, “(we) are helping community members with improvements in infrastructure and resources for blackberry plantations. (We) are
also implementing the same approach for banana plantations” (Corporate Representative, Interview, November, 2012). Corporate support has extended to the broader community and to those who are not directly impacted by current projects: “The company has funded some education activities and has provided our community with some other physical resources” (Community Representatives, Focus Group, November, 2012).

Corporations more often mobilise resources to strongly support improvements in infrastructure for the education sector. However, they have a particular interest in higher education. Increased corporate investments in infrastructure have resulted in positive outcomes for universities near the case study area. Such investment has been translated into benefits for local communities: “Universities play a key role in the region, particularly in undertaking research. They are helping us develop marketing strategies to expand our local business” (Community Leader, Interview, November, 2012). As universities can be difficult to access for locals due to low educational attainment and financial constraints, companies and governments strongly support the Centres for Higher Education (CERES).

We have nearly 10 undergraduate programs in the centre. Ten universities offer education at CERES. This has benefited people from remote areas, as they do not have to migrate to other locations in search of education opportunities. They are provided with education in town, over the weekends (Government Representative, Interview, November, 2012).

Community members, particularly farmers, commute on weekends to sell their local goods at the public market. They also take this opportunity to participate in educational initiatives funded in partnership by governments and companies.

Corporate support for HCB infrastructure has also been directed to non-formal education. According to the Colombian System for HCB, non-formal education aims to build work-related competences in the illiterate or poorly-educated members of the population (DNP, 2010). Participants in non-formal education initiatives have already experienced the benefits of corporate investment: “The house where we are taking (the dress-making) training is going through remodelling. The company is helping us
with this. It will be much larger and in better physical condition by next year”. (Female Community Leader, Interview, November, 2012). Indeed, infrastructure for HCB has become essential for livelihood asset transformation. Companies and other local stakeholders like governments are building local infrastructure to help community members cope with the effects of mining in the long-term.

7.5 Summary

The SLF encapsulates a process of building capacities through the enhancement and maintenance of assets. Hence, this chapter focused on an examination of community assets. More importantly, it explored the ways in which community assets can be deployed, developed or employed in each case study area. Five HCB priority areas for communities were identified and examined: income, employment, education, work experience and infrastructure for HCB. The research indicates the importance of HCB approaches’ being developed according to community expectations and needs. The situation exemplified in Antioquia shows that companies often make choices on behalf of communities, implementing inappropriate HCB initiatives that do not always tackle critical social and economic issues important to the community. Similarly, the approach from the minerals industry is often on implementing mining-oriented HCB actions to attract and retain a viable local workforce. On the other hand, many of Risaralda’s communities have benefited from HCB initiatives supported by a range of stakeholders, that have been aimed at creating alternative livelihoods in priority areas other than mining. This HCB approach has met the relevant community’s expectations and equipped them with capacities to respond to mining impacts and so establish sustainable livelihoods.
8 CONCLUSIONS

8.1 Introduction

The purpose of this chapter is to synthesise the preceding analysis. The chapter consists of three main sections. The first section begins by answering the research questions and also presents key findings from previous chapters. This is followed by a recommendations section, which is based on the relevant components of the Sustainable Livelihood Framework (SLF). The last section identifies areas for further research which were identified during the thesis analysis, but which could not be addressed because of time and resource constraints.

8.2 Mining, Human Capital Capacity-building and Sustainable Livelihoods

This section provides answers to the four central research questions that structured the investigation and highlights the key findings of the research.

What role does the private sector play in implementing HCB to forge sustainable livelihoods in local communities in resource regions and what role could it play?

In answering this question the thesis makes a powerful contribution to the literature concerning sustainable livelihoods—the governing framework of the research. The mainstream presentations of this framework exhaustively discuss government and community roles in developing sustainable livelihoods; however, they have little to say about the private sector’s role (see for example Rakodi, 2001). The research reported in this thesis emphasises the private sector’s role in the design of sustainable livelihood options for communities in resource regions. The literature on the context of mining emphasises that companies have a responsibility to contribute to other economic futures in addition to mining. Some of the incentives for private mining companies to do this include, but are not limited to, obtaining a social licence to operate, responding to international standards and regulatory frameworks and
being accountable to their shareholders but also to their wider stakeholders (Freeman, 1984). But a key finding is that companies’ contributions to community livelihoods differ according to the context and governance dynamics in which they are immersed.

The communities in the Antioquia and Risaralda cases differed substantially in terms of corporate contributions to community livelihoods. The research identified that many companies operating in Risaralda have demonstrated a stronger commitment towards social sustainability, resulting in positive livelihood outcomes for the community, as confirmed by community, company and government stakeholder interviews. On the other hand, due to complex context and governance dynamics, the companies undertaking exploration and mining operations in Antioquia appear not to have been able to play such a strong role in developing sustainable livelihoods for locals. As discussed in Chapter 5, armed conflict in Antioquia led to the death of many people in the natural resource-rich region. Illegal groups like guerrillas, paramilitary groups and nowadays bacrim (criminal bands) have destroyed traditional livelihoods preventing companies from creating relevant livelihood options for locals. In addition, despite collaboration processes between governments and companies, there is no agreement between government and corporate policy agendas in this regard.

If the improvement of local livelihoods is identified as a policy goal, then companies need both to be more active in support of this and to be more accountable to communities. This will help communities enhance their coping capacities, which will enable them to overcome imminent challenges posited by the expansion of mining and exploration projects. The research shows that whilst corporate social responsibility (CSR) agendas are vital to help communities design livelihoods relevant to their development aspirations, in practice such agendas have serious constraints that challenge corporate efforts. This is the case in a mining district at the south of Antioquia where the HCB approach is focused on improving safety standards and therefore enhancing mining practices.

There is a strong perception among community members that CSR agendas are often utilised merely to gain a ‘social licence to operate’ rather than really seeking to
achieve sustainable outcomes for communities. In other words, they are intended to deflect social criticism of mining and exploration projects, rather than to meet community expectations. Such a mismatch between stated aims and reality is compromising the communities’ ability to benefit from HCB activities and thus inhibits their capacity to develop effective livelihood options. To some of the communities, HCB as a constituent component of CSR agendas is often perceived as merely superficial. It was clear from the research that despite existing corporate engagement in the Antioquia case, some companies still continue to focus their CSR agendas only on mining-related activities. A case in point is the existing licensing processes and HCB for informal miners. These initiatives have been very successful in terms of their specific goals and have made mineral processing practices more efficient.

Nevertheless, there is a lack of corporate understanding of the importance of implementing HCB approaches as constituent components of more widely conceived CSR agendas to benefit the broader community. The industry’s role has also been inhibited by the way it implements top-down (mining focused) HCB approaches. Corporate HCB initiatives are mainly intended to overcome the skills shortage in the industry rather than to respond to the community’s expectations and needs. This leads to an overinvestment in unnecessary HCB initiatives due to a limited understanding on the part of corporate actors of the way that HCB can be used as an approach to development. In addition, such existing HCB initiatives as part of narrowly conceived CSR agendas only reach miners rather than the whole community. Limited and partial corporate-community engagement has considerably reduced the industry’s opportunities to understand the community’s development aspirations and to play a stronger role in designing relevant livelihood strategies for locals. One of the main factors limiting corporate-community engagement is the existing complex contextual and governance dynamics. These limitations have been overcome in the field sites in Risaralda. As discussed in Chapter 6, collaborative governance dynamics have been supported both by the state government and the company. The mining roundtable set up in Risaralda has become a space to build positive relationships between stakeholders and tackle issues at the community level. Risaralda’s governance approach has been so successful that their authorities have been asked to share and replicate it in other resource regions in Colombia.
Contextual factors have important implications for the industry’s role in developing appropriate CSR agendas and contributing to the development of sustainable livelihoods. There are two key factors identified in the research as hindering companies from further engaging in social sustainability: internal armed conflict driven by informal mining groups and poor mining revenue management at the local level. Illegal groups, like guerrillas, control some small-scale mines in Antioquia and extort money from companies operating in the region. Conflict dynamics, some of which are triggered by the tension between global-scale and local mining, are preventing communities from developing sustainable livelihoods. In response, local governments have been allocated responsibilities in an attempt by the national government to reduce the power of illegitimate actors over mining revenues and mine sites. However, these responsibilities are proving very difficult for local administrations in their attempt to ensure good governance. This situation has hampered the effective allocation of mining revenues, thereby diminishing the possibilities of sustaining the region over time. More specifically, mining revenues allocated to HCB initiatives as part of CSR agendas are often wasted, misused, or both, as these initiatives do not tackle key issues as identified by the community. In this context, in which poor governance reduces companies’ capacity to contribute to relevant local development, communities do not receive adequate or effective compensation for natural resource extraction.

On the other hand, companies operating in the field sites in Risaralda appear to have dealt with these detrimental factors more effectively. A positive governance environment and a considerably reduced conflict dynamic have led to remarkable corporate contributions to community livelihoods. Existing exploration and mining projects have been effective in helping communities achieve their development aspirations. The research findings show that active community engagement, effective public policies and governance arrangements for HCB strengthen corporations’ roles in promoting social sustainability. In addition to this, companies have an outstanding understanding of the contextual factors impacting on communities. For example, some managers as well as other senior decision-makers at the corporate-level are community leaders themselves. This has helped the community to easily engage with the companies and express their concerns and
demands, leading to more effective and appropriate community HCB approaches as well as development gains for locals.

