

Gender and Sustainable Development

Case Studies from NCCR North-South

Edited by Smita Premchander and Christine Müller

perspectives Volume 2

Gender and Sustainable Development: Case Studies from NCCR North-South

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NCCR North-South Swiss National Centre of Competence in Research North-South University of Bern Switzerland Citation:

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Cover photo:

The picture illustrates a "couple" of maize cobs: the female *mamasara* (mother-maize) on the left and the *tatasara* (father-maize) on the right. In the context of Andean culture, 'nature' is gendered too. Those who find these maize cobs in the field perceive this as a lucky charm of *Pachamama* (earth's mother). The subsequent rituals expressing gratefulness to *Pachamama* involve treating these maize cobs with special affection such as kissing, celebrating, and taking them to church for blessing. Photo by AGRUCO.

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Foreword

Mainstreaming gender has become a core concern in international development cooperation, similar to other transversal themes such as environment, governance, and human rights. Despite efforts to mainstream gender in most development activities, however, huge disparities still persist from the local to the global level, between men and women and boys and girls belonging to different age groups, social groups, classes, and nationalities.

Gender is a field of research as well as a social category that informs all development-oriented research. Thematically, all research activities addressing human dimensions should automatically include gender as a scientific approach and a means of differentiation, in order to better understand the nature of social interaction, decision-making processes, the dynamics of sustainable development, and the dynamics of relationships within and between society, institutions, and social groups in general. Moreover, very often gender is still not automatically included in research projects dealing with human interaction with the environment.

When a programme based on research partnerships spanning major regions of the world attempts to better understand core problems of human development in different political, social, cultural, historical and environmental settings, it must include gender as an important transversal dimension: as a distinct field of research, an element in a conceptual research framework, a methodological component, a focus of data collection, a perspective in analysing and interpreting knowledge production, and a way of generating new insights.

Developing meaningful research partnerships for mitigating syndromes of global change in different contexts worldwide is the general direction of the Swiss National Centre of Competence in Research North-South (NCCR North-South). In its first volume in the *Perspectives* Series (Hurni et al., 2004), the NCCR North-South laid the conceptual basis of the long-term research programme – in particular, by introducing and describing the transdisciplinary process chosen for assessing major core problems of non-sustainable development and their clustering into three typical 'syndrome contexts' in 9 regions of the world.

The present publication is the second volume in this *Perspectives* Series. In mid-2004, two researchers took the initiative to prepare and edit a publication that would constitute an initial compilation of main results from a num-

ber of case studies with a focus on women and gender that had been carried out within and in relation to the NCCR North-South programme. This was done in collaboration with the Interdisciplinary Centre for Women and Gender Studies (IZFG) at the University of Bern. Dr. Smita Premchander from India, and Dr. Christine Müller from Germany, were both applying results from their own research, with a strong focus on women and gender, within the framework of the NCCR North-South. They felt, however, that other researchers in the programme, predominantly women, were also dealing with gender as a research topic, so that synergies should be found to bring these studies together. The programme's Board of Directors gladly accepted their proposal to publish a special book on Gender and Sustainable Development, and provided the necessary funding. In addition to the numerous case studies, a select number of female scientists were invited to write papers for the conceptual section (Part I). This section includes a paper situating gender in contemporary research and literature by one of the editors, Smita Premchander. In the final section of the book (Part III), the other editor, Christine Müller, developed a synthesis of, and drew conclusions from, the two preceding sections.

I am particularly proud of this initiative, as it gives our programme the muchneeded momentum to carry on, and further develop, gender as a field of research and a transversal dimension in the NCCR North-South programme.

Sceptics might challenge the need for a book that culls gender issues from research that necessarily should integrate gender. This reflects the ongoing tension between 'mainstreaming' and 'integrating,' and the accompanying risk of losing perspective or giving special attention to gender, thereby also sanctioning its exclusion and marginalisation. Because this tension is ongoing, we in the NCCR North-South choose to give special attention to the issue, until such time as gender is fully integrated in research processes in the programme, and no longer remains the domain largely of women researchers. I especially hope that in future, many more men will join in this effort, and fully incorporate a gender perspective in their own research. The programme's policy is to guide and support gender-specific research and gendered research, i.e. gender as a full-fledged field, and a focus for mainstreaming of development-oriented research.

Bern, Switzerland February 2006 Hans Hurni Director, NCCR North-South

Preface and Acknowledgements

A book is above all a labour of love, and this is what it has been for us, Christine Müller and Smita Premchander, as editors. The present volume emerged from our work with several researchers in the Swiss National Centre of Competence in Research North-South (NCCR North-South), an international research programme that aims to help mitigate syndromes of global change.

Over the past year, we have had intense discussions on the gender issues contained (or neglected) in the programme's research, and on questions related to suitable gender-sensitive research methodologies. Gender issues related to advancement of women were discussed at the Integrated Training Course (ITC) held in 2003 in Kyrgyzstan. Gender as a transversal theme within the NCCR North-South gave depth to and provided special emphasis in the ITC 2004 in Schwarzsee, Switzerland. These events involved the participation of over 100 NCCR North-South researchers from all over the world. As we moved from general to specific attention to gender issues, open discussions soon developed into the idea of producing a book on this topic within the NCCR North-South Programme. This idea was first discussed at the ITC 2004. Discussions and exchanges proceeded within the virtual workspace of gender and sustainable development, once the researchers had returned to their workplaces.

Gender is conceptualised here as an integrative core category in (1) analysis of syndrome mitigation research using trans- and interdisciplinary approaches; (2) development-oriented projects; and (3) the NCCR North-South's partner-ship approach.

The intention of this publication is to present an initial synthesis of genderrelated research within the NCCR North-South. We are aware that we cannot offer comprehensive coverage of the large store of knowledge about gender within a multi-perspective programme that encompasses a large number of countries, institutions and researchers. We seek to provide a conceptual overview of the historical evolution of gender as a topic, and explore its epistemological underpinnings and its relevance to scientific and transdisciplinary research. We have also collated experience in the scientific realm of gender-related research, in terms of new potentials, ideas and creative approaches, by analysing, comparing and synthesising the individual research of scholars at the master's, doctoral, and post-doctoral levels. This synthesis aims to strengthen and confirm scientific insights into gender issues, and to make these insights available in the integrative approach of the NCCR North-South in the second phase of the scientific work of the programme.

The book is divided into two main sections – conceptual and case studies – bound together by an introduction and synthesis written by Christine Müller. The aim of the conceptual section is to lay out issues relevant to gendersensitive research, and emphasise the nature of transdisciplinary and participatory work, as well as the challenges of making such research useful and relevant to practical promotion of sustainable development through a gender-sensitive approach. The case studies are diverse. They include various types of research being done at the PhD level, along with some at the master's level, and range from studies in their initial stages to those that have been completed. The articles that represent initial stages of research address issues relevant in terms of content and methodology that are highlighted after a first phase of initial research, and outline an intention to carry out further research in the local context. Those that represent completed research present critical findings and also suggest ways of carrying out deeper and more advanced gender-sensitive research.

In preparing this publication, we had strong support from Prof. Dr. Hans Hurni and Prof. Dr. Urs Wiesmann, Director and Deputy Director, respectively, of the NCCR North-South. Dr. Peter Messerli, Co-ordinator of the NCCR North-South Management Centre, assisted us in the planning and development process. Guidance in the review process was provided by Dr. Anne Zimmerman of the Centre for Development and Environment (CDE), Bern, and Prof. Dr. Isabelle Milbert of IUED, Geneva. Institutional support for the review process was kindly organised by Prof. Dr. Marc Hufty at IUED, Geneva. Institutional and logistical back-up for work in the North was provided by CDE, Bern, and for work in the South by Sampark, Bangalore.

Each of the papers went through an elaborate process of peer review, from both a gender perspective and a scientific perspective. The gender review team consisted of experts brought together by the Interdisciplinary Centre for Women and Gender Studies (IZFG) at the University of Bern, and these reviews were coordinated by Dr. Brigitte Schnegg, its director. Several NCCR North-South researchers also peer-reviewed the articles, largely from a scientific perspective. The reviewers included: Anne Zimmerman, Brigitte Schnegg, Doris Wastl-Walter, Elisabeth Bäschlin, Isabelle Milbert, Regula Ludi, Sabin Bieri, Simon Mason, Susan Thieme, Stephan Rist, Karl Herweg, Christine Bichsel, Astrid Wallner and Yvonne Rianõ. We would like to thank each of the reviewers for their time and effort, in a difficult time frame, and the authors for their positive acceptance of comments and their subsequent efforts in revising these papers, also within an almost impractical time frame!