Good governance has enabled the implementation of effective HCB approaches as part of CSR agendas. It has also strengthened positive corporate-community engagement with important implications for locals. The good governance environment is leading to relevant social investment in HCB and meaningful contributions to designing more sustainable livelihoods. The Risaralda case has experienced successful outcomes due to the existing good governance arrangements. Encouraged by the state and local governments, many companies in Risaralda are playing a stronger role in developing sustainable livelihoods. Community-orientated CSR agendas reflect such contributions. Locals have found this approach to be highly beneficial as they are being compensated for natural resource extraction. Some community organisations for coffee and blackberry production as well as jewellery design have already experienced the gains that come from a corporate approach more attuned to community life plans.

Despite these contextual and governance factors, companies can still play a stronger role in both Antioquia and Risaralda with the implementation of bottom-up and locally-driven social responsibility agendas. Such approaches can become some of the main enablers for local development and social sustainability. Developing bottom-up (economically diversified) as opposed to top-down (mining focused) CSR agendas could have positive implications for communities. In addition, the research has clearly shown that HCB approaches as part of CSR agendas need to go beyond just mining practices and provide locals with alternative non-mining livelihood options, enabling an expansion of their life plans. Promoting mining-related HCB approaches as the only driver for local development does not provide communities with sustainable legacies. Instead, this top-down and narrowly focused approach has the potential to escalate internal conflicts as it can escalate community discontent. As discussed in section 2.2.2 in Chapter 2, the implementation of top-down capacity-building approaches gradually fostered tensions at the community level in Santander, Colombia. In 2010 a Canadian company was denied a social licence to operate in the region, causing massive productivity losses for the company. This case shows that it is very likely that the delivery of top-down capacity-building
initiatives in the form of mining-focused programs might deliver adverse outcomes for companies and communities.

**What are the stakeholders (their roles and responsibilities) for HCB in a multi-stakeholder collaboration governance scenario in resource regions?**

This section not only identifies stakeholders involved in HCB implementation but also underlines their roles and responsibilities in governance. Stakeholder analysis was applied to answer this question. According to Rakodi and Lloyd-Jones (2002), this tool of analysis further complements the application of the SLF. A wide range of stakeholders were identified and within this, government, private sector and civil society actors play an active role in governance for HCB, with differing roles and responsibilities according to the context in which they are embedded.

**Government and Facilitator Role**

The role of the government is to lead and manage the planning, delivery, evaluation and improvement of HCB through effective mining revenue collection and allocation and through appropriate policies and regulations. This role needs to be executed at three levels of administration: national, regional and local. At the national level, the government’s role is to bolster local and regional authorities’ capacity to foster effective HCB implementation and help communities develop sustainable livelihoods.

Regional governments’ role is to ensure that adequate and appropriate advice is provided to local governments on the allocation of mining revenues; that HCB initiatives are effectively implemented by other stakeholders; and that adequate support and resources are allocated for HCB implementation at the local level. Meanwhile, local governments have a leading role in the implementation of HCB and are responsible for making these initiatives drive sustainable livelihoods in resource regions. In more detail, the responsibilities of the three government levels are as identified in Table 6.
<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Governance Level</strong></td>
<td><strong>Existing Responsibilities</strong></td>
</tr>
<tr>
<td>- Ministry of Mines and Energy</td>
<td>- Align HCB public policies with the private sector’s agendas through strategic alliances called university-company-state collaborative partnerships</td>
</tr>
<tr>
<td>- Ministry of Education</td>
<td>- Allocate resources for HCB effectively</td>
</tr>
<tr>
<td>- Ministry of Treasury, Royalty Allocation Unit</td>
<td>- Strengthen the role of local education authorities in HCB implementation</td>
</tr>
<tr>
<td>- Colombian Planning Department</td>
<td>- Examine the effectiveness of HCB implementation in the light of the new royalty allocation management system “Decision-making Collegiate Entity” (Los Órganos Colegiados de Administración y Decisión - OCAD)</td>
</tr>
<tr>
<td>- Colombian Mining Agency</td>
<td></td>
</tr>
<tr>
<td>- Learning Service Centres (SENA)</td>
<td></td>
</tr>
<tr>
<td>- Colombian Centre for Research Development (Colciencias)</td>
<td></td>
</tr>
<tr>
<td><strong>National Governance Level</strong></td>
<td><strong>Potential Responsibilities</strong></td>
</tr>
<tr>
<td></td>
<td>- Develop participatory government arrangements and accountability mechanisms to enhance transparency in HCB implementation</td>
</tr>
<tr>
<td></td>
<td>- Formulate national policies for HCB formulation and implementation in resource regions.</td>
</tr>
<tr>
<td><strong>Regional Governance Level</strong></td>
<td><strong>Existing Responsibilities</strong></td>
</tr>
<tr>
<td>State Government</td>
<td>- Administer mining revenues for HCB implementation</td>
</tr>
<tr>
<td>- Education Authorities</td>
<td>- Implement national policy frameworks (E.g. Colombia System for Human Capital Capacity-building)</td>
</tr>
<tr>
<td>- Planning Units</td>
<td>- Align HCB public policies with the private sector’s agendas through strategic alliances called university-company-state collaborative partnerships</td>
</tr>
<tr>
<td>- Productivity and Competitiveness Unit</td>
<td>- Strengthen the role of local education authorities in HCB implementation</td>
</tr>
<tr>
<td>- Mining Development Units</td>
<td>- Implement effective governance arrangements for mining revenue allocation for HCB</td>
</tr>
<tr>
<td></td>
<td>- Examine the effectiveness of HCB implementation in the light of the new royalty allocation management system “Decision-making Collegiate Entity” (Los Órganos Colegiados de Administración y Decisión - OCAD)</td>
</tr>
</tbody>
</table>
Regional Governance Level

Potential Responsibilities
- Effectively allocate resources for HCB

Local Governance Level

Local Governments
- Local Education Authorities
- Planning Units
Learning Service Centres (SENA)

Existing Responsibilities
- Foster community participation for HCB
- Administer mining revenues for HCB implementation
- Implement national policy frameworks (e.g. Colombia System for Human Capital Capacity-building)
- Work in partnership with the state government units responsible for administering resources for HCB implementation
- Work in collaboration for HCB implementation with public schools, tertiary education institutions, non-formal educational institutions, regional centres for tertiary education and government-funded organisations.

Potential Responsibilities
- Provide adequate infrastructure for HCB implementation
- Help identify community aspirations

Source: The author, 2014

Private Sector and Financer Role

This section mainly highlights the roles and responsibilities of exploration and mining companies operating in the regions concerned. Companies have a primary responsibility to their shareholders through exploration for, and extraction of, mineral resources; but they are increasingly being tasked—through international industry agreements (including corporate social responsibility agendas) and in-country obligations such as social licences to operate—with social responsibilities to communities. In this context, they need to contribute to ensuring the effective development, provision and evaluation of HCB as a constituent component of their CSR agendas. Companies, in relation to human capacity building, have the responsibilities identified in Table 7:
Table 7 The Private Sector’s Roles and Responsibilities

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Existing Responsibilities</th>
</tr>
</thead>
</table>
| Multinational and domestic Mining Companies | - Meet international standards regarding HCB development and implementation in resource regions.  
                              - Guarantee minimum social and environmental impacts through HCB implementation |
| - CEOs                                 |                                                                        |
| - CSR Managers                         |                                                                        |
| - HR Managers                          |                                                                        |
| - Community Relations Practitioners    |                                                                        |
| Potential Responsibilities             |                                                                        |
| - Implement people-centred CSR approaches for HCB |                                                             |
| - Support HCB initiatives intended to enhance traditional livelihoods |                                                               |
| - Engage with small-scale miners through HCB to help them cope with large-scale mining-induced effects |                                                          |
| - Contribute to generating employment through HCB without displacing traditional livelihoods |                                                         |
| - Support community-based initiatives for HCB and social sustainability |                                                           |
| - Provide communities adjacent to mining operations with HCB and other benefits to improve their conditions during and after the life of the mine |                                             |
| - Provide advice in the form of HCB actions to local businesses on the company’s areas of expertise like business development, trade, etc. |                                         |
| - Formulate and implement locally driven corporate social responsibility agendas based on relevant HCB. These agendas need to go beyond taxes, infrastructure and short-term economic benefits and should also include non-mining orientated HCB initiatives. | |

Source: The author, 2014

Civil Society and Steering Role

As discussed in Chapter 6, the concept of civil society extends beyond community members to the broader community, including CBOs, NGOs, and universities. Hence, the roles and responsibilities within this grouping are diverse. Amongst their many roles, civil society actors often ensure that the roles and responsibilities of governments and companies comply with the community’s expectations and
development aspirations regarding HCB implementation. Table 8 identifies civil society stakeholders and identifies what their responsibilities are and could be.