The support of Jason Klinck and Roshni Menon was invaluable in managing the review process, in transferring the articles to reviewers, in conveying the comments of reviewers to the authors, and in sending the final papers to the editors. The whole process took well over six months to complete, from March to August 2005.

Any process of peer review has its challenges, especially where differences related to gender, nation, religion, ethnicity or economy, render differences in perspective difficult to resolve. Consider a paper where the researchers are from the local area and are aligned with local gender norms. They would tend to portray these as valid perspectives, without critiquing them from an external perspective. An international perspective would be able to challenge these norms, even though they are locally accepted, as biased against women (even when women in the local milieu accept and perpetuate such norms). And yet, such a challenge, when made by reviewers, would create dissonance among authors in the South, who may even see it as the hegemony of Northern "international" ideas. Conflicting world views can arise both from internal-external and North-South perspectives. These conflicts are inherent in any publication that seeks to bring together a range of papers and perspectives from the North and the South, and in any transdisciplinary research, as explained in the article by Gertrude Hirsch-Hadorn. As editors, we gave detailed consideration to these conflicts where they arose. We have tried to resolve them in each paper by making local views explicit, in an exercise of reflexivity by the authors, though of course many of the papers are coauthored by writers from the North and the South. We hope that the explanations in each paper, along with this analysis, will help readers to make their own judgements.

Final editing was painstakingly completed by Dr. Ted Wachs of CDE. Finally, each paper was given a layout design by Simone Kummer of CDE, and checked again by its author. Authors also provided a wide range of photographs for the book.

Certain members of the NCCR North-South network did not directly contribute articles but helped to advance the gender discussions that resulted

in this book, through participation in the gender discussions at the ITC of 2004 and thereafter. These include Sonia Baires, Sandra Walter, Mey Ahmed, Vineeta Menon, Juan Pedro Schmid, Nathalie Gasser, Karl Herweg, Frank Haupt and Daniel Maselli. We would like to thank all of them for their occasional contributions.

In every way this book has been a collective effort by a large number of researchers in the NCCR North-South. Hence credit goes to all those who worked on it. However, the editors take responsibility for any errors that might have occurred.

We have greatly enjoyed producing this book. We had good agreements and disagreements, and we believe that the whole process of collaboration with a multiple range of authors and institutions has strengthened the articles presented here.

Bangalore, Bern, August 2005

Smita Premchander Christine Müller

Introduction

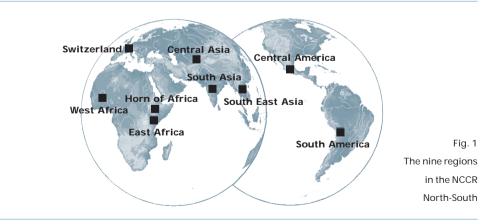


Introduction

Christine Müller

Gender in the NCCR North-South

The present publication contains conceptual papers and case studies by male and female researchers in the Swiss National Centre of Competence in Research North-South (NCCR North-South) programme. As a transversal theme within the NCCR North-South, gender cuts across a wide range of topics. The individual studies explore gender relations within the framework of sustainable development. Yet neither the framework, the topics nor the methods were chosen in a prior joint process. Rather, each individual began her/his research independently, and the process of linking the results began during a two-week Integrated Training Course (ITC), which took place in Schwarzsee (Switzerland) in August/September 2004. Most of us first met there, where we discussed our topics and laid the groundwork for the present publication. Others joined at a later stage. Coming from different parts of the world and conducting research in different parts of the world was only possible as a result of membership in the NCCR North-South. The NCCR North-South was established in 2001, and is jointly financed by the Swiss National Science Foundation (SNSF) and the Swiss Agency for Development and Cooperation (SDC). It has since grown into a research network with more than 250 researchers from the North and South, connecting nine regions of the world.



The overall theme of the NCCR North-South is "Mitigating Syndromes of Global Change". While the "syndrome approach" was developed by the German Advisory Council on Global Change (WBGU, 1997), it had to be further enhanced as a "syndrome mitigation approach" by Wiesmann and Hurni (2004). This scientific approach, further adapted, modified and refined, involves two steps in each study: identification of root causes leading to syndromes of global change, and identification of potentials for syndrome mitigation. The research focus is on the plurality and interrelatedness of root causes, in relation to specific environmental, political, socio-cultural, technical and economic contexts. Identifying problems and potentials is one part of the research approach. Another important part is to exchange, disseminate and communicate knowledge gained, especially - but not exclusively - within the region concerned. The dynamics among researchers within the NCCR North-South soon showed that knowledge not only flows in a North-South direction and vice versa, but is being increasingly exchanged among researchers in the South, resulting in potentially new ideas, new approaches, and new concepts of syndrome mitigation. Complementing this research, knowledge gained can be directly re-embedded through small projects (PAMS: Priority Actions for Mitigating Syndromes of Global Change) and further negotiated. The three levels of knowledge generated within the NCCR North-South can be classified as follows: (1) knowledge for understanding syndromes of global change; (2) knowledge for developing measures and approaches to mitigate syndromes of global change; and (3) knowledge for developing measures and approaches to foster sustainable development (Hurni et al., 2004). In short, the aim of these three steps, taken together, is to promote sustainability-oriented development research.

Equal sharing of knowledge

This joint definition of research approaches and objectives is based on a philosophy of equal sharing of knowledge among researchers from the North and the South. Long-term research partnership has been defined as one main goal of the NCCR North-South, besides the two other main goals, which are capacity-building and social empowerment (Hurni et al., 2004). In order to achieve all three goals, intensive research collaboration in commonly defined scientific realms, involving seven institutions in Switzerland and various others in the eight regions of the South, have been successfully established. Each region represents a research network in itself, whereas research activities in the respective region are managed and supported by a Regional Co-ordinator.

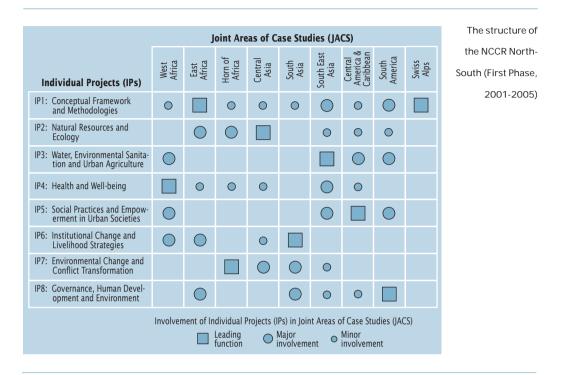


Table 1

The challenge for the NCCR North-South is to establish, work in and manage its multicultural and multidisciplinary setting. The network represents more than 20 different disciplines such as geography, engineering, veterinary medicine, geomorphology, biology, social anthropology, architecture and political science. Communication among researchers from different disciplines and different linguistic and cultural backgrounds demands a constant process of reflection on one's own style of communication if the research partnership and its inherent mutual learning approach are to be taken seriously. In order to support and guide such a process, the development of interdisciplinary and intercultural learning methodologies and tools became a major, unexpected task and led to scientific investigation and meaningful experimentation within the NCCR North-South (see Herweg/ Künzel, forthcoming). Gender has become a dimension of research and communication, and has been integrated in the NCCR North-South at two levels:

- On an institutional level, the NCCR North-South follows a policy of promoting gender-balanced research partnerships. This is realised by actively supporting the scientific careers of junior and senior female researchers in all nine regions.
- Gender-specific studies, gender-sensitive methodologies, and gender-sensitive actions are promoted in both research and action.

The present publication deals with the second level, though it does not include all ongoing gender-specific or gender-sensitive studies within the NCCR North-South. Mey Eltayeb Ahmed (University of Karthoum/Swisspeace), conducting research on national and indigenous management of environmental conflicts in the Savannah Belt of Sudan, has just finished her PhD fieldwork. Another work in progress is a collaborative study between the Pakistan Research Group and the Development Study Group of the Institute of Geography, University of Zürich, on economic globalisation and rural livelihoods in Pakistan.