Table 8 Civil Society’s Roles and Responsibilities

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Existing Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>- Oversee the allocation of mining revenues and corporate social investment on HCB implementation</td>
</tr>
<tr>
<td>Tertiary Education Institutions</td>
<td>- Engage and strengthen multi-sector partnerships between civil society, governments and the private sector.</td>
</tr>
<tr>
<td>Small scale miners</td>
<td>- Contribute to delivering vocational HCB programs to help community members access gainful employment opportunities</td>
</tr>
<tr>
<td>CBOs</td>
<td>- Undertake research to help communities enhance existing local businesses and develop new entrepreneurship ideas.</td>
</tr>
<tr>
<td>NGOs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Potential Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>- Universities need to include an entrepreneurship component in their curriculum as the region is unable to employ all graduates in coming years in mining. This will also help community members to cope with potential mining-induced effects.</td>
</tr>
<tr>
<td>Tertiary Education Institutions</td>
<td>- Universities need to offer programs that reach the broader community and are aligned with productive regional needs.</td>
</tr>
<tr>
<td>Small scale miners</td>
<td>- Universities are also responsible for advising companies and governments in the formulation and development of sustainable approaches for local communities over the life of the mine.</td>
</tr>
<tr>
<td>CBOs</td>
<td>- Research into effectiveness and impact</td>
</tr>
<tr>
<td>NGOs</td>
<td>- Broaden range of employment options</td>
</tr>
</tbody>
</table>

Source: The author, 2014

In the case of all these important stakeholders’ discussion of their roles and responsibilities, there is a need to distinguish between their primary roles, which may or may not be directly relevant to community capacity building, and the roles that they could play in this capacity building. This research focuses on human capital capacity building as a component of the development of sustainable livelihoods for communities and has paid particular attention to what the existing stakeholders’
responsibilities are and could be in HCB implementation. Identifying their roles and responsibilities will help them implement more appropriate and relevant HCB for communities in resource regions.

**What are the factors that limit or foster multi-stakeholder collaboration in the implementation and development of HCB initiatives in resource regions?**

A community’s pre-existing vulnerabilities, as well as the complex realities in collaboration processes for HCB implementation are likely to result in more adverse impacts from mining. Successful HCB implementation is a collaborative and ongoing process (Loza, 2004). However, this current research has identified a number of complexities in the context and governance environment in which this collaboration takes place. These might increase or diminish stakeholder opportunities to engage in effective HCB which can affect their ability to deliver sustainable legacies. Previous chapters discussed the success of HCB for communities which was apparent in the field sites in the Risaralda case. The important question is why are these communities able to benefit more than the others investigated? Following Minnery (2007), Healey (2006) and Davis (2005), this thesis argues that stakeholder interactions involve both collaboration and conflict. These two aspects impact the effectiveness of HCB and therefore the level of relevance and success of these initiatives at the community level. This section identifies the factors that either limit or foster collaboration for HCB and community development opportunities.

Evidence from the research indicates there are several aspects that have a substantial impact on stakeholder interactions for HCB. The principal limiting factors include but are not limited to contextual factors, poor accountability and poor governance. On the other hand, there are enabling factors that have the potential to strengthen multi-stakeholder collaboration, such as a strong government role in HCB implementation, active community engagement and effective communication. These various factors are explained further below.
Limiting Factors

Contextual Factors

The involvement of illegal groups in informal small-scale mining has exacerbated historical conflicts and adversely affected stakeholder interactions. It has also diminished the potential of HCB as a driver for social sustainability. Civil society actors and government representatives both agree that deteriorating relationships between companies and other stakeholders have resulted. In addition, the escalation of global mining in the region is causing resentment amongst legitimate small-scale miners. These groups are highly dependent on mining which they perceive as the only employment opportunity and therefore their only livelihood option. Consequently, legitimate small-scale miners regard the arrival of multinational exploration and mining companies as a threat to their livelihoods. This situation has increased resistance from these groups against multinational companies. The whole situation has also been intensified by armed conflict.

Internal conflict dynamics have been exacerbated by illegal groups including guerrillas, paramilitary and *bacrim* (criminal bands). These illegitimate actors own small-scale mines to launder money or support their illegal businesses. In addition, they have found the current mining boom to be the best opportunity to extort money from companies operating in the region. Community livelihoods have been heavily impacted by the indirect benefits of mineral extraction to these groups. Very often communities cannot actively engage in HCB initiatives as they feel. On the other hand, governments and companies are reluctant to further engage with some small-scale miners and community members due to their suspicions of links between locals and illegal groups. This has not only aggravated the level of discontent and violence in remote resource areas, but has also resulted in destruction of livelihoods, since communities reap very little benefit from collaborative endeavours in these circumstances. These limiting contextual factors have also been detrimental for the accountability and governance arrangements in place.
Poor Accountability

Lack of transparency is reflected in the ineffectiveness of existing corporate accountability mechanisms such as CSR agendas. The current research showed that HCB approaches as constituent components of CSR agendas experience serious limitations. Such difficulties impede companies from effectively engaging with other actors for HCB implementation and thus from achieving sustainable community development aspirations. The findings show that existing constraints on accountability in relation to CSR agendas are mainly due to two elements. On the one hand, although companies may be aligned with global standards for corporate performance, they seem to neglect making public statements about the importance of enhancing HCB in resource regions. On the other hand, CSR policy agendas are not aligned with government HCB policies. This has reduced the effectiveness of processes for HCB between governments and companies.

There is little relationship between CSR policy agendas and global precepts on HCB, a factor which is currently preventing stakeholders, particularly companies, from becoming more accountable to communities and from engaging locals in meaningful capacity building. Despite corporate alignment with international guidelines and regulatory standards, current corporate accountability mechanisms—such as reporting in relation to CSR agendas and providing sustainability reports—do not reflect global precepts concerning HCB. There is widespread agreement within the international community that HCB is a key driver to help communities achieve their development aspirations (ICMM, 2005; IFC, 2011; ISO, 2010; OECD, 2008; PDAC, N.D; RJC, 2011). Yet, companies have demonstrated limited understanding of global guidelines and regulations, resulting in the implementation of HCB initiatives that are irrelevant for communities. The neglect of global precepts in relation to HCB has also become the cause of resentment and internal conflict at the community level.

The lack of articulation between corporate and government agendas challenges the effectiveness of CSR initiatives. Community expectations about HCB are usually contained in government development plans and HCB public policies, such as competitiveness policies (Departamento Nacional de Planeacion, 2010). However, findings from the current research indicate that companies are often unaware of
government’s HCB public policy. The mining industry sometimes embarks on independent HCB initiatives that do not match government's or local needs. In consequence, these efforts are becoming either a replication of existing HCB initiatives carried out by government organisations or programs that do not meet community needs. The lack of accountability reflected in inadequate monitoring and review of CSR obligations has also been accompanied by poor governance dynamics amongst stakeholders.

**Poor Governance**

The research findings indicate that poor governance has been detrimental to collaboration processes for HCB. As identified in the SLF, the notion of governance comprises three main elements: policies, institutions and processes. Previous sections have accounted for the roles and responsibilities of institutions and stakeholders involved in HCB implementation without highlighting the limitations of their policies and processes.

Two major difficulties exist in relation to policies and processes. On the one hand, poor revenue administration creates serious difficulties for collaboration processes. On the other hand, weak institutional capacity at the government level hinders actors from effectively collaborating. These two factors have escalated conflict-laden interactions amongst stakeholders, diminishing the possibilities for positive impacts on communities.

The findings indicate that ineffective revenue administration goes beyond just royalty allocation. The restructuring of royalty allocation systems has not, by itself, led to adequate and socially just allocation of mining revenues. It is apparent from the key findings that the new system called OCAD “Management and Decision-making Collegiate Entity” (Órganos Colegiados de Administración y Decisión) will not be able to solve this governance issue. This new royalty allocation system involves the participation of three actors at different levels of governance. The data from the research reveals that this system has already led to conflicting relationships amongst the actors involved. Furthermore, the most critical governance issue is related to the governments’ dependence on mining taxation. As would be expected, resource rich
regions were found to be more likely to rely on mining revenues and taxes as a means to meet community needs.

The mining bonanza is discouraging governments from exploring other funding opportunities to sustain their regions. Other industries relevant to the local economy are not as heavily taxed as is mining. This helps to explain the lack of resources at the government level for HCB implementation, as mining-based revenues are more likely to be allocated to projects and programs that directly support the mining industry. Such economic dependence on mining revenues threatens the future of resource regions and their communities during and beyond mining projects and more importantly, it undermines local governments’ capacity to administer these resource-rich areas. Governments are becoming less proactive in developing sources of income apart from mining, thus compromising economic diversification. In addition, the lack of government capacity limits collaboration processes for HCB and challenges the achievement of sustainable development gains (Buitrago, 2013).

Local governments were found to lack capacity in three main aspects: governance for royalty allocation that would support capacity-building activities, accountability and transparency, and active engagement in collaboration for developing HCB. These capacity gaps at the government level merit immediate attention by stakeholders involved in HCB implementation. The Risaralda case, for example, highlights the importance of the role of the government in HCB implementation. Governments can not only drive successful HCB implementation but can also help communities negotiate development gains with companies. The government’s role is crucial to achieving social sustainability and fostering HCB collaborative processes. Improved governance can lead to improved outcomes.

In the SLF, the ‘process’ component of governance concerns the interactions between stakeholders where there are multiple stakeholders. As discussed early in this section, context factors can hinder the relationships amongst stakeholders. Poor governance dynamics are more widespread in field examples in the Antioquia case, where they are a substantial component of the contextual factors that have had serious implications for the actors involved. Interestingly, relationships between civil society actors, particularly communities and other stakeholders, seem to be the
weakest. Communities remain the weakest actors politically, resulting in low levels of community engagement. Moreover, the research showed that there is limited engagement between companies and CBOs, with companies preferring to engage with other stakeholders like the local and national governments for HCB implementation purposes. These poor relationships are also compounded by conflicting factors such as the aforementioned lack of connection between corporate and government accountability mechanisms. Poor governance dynamics can prevent stakeholders from providing communities with a legacy that lasts beyond the mine-cycle.