Women, gender and sustainable development

The gender and sustainable development nexus can already look back on a long history that needs no lengthy summary here (see Braidotti et al. 1994). It emerged from the environmental debate initiated by individual scientists



Fig. 2 Mey Ahmed at the site where she is doing fieldwork in Sudan, February 2005

Photo by Christine Müller concerned about the danger to the natural and human environments from pesticides and other toxins, such as Rachel Carson in her controversial 1962 book *Silent Spring*. Since then many other women all over the world have raised their voices to bring environmental issues before the public, including Nobel prize winner Wangari Maathai (Greenbelt Movement, Kenya), Erna Witoelar (Indonesia), Vandana Shiva (India) and Bella Abzug (USA). Critiques of conventional development approaches and science have been and still are the grounds for innovative research within the gender and sustainable development nexus. Due to the efforts of many women activists and academics all over the world, a gender dimension entered the debate on sustainable development, summarised by the statement of the World Commission on Environment and Development (1987): "Inequity is the largest environmental problem in the world; it is a fundamental development problem". Asserting that gender equality is a prerequisite for sustainable development made it possible for women to raise awareness of existing forms of gender inequalities, amongst many other existing forms of inequality.

Women and gender at the UNCED 1992

The UNCED (United Nations Conference on Environment and Development) Conference in Rio in 1992 was a turning point at the international level. Women, as legitimate representatives of long-established or newly formed women's organisations all over the world, organised themselves along governmental and non-governmental lines. They aimed through lobbying efforts to influence the policies of the official delegations by integrating a gender perspective into major issues such as governance, peace, economic justice, poverty, food security, environment, energy and technology. The outcome was a reasonably engendered Agenda 21. Women realised that they are important players in determining the future of the planet, and not just passive beings who are only the victims of social, economic or ecological processes. Meanwhile, in many parts of the world, women have established their own capacities for knowledge production in the nexus of gender and sustainable development, in research institutes such as the United Nations International Research and Training Institute for the Advancement of Women (Dominican Republic), or by being affiliated with a university.

The Rio Conference also signified the beginning of a new era in the relationship between women in the North and South who realised that despite living in different contexts, they, their children, and their families face a common risk: the degradation of their environment. The particular experiences of women, as actors and as individuals affected by environmental change, continue to be Gender and Sustainable Development: Case Studies from NCCR North-South

gathered all over the world and presented to a global audience. This involves a refinement and a reconceptualisation of normative sustainable development, with its economic, ecological and social components, in order to acknowledge the gendered nature of social reality. This perspective was reaffirmed at the World Summit on Sustainable Development in 2002 in Johannesburg.

Towards empowerment of women

Another turning point at the international political level was the Third World Conference on Women in Nairobi (1985), dedicated to the theme "Equality, Development and Peace". The DAWN network (Development Alternatives with Women for a New Era) formulated the empowerment approach at a time when living conditions in countries of the South were drastically worsening, with many negative impacts on the lives of women, men, their children, and their families. The pragmatic strategy of empowerment is meant to reconfigure unequal gender relations, but also to transform such institutions as the market and the state. This multilevel approach, which constitutes a conceptual linkage of macro- and micro-developments, included a claim for recognition of women as knowing, active subjects, as opposed to the dominant Women in Development Approach (WID), with its paradigm of women as passive, unknowing objects, and mere recipients of development aid. The empowerment approach can be regarded as being of historical value in the nexus of women, gender, environment and sustainable development, since it marks a major turning point at the epistemic level: the previous discovery of women for development became a discovery of development by women. International discussions subsequently entered a period marked by a strong critique of the structures of knowledge production, and in particular of Western epistemology (see the article by Bieri in the present volume). There was and still is a strong critique of dichotomic thinking, which for instance artificially splits the public and private spheres of women. This ongoing critique of science is advanced by post-colonial and feminist scholars, but also represented in individual self-reflection on one's own institutional context of knowledge production.

Now, ten years after the Fourth World Conference on Women in Beijing, the political environment for women's and gender agendas is less favourable. Key dimensions and forces that are eroding or causing detriment to the lives of both men and women include social crises, civil wars, deregulation, privatisation, and neo-liberalisation. On the other hand, women have found new opportunities in information and communication technologies, and disseminated their voices at the global level. At the local level, the decentral-

isation of political power to local bodies and municipalities in many countries is opening opportunities for women to act directly in local politics. But these positive aspects cannot hide the reality that in many countries all over the world women and their families are facing increasing poverty.