**Fostering Factors**

**Strong Government Role in HCB Implementation**

Governments’ active engagement strengthens collaborative processes for HCB. The examples in the Risaralda case have shown the importance of active government participation. The role that government organisations play is fundamental for multi-stakeholder arrangements for HCB. On the one hand, governments have the ability to negotiate sustainable development gains for communities. Government organisations can become important mediators in negotiations and collaborative processes for HCB between companies and communities. On the other hand, governments are also empowered to set the rules for successful HCB implementation. Although all levels of governance are equally important to foster HCB and provide communities with sustainable outcomes, regional and local governments’ roles were shown to be essential for effective HCB implementation.

The research showed that governments can strongly support civil society actors, leading to successful negotiation outcomes with companies. As discussed in previous chapters, local communities in resource regions very often lack the necessary education and skills to communicate their development aspirations and to negotiate with powerful companies. Governments can help empower communities so that they become more aware of the rights and benefits derived from mineral resource extraction. This government approach has resulted in positive outcomes for many communities in the Risaralda case. In contrast to the Antioquia case, many
Risaralda locals have been able to successfully organise themselves around key livelihood options relevant to the local economy. These development gains have been possible due to active government support and participation in HCB collaboration processes. This approach has also helped companies become more responsible for regional development and in putting HCB public policies in place.

The research findings also indicate that the role of regional and local governments has been essential in fostering the effectiveness of HCB governance. The Risaralda case has demonstrated that government representatives can be committed to community sustainability and so encourage companies to help achieve regional community aspirations. In addition, Risaralda’s governments have successfully implemented HCB national policy agendas at the regional and local levels. The regional government plays a strong role as it has the power to set clear HCB public policies, foster community engagement and oversee corporate social performance.

**Active Community Engagement**

Encouraged by government organisations, many locals in Risaralda are becoming active actors in HCB collaboration. Active community engagement is another fostering factor for successful HCB implementation, which has been made possible by two main aspects: high levels of trust and active community participation in the minerals industry. Communities are playing a strong role in the formulation of local development agendas, becoming active participants in achieving their own development aspirations.

Active community engagement has been built on the basis of trust between communities and companies. This strong linkage has helped the company relate to the community and contribute through HCB initiatives that meet their expectations. However, trust has been developed as a result of company’s accountability to both governments and communities. Community engagement based on trust has also been possible due to increasing involvement of communities in the mining company. In Risaralda, locals occupy positions that range from miners to community relations practitioners, which has further facilitated communication amongst stakeholders.
Effective Communication

The research has shown that effective communication is another pivotal aspect in helping to foster good governance in HCB. Open communication to convey stakeholders’ expectations is fundamental in collaboration processes and has the potential to overcome existing barriers and so cultivate successful HCB implementation. In the Antioquia case, positive communication and relationships between the government and corporate representatives have helped stakeholders foster initiatives in small scale mining. Communication at this case study location was mainly driven by the government and corporate representatives. As discussed in Chapter 6, effective corporate-government communication practices have led to small-mining licensing, reduced the of mercury in gold processing, reduced public health issues and have fostered good mining practices. Effective communication can also strengthen stakeholder accountability, encourage community engagement, help develop agreements that create value for all parties and promote positive corporate-community relations.

What are the main priority areas for HCB and to what extent are they valuable for local communities in resource regions?

This section aims to answer the fourth and final research question and so to increase knowledge about actual HCB implementation. There is general concern in the scholarly literature pertaining to HCB implementation and its real-life effectiveness for communities (Cornelius et al, 2008; Jenkins, 2004; Tracey et al., 2005). Yet there are many unanswered questions in this area, and the research reported in this thesis increases our understanding in this regard.

As introduced earlier, the investigation has shown that there are five main priority areas for human capacity building for local communities in mining resource regions. These are: employment, education, work experience, income and infrastructure for HCB. Although other components of human capital such as health and leadership are important, improving the five identified forms of human capital seems from the investigation to be the most effective way to strengthen the ability of communities to cope with mining-induced changes over time. A deep analysis of the nature and
importance of these aspects of human capital was presented in the previous chapter that explored community livelihood assets. Because of this, the specific priority areas for HCB will not be examined in this section. Instead, attention will be focused on determining the extent to which these HCB priority areas as a whole are valuable for communities in resource regions.

An important finding from the research was that priority areas which are the most valuable for communities are those that help them achieve their own sustainable development goals. Because of this, bottom-up HCB approaches are more likely to create value for communities than are top-down approaches. In those cases in which companies have embraced community-oriented and community-driven agendas, locals claim to have become more resilient. Communities that have been properly consulted about HCB priorities have been able to strengthen key assets, becoming more capable of coping with mining-induced changes. However, such approaches need to be included as a constituent component of both corporate and government policies. It is not solely the companies’ responsibility to make HCB approaches valuable for communities as governments also need to share responsibilities with companies in this regard. Governments also need to consult communities. In both cases consultation should not be merely the token provision of information but should be such that communities are involved in decision-making about matters such as priorities for the allocation of funds.

At the corporate level, a more people-centred CSR approach for HCB has helped companies in Risaralda play a strong role in relation to capacity building initiatives and allowed them to contribute strongly to the development of sustainable livelihoods. The implementation of non-mining capacity building initiatives involving the broader community was found in the research to be more valuable for locals. In Risaralda, companies are engaged in several HCB initiatives that place local people at the centre of development. These actions involve the broader community regardless of their engagement with the mining industry. For example, there is active participation from local entrepreneurs and vulnerable groups, but with the assistance of mining companies, so that they can access better business opportunities and so develop livelihoods that do not involve mining.
These are examples where both corporations and governments have embarked on HCB-orientated social responsibility programs based on the aspirations and expectations of communities in Risaralda. This has had positive impacts on locals, as the resultant efforts at capacity building are more attuned to the context in which they are embedded. In this approach the needs and expectations of the community are highly valued in the implementation of capacity building activities. These conditions have made the existing HCB approach meaningful for all stakeholders but especially for communities; all of which could serve as a valuable model for actors in Antioquia and other regions to follow.

The research showed that the current approach in Antioquia is mainly intended to attract and retain human capital that is skilled or trained for the mining industry. Although there are some wider entrepreneurship-development initiatives in place, they were seen by respondents to be insufficient to face the potential challenges created by the industry. In spite of corporate investments in HCB programs and activities, those initiatives have not yet tackled issues that were seen to be critical by the community. Development aspirations have been partially achieved, but powerful mining stakeholders are not playing a sufficiently strong role in protecting community assets and helping to forge sustainable livelihoods. In addition, the government and private sector actors involved need to take HCB more seriously and devote more resources and attention to the enhancement of community human capital assets and delivering relevant training.

The research identified that there are key forms of training that can be delivered to provide communities with more sustainable livelihood options. This was the case in both case study locations. HCB in the form of training needs to be implemented according to gender and context variables. For example, participants feel there is a potential for dressmaking training for females in both regions. Funded by a Canadian company, some women in Risaralda are participating in an HCB initiative for dressmaking, an action that needs to be enhanced as this initiative has the potential to create value for the company and the community itself. Women are currently designing and making company and schools uniforms, so creating a valuable supply chain for the local economy. A similar initiative is taking place in Antioquia; however, active corporate engagement is needed. Women from Segovia, Antioquia have
obtained some funding from the government but there is minimal support from the large-scale mining companies, so the initiative is under threat. Other women more actively involved in the small-scale mining sector have been partially engaged in HCB initiatives in mining, but this is limiting their possibilities to further expand their livelihood options. In this context, women need to become active participants and benefit from a range of training in both case study locations.

In addition, small-scale miners participating in existing HCB in mining need to be trained in other areas apart from mineral processing. Lessons can be learned from the current small-scale licensing process in Antioquia. This process involves HCB in areas like finance, accounting, administration and literacy. However, this HCB approach should not be exclusively for small scale miners but should be applied to the broader community. Key findings also show that there are other forms of training that are being delivered to the whole community, particularly in Risaralda, and that need to be enhanced and replicated in other resource regions in Colombia. For example, training in jewellery design not only adds value to mineral extraction but creates alternative livelihoods for locals. Similarly, major attention needs to be paid to existing agriculture community associations. Agriculture is a key sector in Colombia’s economy, and so stakeholders, particularly the private sector, should support agriculture-based livelihood options. Companies operating in Risaralda contribute to fostering both the mining and agriculture sectors. This approach has assisted locals in keeping their traditional livelihoods. For example, coffee and blackberry production training has been provided by the private sector in the Risaralda case. Other recommendations derived from key research findings are provided in the following section.

8.3 Recommendations: Livelihood Strategies and Outcomes

This section provides recommendations for ways of improving social sustainability in mining resource regions based on the key findings identified above. Although this research focused on Colombia, the conclusions are highly likely to be applicable to other resource locations in other developing countries. The recommendations provided here should be taken into consideration by all stakeholders involved
(governments, exploration and mining companies and civil society actors) as planning tools for increasing social sustainability.

Planning for social sustainability needs to be conducted during all phases of the whole mine cycle, from exploration to closure. Hence, the importance of getting exploration and mining companies involved in planning for social sustainability from the start of planning for the mine cycle. This helps communities become more resilient to potential mining impacts and so achieve sustainable outcomes. The recommendations provided below have been developed in the light of the two final stages of the overall sustainable livelihoods framework: livelihood strategies and outcomes (See Figure 32).

Figure 32 Sustainable Livelihood Framework

![Sustainable Livelihood Framework Diagram](source.png)

8.3.1 Livelihood Strategies

Following Scoones cited in Mandke (2007), livelihood strategies can be analysed in relation to several aspects: combination, substitution, sequencing, clustering and trade-offs. The first four components will be examined here. As this section focuses on recommendations, an analysis of possible trade-offs will be omitted. These components will be analysed as a way of developing recommended strategies and ways for stakeholders to plan for social sustainability in mining resource regions.

Combination and Substitution

Following the SLF, combination and substitution are two main strategies that can be implemented to foster sustainable livelihoods. It is advisable to apply these two strategies according to the context and governance environment in which the communities are embedded. Combination entails examining how mining and other livelihoods co-exist and the implications of this co-existence for communities (DFID, 1999). However, assets and livelihoods can also be replaced to help communities adjacent to mining operations develop livelihoods in tune with their development aspirations in what the SLF refers to as substitution (DFID, 1999).

The Risaralda case illustrates the successful implementation of a combination strategy in which both mining and other traditional livelihoods like agriculture are combined to help communities become more resilient to potential mining impacts. In Risaralda, examples can be seen where mining has also been combined with jewellery design and trade; a livelihood option that is currently adding value to resource extraction in the region. Conversely, mining training in Antioquia is often substituting for traditional livelihood options such as agriculture, which is not only compromising community sustainability but also jeopardising the mining industry’s opportunities to undertake operations in the long-term. However, the small-scale licensing process undertaken in collaboration between a Canadian mining company and the state government is a remarkable approach which could be replicated in other sectors relevant to the local economy, like agriculture. As discussed in Chapter 7, this approach is fostering positive relationships between the stakeholders (governments and companies) involved.
In this context, the implementation of an economic diversification approach coupled with other initiatives such as food security and farming programs is highly recommended due to the likelihood that mining impacts will have adverse implications for livelihoods. This will allow activities like mining to co-exist with other industries and activities relevant to the local economy and will add value to other livelihood options relevant to communities, as well as helping to ensure that livelihood options remain open after mines have closed.

**Sequencing and Clustering**

Both sequencing and clustering are examined here. Sequencing relates to the resources that need to be allocated one after the other to build livelihoods, while clustering relates to the group of livelihood assets associated with specific livelihood strategies (DFID, 1999). In other words, an examination of these two concepts accounts for existing community assets and potential strategies to further employ these assets. Based on the key findings of the research, communities need to develop alternative livelihoods to mining. In doing so, there are specific assets that should be enhanced to help provide them with meaningful livelihood opportunities. As discussed earlier, five forms of human capital (income, employment, education, work experience and infrastructure for HCB) need to be further enhanced so that locals can achieve their development aspirations. Major attention should also be paid to foster entrepreneurship education with a particular focus on women.

Existing income rates are not enough to meet women’s basic needs or those of their families. Governments and companies (with input from communities) need to partner to formulate income generation strategies. Up-skilling women and communities so that they are helped to obtain higher salary rates is highly recommended but as shown in the research, this needs to be combined with increased opportunities to earn incomes. This will not only create value for the community but also for the company itself in terms of goodwill and support for community service obligations.

Employment is an asset that needs to be revisited as it can cause tensions at the community level. Current processes intended to up-skill informal miners and the broader community need further development in order to help locals enhance their
capacity to get gainful employment and therefore develop more resilient livelihoods. The research showed that these need to be both within and outside the mining sector. The participation of tertiary institutions and other educational organisations such as SENA (Learning Service Centre) are vital to increase both education and job opportunities. Chapter 7 discussed the potential of these institutions for delivering relevant HCB and preparing locals for relevant job opportunities.

Education is an essential asset to enhance other human capital such as income and employment. Despite the implementation of educational policies at the regional level (Gobernacion de Antioquia, 2012), education does not always reach the broader community. The research showed that locals who benefit the most from educational initiatives are those with the financial capital to be able to afford it. The scarcity of economic resources to enable access to tertiary education is threatening community opportunities to access the educational system. In addition, current vocational HCB initiatives are mainly mining-orientated, particularly in the Antioquia case, which is becoming a limitation for locals whose livelihood options and development aspirations are not always directly linked to the mining industry. Thus, it is recommended that education, particularly at the tertiary level, be secured for locals in non-mining subjects. These need to be subjects that will enhance their ability to take up opportunities that are offered outside the mining sector.

The dearth of both gainful employment options and appropriate education are hindering locals from gaining relevant work experience. This is leading to diminished opportunities for income generation and preventing them from employing other human capital assets that they may have access to. Early chapters discussed the fact that issues relating to work experience arose from the Colombian HCB approach and the educational system itself. Propaedeutic cycles need to be implemented across the educational system in order to overcome the obstacles of limited prior learning or prior experience faced by community members. This educational approach can give students credit for their work experience. Tertiary education institutions need to embrace the propaedeutic cycles approach to help vulnerable communities from resource regions achieve their development aspirations through HCB in the form of education. This thesis concentrated on tertiary education, but other educational levels are also relevant for the community. Therefore, a review of
this approach as a constituent part of the system for human capital capacity-building needs to be carried out by national level organisations such as the Ministry of Education, Ministry of Work Relations, Ministry of Commerce and other organisations at the national level who are involved in the implementation of the system for human capital capacity-building. The review should be carried out with input from both companies and the community. This revision needs to be followed by targeted capacity-building at the government level, so that government organisations can effectively implement HCB approaches and help other stakeholders like companies to get actively involved in its implementation and for the implementation to support community development aspirations.

Stakeholders have faced serious challenges in HCB implementation due to infrastructure issues. Resource allocation for HCB infrastructure as well as stakeholders’ responsibilities in this domain remain unclear for some parties. Infrastructure for HCB is the last asset to be examined here. Evidence shows that stakeholders are often unaware of their potential roles and even of their legal responsibilities for HCB infrastructure provision. It is recommended that communities play an active role in advising on the allocation of HCB infrastructure. It is equally important that both governments and companies further engage and commit to the delivery of infrastructure for HCB actions, especially where these have been identified by communities as being of high priority, thereby increasing community opportunities to meaningfully benefit from these initiatives.

8.3.2 Livelihood Outcomes

Embracing the aforementioned recommendations will not only help locals develop sustainable livelihoods outcomes. More significantly, it will also create value for the other parties involved. Strengthening community assets will bring positive livelihood outcomes for communities in the case study locations. In doing so and following the SLF, it is necessary to use clear links between livelihood strategies and the community assets they utilise (Rakodi & Lloyd-Jones, 2002, p.16). Economic diversification was recommended as a combination livelihood strategy. However, such a strategy needs to be accompanied by labour market opportunities to enhance other assets, such as employment and income, which will improve the community’s
existing conditions. If Colombian communities (and those adjacent to mining projects in Latin America and elsewhere) are well equipped in terms of assets (education, employment, income, work experience and infrastructure for HCB) they are more likely to achieve livelihood outcomes that are sustainable for the longer term.

As the sustainable livelihood framework—the governing framework of this thesis—is widely used across the developing world, both research recommendations and outcomes reported are suitable for application to other Latin American locations and elsewhere.

8.4 A novel application of the SLF

This thesis proposed a modification of the original SLF to tackle pressing livelihood issues in developing resource regions. A summary of the ways in which the SLF was modified is explained in this section, but briefly the changes concern the contextual, governance and livelihood components of the SLF. The novel application of SLF proposed in this thesis is focused on two aspects relevant to resource extraction in Colombia: examination of the role of the private sector in the process, institutions and policies (PIP) box and a deeper examination of the process component of the PIP box than found in the classic SLF literature. There is also a particular focus on human capital rather than on all five forms of capital as is usual in the SLF.

The term ‘context’ is used in this thesis rather than the original term ‘vulnerability context’ found in the SLF literature. Hence, mining impacts on locals and the benefit they get from the industry are quite different across regions. They have both negative and positive impacts; the context thus relates to both vulnerability and support. For the purpose of this research the original SLF concept of ‘seasonality’ has been replaced by cycles, particularly in terms of regular fluctuations in the value of minerals and the related livelihood and employment opportunities; this supports the overall use of the SLF in the thesis for non-farming activities.

The potential for sustainable livelihood options was also examined in the light of the PIP (policies, institutions and processes) box here denominated ‘governance
environment'. Previous SLF applications analyse elements contained in the PIP box separately. The SLF proposed in this thesis accounts for the interactions amongst these components and provides for a deeper examination of the role of the private sector. Previous SLF applications present substantial analysis about the role of state agencies but little attention had been paid to non-state actors, particularly to private stakeholders. The SLF application in this thesis puts a special emphasis on the role of mining and exploration companies in fashioning sustainable livelihoods in resource regions. This component had not been exhaustively addressed in previous applications (Carney, 2003, p. 48).

Similarly, former SLF applications comprise elements such as institutions, laws and policies but do not offer an exhaustive analysis about potential ways in which these elements, as well as public and private stakeholders can lead to livelihood improvements. This thesis elaborates on these interactions and offers substantial analysis on existing multi-stakeholder collaboration processes and contributions to building sustainable livelihoods.