Our contributions

Exploring gender: the varieties of discovery

Gender researchers entered the NCCR North-South at different times and approached their topics from different standpoints. The variety of ways to approach gender clearly shows that gender is an open category in all disciplines. Taking a gender perspective is less a dogmatic approach than an exploratory one, leading to surprise discoveries or unexpected moments at the empirical level. Authors such as Smita Premchander, Christine Müller, Susanne Fleischli, Martina Locher and Heidi Kaspar already had a clearly defined gender design at the outset of their research. Others, such as Kate Molesworth and Chinwe Ifejika Speranza, gradually discovered that gender played an important role in their fieldwork. It was pure, everyday observation, coupled with scientific investigation, that paved the way to gender. Chinwe Ifejika Speranza encountered gender by using a participatory approach. Realising during fieldwork that gender was an important topic, she added a sub-study to her main research. The experience of a research group from Argentina that included Ada Freytes Frey, Karina Crivelli, Florencia Partenio, Maria Ines Fernandez Alvàrez and Cecilia Cross, went in the same direction: in reference to the results of a completed study, these authors decided to integrate a gender perspective into the subsequent research project.

Through observation and investigation, a homogenous picture of one *social reality* becomes differentiated into gendered realities, independent of one's own disciplinary background. The research results presented here prove that such a gender-sensitive perspective offers a more specific and precise explanation of negative or positive social dynamics within respective societies, especially between women and men, and even among members of each sex. It must be emphasised that although gender is an open category, this does not imply that it is to be treated as an ingredient ready to add and stir. All case studies reveal a systematic and controlled collection of data on gender relations, with the outcome that research results are clearly defined.

However, depending on the cultural context, there can also be practical limits to using a gender approach. In the case of Sebastian Boillat, who is conducting an ongoing study on indigenous concepts and knowledge of natural resources in Bolivia, it was difficult as a male to conduct interviews with women, who were rather reserved about sharing their knowledge. Therefore, to complement his research "on the male side," an additional study on the same topic conducted by a female researcher was launched on the initiative of Smita Premchander, and with the support of Stephan Rist and Elvira Serrano.

In the case of Mohamed Doumbia, it was possible to talk with women about the issues of fertility and contraception in an urban context in Ivory Coast. Both cases show that an ideal gender arrangement must be found in accordance with a culturally specific context in order to conduct gender-sensitive fieldwork. It must be assumed that culture determines gender research more than disciplines do. Capturing multiple voices – the voices of women and men – therefore also requires a culturally sensitive approach between the researcher and her/his research partners.

Gender in inter- and transdisciplinarity

The approach of transdisciplinarity, which is a constant partner of sustainability-oriented development research, presents opportunities, limits, and challenges in conducting gender-sensitive fieldwork: at the level of research, it covers all aspects of communication between scientists and local actors. Transdisciplinarity according to our approach (Hurni and Wiesmann, 2004) further encompasses communicating beyond one's own discipline to share experiences and knowledge through interdisciplinary communication with scientists in other scientific realms. Integrating a gender perspective into a transdisciplinary approach contributes to diversity, for instance by tapping gender- specific elements of knowledge. It also enhances understandings of complexity and variability in problem-solving contexts, as Gertrude Hirsch argues. The meta-concept of transdisciplinarity provides ideas about how such a problem-solving research process might look, and makes us aware of the implications of such a carefully embedded social learning process for researchers, practitioners and stakeholders, which could lead to social change by changing attitudes and altering institutional structures.

Interdisciplinarity within the transdiciplinary approach is understood as a bridge between the humanities, the social sciences and natural science. Working in an interdisciplinary context also demands opening up communi-

cation between the "mother discipline of gender", in the social sciences, and "gender-inexperienced" disciplines e.g. the natural sciences, as a prerequisite. On the other hand, these "gender-inexperienced" disciplines can be invited to integrate gender issues into their particular discipline. Franziska Pfister discusses this issue, based on her own fieldwork in Nicaragua, and proposes ways of integrating a gender approach into her natural science approach. She points out the potential that following such an interdisciplinary approach has for sharpening one's own perspective, but also warns that it harbours the danger of losing the frame of reference of one's own discipline. A crucial factor influencing the degree of interdisciplinary work is time constraints. Following an interdisciplinary approach in practice would mean a double breakthrough in opening the boundaries between disciplines, on the one hand, and reversing the long-time consequences of historical development of differentiation and specialisation within the sciences on the other hand. The "battlefields of knowledge" (Long/Long, 1992) between and within disciplines are confronted in the NCCR North-South as an opportunity to attain new scientific insight by practically building up overlapping "interfaces" of communication between sciences as well as between science and society.