The governance environment, particularly multi-stakeholder collaboration between public and private actors, was examined through the notion of human capital. The original SLF suggests five forms of capital (natural, physical financial, social and natural). This thesis argues that human capital is a catalyst to foster social sustainability in resource regions and deserves special attention. The current research suggests five forms of human capital that need to be further enhanced to build sustainable communities in resource regions: education, employment, income generation, work experience/apprenticeship opportunities. It also suggests that the other modifications may support other research into aspects of sustainable livelihoods where multi-stakeholder collaborations, especially those involving the private sector and civil society actors, are critical.

Overall the SLF provided a conceptually valuable framework for the research; but the modifications used in this thesis supported a more focused and nuanced use of the framework. The SLF is clearly flexible enough to support these modifications; parallel modifications may support research related to sustainable livelihoods in other important contexts.
8.5 Recommendations for Further Research

This research explored the linkage between mining and livelihood options for communities in resource regions. In the process, it contributed to building knowledge regarding the role of the private sector (mining and exploration companies) in planning to forge sustainable livelihoods. Such analysis was mainly undertaken in the early stages of the life of a mine. However, further research is needed to explore this aspect during later stages of the mine-cycle, like closure, in order to advance the applicability of the SLF in planning for resource regions. Similarly, empirical research needs to be undertaken on the role of the industry in developing livelihood opportunities for small-scale mining (SSM).

Mine lifecycle planning and social sustainability are both pivotal factors in meeting corporate goals and delivering positive socio-economic outcomes for communities over the life of a mine. There is general agreement in the literature about mining-induced effects on locals residing adjacent to mining operations. However, scant attention has been paid to the socio-economic impacts of mining and other relevant extractive industries on livelihoods during and after closure. This thesis argued that spreading some of the benefits from mining to create lasting value for communities needs to be considered at the initial stages of planning for the mine and the community. However, examining such impacts and planning for sustainable livelihoods over the life of a mine and/or oil and gas operation in other developing and developed locations remain insufficiently explored. Similarly, attention needs to be paid to examining the contribution of other economic sectors apart from mining in forging sustainable livelihoods beyond the mine-cycle. The application of the SLF to other areas relevant for the local economy will be pivotal in planning for sustainable resource regions.

In planning for social sustainability, the role of large scale mining in providing livelihood opportunities for informal SSM deserves major attention. Stakeholders frequently engage in HCB approaches to deliver sustainable livelihood options to community members involved in informal SSM. However, the actual implications for large scale mining for informal SSM have largely been ignored and further research
needs to be undertaken to understand the opportunities for existing stakeholder engagement approaches between SSM and the large-scale mining industry. The escalation of informal mining in developing countries has resulted in critical social and environmental challenges including social conflict, loss of livelihood options, mercury pollution and public health issues. An examination of current engagement between the large-scale industry and informal mining will increase our understanding of the processes linked to this potential partnership. It will also indicate whether this partnership approach increases opportunities for both parties and has the potential to tackle some of the challenges confronting the whole industry. Further research is warranted to better understand the challenges and opportunities arising from the growing interactions between both parties, so as to build knowledge and raise awareness of the potential synergies in developing countries.

A more general area of potential further research is that identified in section 8.4. The research framework was inspired by a modification of the original SLF to help understand the impacts and contribution of pro-poor tourism policy in the urban context of Bangkok (Mandke 2007). This current research modified the original SLF to make it more appropriate to understanding human capacity building in resource regions of Colombia. The framework is flexible enough to enable its modification and use to underpin research in a number of important contexts where the development of sustainable livelihoods is important.
LIST OF REFERENCES


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Vilora de la Hoz, J. (2009). Cerro Matoso y la Economía del Ferroníquel en el Alto San Jorge (Córdoba). *Banco de la Republica: Documentos de Trabajo sobre Economía Regional (119), 41-58*


## APPENDICES

### APPENDIX 1 Policy Documents at the International, Corporate and Government Levels

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<tr>
<th>International policy frameworks</th>
<th>Corporate policies (companies)</th>
<th>Government policies</th>
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<td>International Council of Mining and Metals (ICMM) - Principles</td>
<td>AngloGold</td>
<td>Colombian Constitution 1991</td>
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<tr>
<td>ISO 26000 –Social responsibility guidelines</td>
<td>Ashanti</td>
<td>Colombian development Plan 2010-2014</td>
</tr>
<tr>
<td>Responsible Jewellery Council (RJC)- standards guidance</td>
<td>Seafield Resources</td>
<td>Colombian Ministry of Education –Document vision 2019</td>
</tr>
<tr>
<td>Prospectors and Developers Association of Canada (PDAC) - standards</td>
<td>Anglo-American Chile</td>
<td>Colombian mining Plan Mining plan for Risaralda Province</td>
</tr>
<tr>
<td>International Financial Corporation (IFC)- Standards</td>
<td>Barrick, Peru</td>
<td>Mining plan for Antioquia Province</td>
</tr>
<tr>
<td>Agenda 21</td>
<td>BHP Billiton</td>
<td>Case Study Areas’ Regional and local development plans</td>
</tr>
<tr>
<td>Local agenda 21</td>
<td>Cerrejon</td>
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<tr>
<td>Department for International Development –SL framework</td>
<td>Freeport-McMoran</td>
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<tr>
<td>Extractive Industries Transparency Initiative</td>
<td>Copper &amp; Gold Seafield Resources</td>
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<td>United Nations Development Plan</td>
<td>Newmont</td>
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### APPENDIX 2 Data Collection Chart

<table>
<thead>
<tr>
<th>Research Question&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Objective</th>
<th>Indicators</th>
<th>Sources of Data</th>
<th>Method</th>
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</thead>
<tbody>
<tr>
<td>What role do global mining companies play in forging sustainable livelihoods in local mining communities?</td>
<td>To increase our understanding of multi-stakeholder collaboration for human capital development capacity-building, as an integral part of the sustainable livelihoods framework. To recommend ways of strengthening mining companies’ role in forging sustainable livelihoods</td>
<td>Community’s perceptions about the effectiveness of HCB initiatives in forging sustainable livelihoods</td>
<td>Community members’ perceptions: 15 to 20 Community members enrolled or previously enrolled in capacity-building initiatives. Current students and academics from the following local institutions: Colombian Learning Centre SENA National University of Colombia Other educational institutions operating in the case study areas Community organisations in the case study areas (Apecafe, Amorquin, etc)</td>
<td>Face to face and focus group semi-structure interviews</td>
</tr>
</tbody>
</table>

<sup>3</sup> Adapted from community research methods for the resource sector Master Class Outline 2011 (CSRM, 2011)
<table>
<thead>
<tr>
<th>Locals working for domestic mine sites</th>
<th>Locals working for global mining companies operating in each case study area</th>
<th>NGO Director, Cultural Association for Antioquia's Social Development Director, Nukanti NGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government’s perceptions about the effectiveness of HCB initiatives in forging sustainable livelihoods</td>
<td>Senior Government Representative, Ministry of Education of Colombia Senior Government Representative, Colombian Planning Department Senior Government Representative, Ministry of Treasury, Royalties allocation Department Mining Development Director, State Government of Antioquia Major, San Roque Municipality HCB Coordinator, SENA</td>
<td>Face to face semi-structure interviews</td>
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<tr>
<td>Role</td>
<td>Location/Service Centre</td>
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<td>Regional Project Coordinator, SENA (Learning Service Centre, Antioquia)</td>
<td>(Learning Service Centre, Cisneros)</td>
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<tr>
<td>Mining Programme Coordinator, SENA (Learning HCB Service Centre, Cisneros)</td>
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<tr>
<td>Coordinator, SENA, Centre, Nordeste Antioqueno</td>
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<td>Government Representative, Amaga’s Local Government</td>
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<tr>
<td>Entrepreneurship Tutor, SENA, (Learning HCB Service Centre, National level)</td>
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<td>Major, Quinchia Municipality</td>
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<td>Local Government Senior Representative, Quinchia’s Mayoralty</td>
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<td>Director of Regional Productivity and Competitiveness, Sate Government of Risaralda</td>
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<td>Mining companies' perceptions about the effectiveness of HCB initiatives in forging sustainable livelihoods</td>
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<td>Community Relations Practitioner, AngloGold Ashanti, South African mining company</td>
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<td>Corporate Social Responsibility Manager, Carbones San Fernando, Domestic Mining company</td>
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<tr>
<td>Sustainable Development Coordinator, Carbones San Fernando, Domestic Mining company</td>
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<tr>
<td>Social Responsibility Manager, Antioquia Gold, Canadian Mining Company</td>
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<tr>
<td>Corporate Social Responsibility Manager, Seafield Resources, Canadian Company</td>
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<tr>
<td>Manager C.I. Carbones de Qunchía, Domestic Mining</td>
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<tr>
<td>Face to face semi-structure interviews</td>
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<td>What are the stakeholders (their roles and responsibilities) for HCB in a multi-stakeholder governance collaboration scenario in mining regions?</td>
<td>To recognise the stakeholders (their roles and responsibilities) in HCB conception and implementation. To suggest ways in which global and local stakeholders other than mining</td>
<td>Private stakeholders at the national, state and local levels implementing HCB initiatives that have some impact on the case studies</td>
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</tbody>
</table>

<p>| company |
| Corporate Representative, C.I. Carbones de Qunchia |
| Social Responsibility Manager, Minera Qunchia, Canadian Mining company |
| Legal and social Affairs Representative, Seafield Resources, Canadian Mining Company |
| companies, that is, governments, tertiary institutions and civil society actors, can play stronger roles in forging sustainable livelihoods through the implementation of HCB initiatives. | Government stakeholders at the national, state and local levels implementing HCB initiatives that have some impact on the case studies | Government organisations’ websites and policy documents Data provided by the administrative units from the national, state and local government: Ministry of Education of Colombia Colombian Planning Department Ministry of Treasury, Royalties allocation Department State Government of Antioquia San Roque Mayoralty SENA (Learning Service Centre, Cisneros) SENA (Learning Service Centre, Antioquia) SENA, Centre, Nordeste Antioqueno Amaga’s Local Government SENA, (Learning HCB Service | Literature Review Document and Policy analysis |
| What are the factors that limit or foster multi-stakeholder collaboration in | To recognise and increase our understanding of collaborative but also conflict-loaded | Limitations/factors that foster mining company-stakeholder collaboration for | Mining companies representatives’ perceptions (Corporate Social Responsibility and Human | Face to face semi-structure interviews |</p>
<table>
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<th>the implementation and development of HCB initiatives in mining regions?</th>
<th>interactions, helping stakeholders - mining companies, governments and civil society - perform and collaborate more effectively in HCB implementation.</th>
<th>HCB</th>
<th>Resource representatives)</th>
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<td>Other educational institutions operating in the case study areas</td>
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<td>Community organisations in the case study areas (Apecafe, Amorquin, etc)</td>
<td>Nukanti NGO</td>
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<td>Limitations/factors that foster government-stakeholder collaboration for HCB</td>
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<td>Data provided by the administrative units from the national, state and local government:</td>
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<td>What are the main priority areas for HCB and to which</td>
<td>To recommend ways of making HCB initiatives more effective for</td>
<td>Community’s perceptions about the priority areas for HCB</td>
<td>Community members’ perceptions: 15 to 20 Community members enrolled or previously enrolled</td>
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<td>Colombian Planning Department</td>
<td>Ministry of Treasury, Royalties allocation Department</td>
<td>State Government of Antioquia</td>
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<td>SENA (Learning Service Centre, Antioquia)</td>
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<td>SENA, (Learning HCB Service Centre, National level)</td>
<td>State Government of Risaralda</td>
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</table>
extent they are valuable for communities adjacent to mining operations?

To investigate and understand and evaluate the actual level of achievement and value of HCB initiatives for stakeholders in mining regions, particularly for mining communities.

in capacity-building initiatives.

Current students and academics from the following local institutions:

Colombian Learning Centre
SENA
National University of Colombia
Other educational institutions operating in the case study areas
Community organisations in the case study areas (Apecafe, Amorquin, etc)
Locals working for domestic mine sites
Locals working for global mining companies operating in each case study area
NGO Director, Cultural Association for Antioquia’s Social Development
Director, Nukanti NGO
| Government’s perceptions about the priority areas for HCB | Senior Government Representative, Ministry of Education of Colombia  
Senior Government Representative, Colombian Planning Department  
Senior Government Representative, Ministry of Treasury, Royalties allocation Department  
Mining Development Director, State Government of Antioquia  
Major, San Roque Municipality  
HCB Coordinator, SENA (Learning Service Centre, Cisneros)  
Regional Project Coordinator, SENA (Learning Service Centre, Antioquia)  
Mining Programme Coordinator, SENA (Learning HCB Service Centre, Cisneros) | Face to face semi-structure interviews |
| Private sector’s perceptions about the priority areas for HCB | Private sector organisations and mining companies’ websites and policy documents | Face to face semi-structure interviews | Coordinator, SENA, Centre, Nordeste Antioqueno  
Government Representative, Amaga’s Local Government  
Entrepreneurship Tutor, SENA, (Learning HCB Service Centre, National level)  
Major, Quinchia Municipality  
Local Government Senior Representative, Quinchia’s Mayoralty  
Director of Regional Productivity and Competitiveness, Sate Government of Risaralda  
Government Representative in charge of social and cultural affairs, Quinchia’s Mayoralty |
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<th>Historical of HCB initiatives implemented in collaboration by two or more of the following actors: mining companies, other private sector organisations, governments and civil society actors</th>
<th>Data collected from public and private stakeholders mentioned above</th>
<th>Document analysis Face to face interviews</th>
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<td>Population enrolled in formal education</td>
<td>Colombian Department of Statistics</td>
<td>Document analysis</td>
</tr>
<tr>
<td>Kinds of workforce (technical, professional, etc) needed to work at a gold and</td>
<td>Private sector organisations and mining companies’ websites and policy documents</td>
<td>Document analysis Face to face semi-structure interviews</td>
</tr>
<tr>
<td>Topic</td>
<td>Source Information</td>
<td>Methodology</td>
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<tr>
<td>Training required for the different kinds of workforce needed to work at a gold and coal mine-sites</td>
<td>Private sector organisations and mining companies' websites and policy documents</td>
<td>Document analysis, Face to face semi-structure interviews</td>
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<tr>
<td>Direct and direct employment that the mining company provides</td>
<td>Private sector organisations and mining companies' websites and policy documents</td>
<td>Document analysis, Face to face semi-structure interviews, Focus group interviews</td>
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<tr>
<td>HCB initiatives intended to be implemented after the mine's closure</td>
<td>Private sector organisations and mining companies' websites and policy documents</td>
<td>Document analysis, Face to face semi-structure interviews</td>
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<tr>
<td>Mining companies' corporate social responsibility approaches in HCB, particularly in education</td>
<td>Private sector organisations and mining companies' websites and policy documents</td>
<td>Literature Review, Document analysis, Face to face semi-structure interviews</td>
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</table>
| Number of people needed to work at a gold mine-site | Private sector organisations and mining companies’ websites and policy documents | Document analysis  
Face to face semi-structure interviews |
| Number of people needed to work at a coal mine-site | Private sector organisations and mining companies’ websites and policy documents | Document analysis  
Face to face semi-structure interviews |
| Population from the community that has participated in HCB initiatives employed at the mine-site | Private sector organisations and mining companies’ websites and policy documents | Document analysis  
Face to face semi-structure interviews |
| Population from the community that has participated in HCB initiatives and is unemployed | Mining Development Director,  
State Government of Antioquia  
Major, San Roque Municipality  
HCB Coordinator, SENA  
(Learning Service Centre, Cisneros)  
Regional Project Coordinator,  
SENA (Learning Service Centre, Antioquia) | Document analysis  
Face to face semi-structure interviews |
<table>
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<tr>
<th>Population from</th>
<th>Private sector organisations</th>
<th>Document analysis</th>
</tr>
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</table>

Mining Programme Coordinator, SENA (Learning HCB Service Centre, Cisneros)
Coordinator, SENA, Centre, Nordeste Antioqueno
Government Representative, Amaga's Local Government
Entrepreneurship Tutor, SENA, (Learning HCB Service Centre, National level)
Major, Quinchia Municipality
Local Government Senior Representative, Quinchia's Mayoralty
Director of Regional Productivity and Competitiveness, Sate Government of Risaralda
Government Representative in charge of social and cultural affairs, Quinchia's Mayoralty
<table>
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<tr>
<th>Category</th>
<th>Methodology</th>
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<tr>
<td>across Colombia working at the mine-site</td>
<td>Face to face semi-structure interviews</td>
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<tr>
<td>and mining companies’ websites and policy documents</td>
<td>Literature Review, Document analysis, Face to face semi-structure interviews</td>
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<tr>
<td>International population working at the mine-site</td>
<td>Literature Review, Document analysis, Face to face semi-structure interviews</td>
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<tr>
<td>Private sector organisations and mining companies’ websites and policy documents</td>
<td>Literature Review, Document analysis, Face to face semi-structure interviews</td>
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<tr>
<td>Proportion of women working at the mine-site</td>
<td>Literature Review, Document analysis, Face to face semi-structure interviews</td>
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</table>
APPENDIX 3 Interview Questionnaires

Interview questionnaire
(Community Members)
Introduction

Good morning/afternoon. My name is Isabel Buitrago-Franco and I am currently a PhD candidate at the Sustainable Minerals Institute and at the School of Geography, Planning and Environmental Management at the University of Queensland, Australia. Before going to Australia to undertake my PhD studies, I worked for the Ministry of Education of Colombia and as a researcher and lecturer at the School of Public Administration and at the National University of Colombia. I am from Bogota but I undertook some research work in this region, so I used to visit Segovia quite often.

Your participation in this interview is very important for my research. I am conducting face-to-face and group interviews to find out if the people that surround mining operations have been provided (either by the mining company, the government, tertiary institutions, NGOs or CBOs) with adequate education and training to be able to get gainful employment opportunities to work either at the mine-site or another industry in the region. Your feedback will help us to better understand the concerns and challenges of people that surround the mine-site in the region so that research activities can be better targeted to address these issues and can also recommend ways of forging more sustainable livelihoods for local communities. Before starting the interview, I would like to ask:

Have you read the project information sheet? If no, provide a copy

Are you willing to participate in the interview? If yes, provide the informed consent to be signed.

[ When signed, continue to next section]
[If no, ask if another time would be more appropriate and schedule an appointment. If they still do not want to participate, thank them for their time].

Section 1: Informed consent

Before we start, I just need to go through the ethical provisions for this research. Participation in this interview is voluntary and you can withdraw at any time, as you read in both the information sheet and the informed consent. All information provided by you will be kept confidential and no identifying information will be sought.