Gender issues are communicated within the NCCR North-South in terms of the three types of knowledge mentioned above, and ideally – and this is our future task – in order to re-embed knowledge gained into society. A permanent ground for collaboration is provided to counteract negative social, economic and ecological processes in the specific regions, from the perspective of long-time partnership and a transdisciplinary approach at the level of theories, concepts, methods and practice.

Our research

This publication aims to provide an initial synthesis of experience and knowledge gained. It was also conceived as a platform for young researchers in the NCCR North-South programme currently at the Master's or PhD level. The contributions presented here do not signify an end; the intention is to help shape positive developments in the respective regions, and also to motivate other researchers to integrate gender-sensitive methodologies into their own studies.

Multiple paths have led to the present theoretical, conceptual and empirical grounding of the case studies, which would not have been possible in historical terms without such a body of existing knowledge. Sabin Bieri discusses

the various stages in the development of the social category of gender, conceptualised within and underlying development theories of epistemology and feminism. Her contribution critically reflects on the different approaches and paradigms within development cooperation. She argues strongly for sound differentiation in the use of the category of gender when conceptualising programmes, projects and policies for women. Smita Premchander's contribution hints at the levels and domains of a gender analysis and the use of analytical outcomes for the respective social actors and institutions engaged within a specific domain (e.g. finance, agriculture, industry). With reference to Naila Kabeer, she explores and discusses three analytical linkages. First, the link between production and reproduction; second, the link between public sphere and private domain; and third, the link between the macro-, meso- and micro levels. Against the background of relevant knowledge gained within the history of development cooperation and policies, as well as lessons learnt, she calls for putting gender discourses into action now in order to achieve gender equality. The need to respect and differentiate among the priorities of women and men as a precondition for successful development is the conclusion of the contribution by Franziska Pfister, who argues for interdisciplinary research involving the social and the natural sciences. On the basis of her own empirical study in Nicaragua, she develops potential methods, as well as stages of communication between the natural and social sciences, in order to gender-sensitise natural scientists. The contribution by Gertrude Hirsch Hadorn clearly shows the advantages of using a sophisticated transdisciplinarity approach with regard to gender issues and sustainability. According to this paradigm, sustainability-oriented solutions are to be conceptualised and realised in mutual learning processes, integrating gender issues right from the start. Long-term and effective problem-solving processes and solutions can be developed by synthesising and communicating different perspectives.

The empirical contributions shed light on the dynamics of gender relations in three geographical contexts (urban/highland-lowland/semi-arid), and within various topics. From the perspective of development interventions, the articles by Kate Molesworth and Smita Premchander reveal the influences of these interventions on the lives of women. In the case study by Kate Molesworth, road construction generated unequal gender relations, although it was a well-intended development project. The study by Smita Premchander on micro-finance focuses on the different types of logic involving the impact of state actors on the lives of women, leading to feminisation of responsibilities. She further explores the dynamics of self-help groups and balances their impacts, ranging between self-empowerment and negative ecological consequences.

The importance of taking up gender relations as a research and political programme is highlighted by Martina Locher, using the context of a nature conservation area in Nepal to show that local organisations have adopted a women's approach in various project activities, although policies and impacts are ambivalent. She also points out that women from especially poor or geographically distant locations are disadvantaged, since they do not have the time to participate in the projects. The need for analytical deconstruction of homogeneous groups of women is also demonstrated in the case study by Smita Premchander, revealing the huge difference in living conditions and life expectancy among women from different castes. The construction of gender and the shaping of gender relations are also closely intertwined with other mechanisms such as class or caste.

The impact of migration on the lives of women is the focus of a study by Heidi Kaspar in Nepal. In contrast to many other studies, which refer almost exclusively to the situation migrants face in their country of destination, she examines the situation faced by women who remain at home when their husbands migrate, and discusses continuity and change in decision-making processes.