For our talk today, I would like to focus on four areas. First I would like to hear from you about the role of the mining company in the region and the impact it has in your livelihoods. It would also be interesting to hear from you if the mining company, the government or other organisations such as NGOs or CBOs have ran educational programs to help you find gainful employment opportunities either at a mining company or another industry. In addition, I would like to learn how you perceive the collaboration between the company, the government and other organisations to run initiatives intended to up-skill community members to get meaningful employment opportunities. Finally, I would like to know what areas you think you need more education and training to get better employment opportunities in this mining region and how your participation in these initiatives impact your life and your family’s life.

Section 2: Mining operations and changes in community life and livelihoods

I would like to start our discussion by learning about mining and the ways in which this activity has changed your lives:

Mining is one of the most important activities in the region. How do you think this activity has transformed your live and your family’s life? For example, have you got any employment opportunity in mining or associated with mining? Or on the contrary have you lost any income opportunities because of mining operations?
Have the neighbouring mining companies provide you with some opportunities like education, employment or some other initiatives that have positively impacted your life? If yes, what sorts of initiatives have been developed?

Similarly, has the mining company held any conversations with local people about the benefits derived from mining operations for the community? If so, what are the main topics and issues that have been discussed?

Has the mining company discussed with the community about the legacies they will be delivered after the mine’s closure? If so, what are those legacies?

How do you think the mining company can help you to increase yours and your family’s life standards?

Section 3: Stakeholders involved, their roles and responsibilities

Following our discussion, I now would like to concentrate on the roles and responsibilities of mining companies, governments, NGOs and tertiary institutions in delivering legacies (like education and training) that help communities to improve their life standards.

Are there any organisations that are helping you to develop skills to be able to work at a mining company or another industry? If yes, could you mention which ones and the type of initiatives that they are implementing?

Can you tell me what role the company plays in up-skilling community members?

What do you think the responsibilities of the mining company are with the community, regarding employment and education?
Can you tell me what role the government plays in the implementation of these initiatives?

What do you think the responsibilities of the government are in the provision of education or other opportunities intended to increase your life’s standards?

Similarly, can you tell me what role NGOs and tertiary institutions play in these actions? There are some tertiary institutions and NGOs locally. Do you know if they are running programmes to develop community skills to get gainful employment opportunities? If yes, could you tell us about these initiatives?

Section 4: Collaboration between the mining company, the government or other organisations (NGOs or CBOs)

Thank you so much for sharing such informative insights. I have learned a lot from you. Now I would like to know about the ways in which mining companies, governments and other organisations such as NGOs and tertiary institutions interact to provide communities with legacies like education.

At times, mining companies, governments and other organisations collaborate to achieve common goals. Are you aware of any existing collaboration (e.g. mining company-government, mining company NGO or mining company-tertiary institution) intended to increase the level of education in the community or to train community members to access gainful employment opportunities? If yes, can you tell us more about this type of collaboration? (e.g. How long it started, what it is for, etc).

Have you participated in any educational program run in conjunction with the mining company and the government; the mining company and NGOs or civil society actors?

How do you perceive the relationships between the government and the mining company? Do they collaborate very often?
What do you think are the factors that prevent mining companies from collaborating with other actors, like governments, NGOs or tertiary institutions?

How is the relationship between the mining company and NGOs or tertiary institutions? Does the mining company work together with these organisations to provide communities with education or training?

If you really want to let the company know about your concerns regarding lack of education to access better employment opportunities at the mine-site or another industry, how would you do that?

Similarly, if you want to let the local government know about these concerns, how would you do that?

**Section 5: Capacity-Building Initiatives and their value**

*We have been talking about the company, government, and the participation of local people in educational initiatives. Participating in capacity-building initiatives, with a focus on education, changes people’s life. In this last section, I would like to learn what changes in life people experience after participating in these initiatives.*

Have you ever participated in a capacity-building initiative? (e.g. educational programs, training, etc) If yes, Can you tell me how it changed your life and your family’s life?

If no, Can you tell me what types of changes might happen after participating in a capacity-building initiative with a focus on education or training?

Can you describe for me what you think your life will be after participating in these initiatives?

Why do you think it will look like this way?
Where did your expectations come from?

How do you think your family will benefit from your participation in these initiatives?

Would you like to develop skills to be able to work at the mine-site?

If not, what do you think are the key areas in which you need to develop skills to increase your life standards and your family’s?

Section 6: Additional Comments

Before finishing the interview, please feel free to further discuss on any issue you would like to address.

This is the end of the interview. Thanks for your participation. If you have any questions about this interview, please feel free to email me at: i.buitragofranco@uq.edu.au
Introduction

Good morning/afternoon. My name is Isabel Buitrago-Franco, and I am a PhD candidate at the Sustainable Minerals Institute and at the School of Geography, Planning and Environmental Management, University of Queensland. I am involved in research that explores multi-stakeholder collaboration dynamics for human capital development in Colombian Mining Regions. I am being supervised by Associate Professor John Minnery and Dr Terry Maybury. I completed my studies in public administration and education at the Universidad Nacional de Colombia and at the Escuela de Administracion Publica (ESAP). I also completed my Master in Educational Management at Universidad de Barcelona, Spain and pursued graduate studies in Public Policy at the University of Queensland. Prior my PhD studies I worked in Colombia as a lecturer, researcher and later as a public servant at the Ministry of Education of Colombia.

Your participation in this interview is very important for this research. I am conducting face-to-face and group interviews to find out about multi-stakeholder collaboration for human capital development in Colombian mining regions. Your feedback will help us to better understand the concerns and challenges in the region so that research activities can be better targeted to address these issues and can also recommend ways of collaborate more effectively to forge sustainable livelihoods for mining communities. The following information pertains to the study:

Before starting the interview, I would like to ask:

Have you read the project information sheet? [If not, provide a copy]
Are you willing to participate in the interview? If yes, provide the informed consent to be signed [ When signed, continue to next section]

[If no, ask if another time would be more appropriate and schedule an appointment. If they still do not want to participate, thank them for their time].

**Section 1: Informed consent**

Before we start, I just need to go through the ethical provisions for this research. Participation in this interview is voluntary and you can withdraw at any time, as you read in both the information sheet and the informed consent. All information provided by you will be kept confidential and no identifying information will be sought.

For our talk today, I would like to focus on four areas. First I would like to hear from you about the role and responsibilities of the mining company in the region and the impact it has on community livelihoods. It would also be interesting to hear from you if the mining company, the government or other organisations such as NGOs or CBOs are implementing human capital development initiatives in education to assist communities to get gainful employment opportunities either at a mining company or another industry. In addition, I would like to learn how you perceive the collaboration between the company, the government and other organisations to implement these initiatives. Finally, I would like to know what areas you think communities need more education and training to get better employment opportunities in mining or other local industry.

**Section 2: Mining operations and changes in community livelihoods**

*I would like to start our discussion by learning about mining and the ways in which this activity has changed communities and their livelihood opportunities:*
• Mining is one of the most important sectors in the region. How do you think this activity has transformed community livelihood opportunities?

• Have the neighbouring mining companies provide communities with opportunities like education, employment or some other initiatives that have positively impacted their livelihoods? If yes, what sorts of initiatives have been developed?

• Similarly, has the mining company held any conversations with local communities about the benefits derived from mining operations? If so, what are the main topics and issues that have been discussed?

• Has the mining company discussed with the community about the legacies that will be delivered after closure? If so, what are those legacies?

• How do you think the mining company has help to achieve community development?

Section 3: Stakeholders involved, their roles and responsibilities

Following our discussion, I now would like to concentrate on the roles and responsibilities of mining companies, governments, NGOs and tertiary institutions in implementing capacity-building initiatives on education and training to develop human capital.

• What are the organisations engage in multi-stakeholder collaboration for human capital development? What type of initiatives are they implementing?

• Can you tell me what role the company plays in developing human capital within local communities?
• What do you think the responsibilities of the mining company are with the community, regarding employment and education?

• Can you tell me what role the government plays in the implementation of these initiatives?
• What do you think the responsibilities of the government are in developing human capital in the region?

• Similarly, can you tell me what role NGOs and tertiary institutions play in these actions?

• What sort of alliances or partnerships the mining company and the government have with tertiary institutions and NGOs to develop human capital?

Section 4: Collaboration between the mining company, the government or other organisations (NGOs or CBOs)

Thank you for sharing such informative insights. Now I would like to know about the ways in which mining companies, governments and other organisations such as NGOs and tertiary institutions collaborate to develop human capital.

• What is the existing multi-stakeholder collaboration scenario for human capital development? Can you tell us more about this scenario? (e.g. How long it started)

• How do you perceive the relationships between the government and the mining company? Do they collaborate?

• What are the factors that foster multi-stakeholder collaboration for human capital development?
What are the factors that limit multi-stakeholder collaboration for human capital development?

Section 5: Capacity-Building Initiatives and their value

We have been talking about the company, government, and the participation of communities in human capital development initiatives. In this last section, I would like to learn what value of these initiatives is for communities.

- What is the current state of participation of community members in human capital development initiatives?

- How do you think these initiatives are benefiting local communities?

- What are the mining company expectations about human capital development initiatives?

- Similarly, what are the expectations of the government about these initiatives?

- What do you think the priority areas for human capital development in this mining region are?

Section 6: Additional Comments

Before finishing the interview, please feel free to further discuss on any issue you would like to address.

This is the end of the interview. Thanks for your participation. If you have any questions about this interview, please feel free to email me at: i.buitragofranco@uq.edu.au.