Two articles deal with aspects of knowledge. Although women and men share the same social and environmental worlds, the content of knowledge and processes of knowledge innovation, distribution and legitimation vary. Christine Müller shows how the order of knowledge and social order in society are intertwined. Women in Ghana use their new knowledge by linking up with global networks for empowerment. In the very specific context of Bolivia, Elvira Serrano, Sebastian Boillat and Stephan Rist indicate the duality, complementarity and reciprocity of the organisation of environmental knowledge involving gender and underlying concepts, referring to every societal dimension, whether religious or economic. Environmental conflict analysis and its transformation is a new field of research and policy that has long neglected a gender perspective. Susanne Fleischli adopts a gender triangle in her case study of an environmental conflict in Southern India. She explores how women are affected by conflicts, but also emphasises the potential such a situation could offer to reconfigure gender relations. Environmental change is also a topic taken up by Chinwe Ifejike Speranza. In a case study from Kenya, she analysis the strategies women develop to cope Table 2

region and

of the NCCR North-South

Individual Project

Gender and Sustainable Development: Case Studies from NCCR North-South

with drought and insecurity, and how they strengthen their position in the family and the community.

In an urban context in a slum area in Ivory Coast, Mohamed Doumbia investigates knowledge about and use of contraceptives. His empirical findings clearly show that discontinuities in knowledge and practice are heavily influenced by decision-making processes between women and men. There is a tendency for women to subordinate their interests to decisions made by males. Overview of contributions by

> Also in an urban context is an ongoing research project in Buenos Aires conducted by Ada Freytes Frey, Karina Crivelli, Florencia Partenio, Maria Inés Fernandez Alvàrez and Cecilia Cross. The focus is on women partici-

JACS Contributions	West Africa	East Africa	Horn of Africa	Central Asia	South Asia	South- East Asia	Central America	South America	Switzer land
Gertrude Hirsch Hadorn (ETH)									-
Franziska Pfister (MC)									
Sabin Bieri (IZFG)									
Smita Premchander(IP1/MC)					•				
Chinwe Ifejika Speranza(IP1)		•							
Elvira Serrano, Sebastian Boillat,Stephan Rist (IP1/2)								•	
Mohamed Doumbia (IP4)									
Martina Locher (IP6)									
Kate Molesworth (IP6)									
Heidi Kaspar (IP6)					•				
Susanne Fleischli (IP7)					•				
Cecilia Cross et al. (IP8)								•	
Christine Müller (MC)									

pating in unemployed workers' organisations, which are agents mediating between public policy and the struggle for survival faced by women and men in their daily lives. Their preliminary results show the difficulties faced by women in taking over new responsibilities, and how their status in domestic space and their activism in public correspond with the challenges of constructing femininity, stereotypes, and the traditional roles of women, as well as the challenge of shaping a new gender identity.

Visions and potentials: expanding the community of practice

As a core group within the NCCR North-South, we are pursuing the vision of deepening our investigations and applying grounded research insights in order to change gender inequalities and maintain the momentum of gender equality. To a certain degree, we claim to have become an exceptional group in terms of an inter- and transdisciplinary research approach, in comparing our research approaches and results, and in having the chance to combine research results with direct actions. We can efficiently make use of the continuous link in conducting context-close research and translating it into context-close action, as well as communicating knowledge and experience in multiple directions. By joining forces and using an electronically supported virtual workspace, we permanently exchange, share and discuss gender topics with a wide audience within and outside the context of the NCCR North-South. Having given ourselves the identity of a critical mass in various societies and communities, it is our further aim to expand in number, to cover at least all regions of the NCCR North-South with several case studies, to continue promoting gender-sensitive research and action, and to share our ideas with gender-experienced or non-experienced actors willing to contribute to gender justice and, as a consequence, to social justice as well.

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Part I Conceptual Section

1 Gender and Transdisciplinarity in Research for Sustainable Development

Gertrude Hirsch Hadorn

Introduction

Sustainable development is a socio-political model for improving practices to achieve greater equity within and between generations, in terms of opportunities to meet needs, while being conscious of the potentials and risks of developmental strategies which cause unintended side effects that threaten health and natural, social and economic life support systems.¹ The sustainability model can be regarded as an elaboration of the old idea of the common good, extended, in accordance with the precautionary principle, to the global population and to include possible harm in a long-term perspective. It takes account of global change and, due to the complex interrelations among ecological, economic and social systems, its harmful effects on humans.

Societal practices are interconnected with cultural contexts that constitute meaning and significance for people. Therefore, when addressing demands for knowledge for sustainable development, researchers are challenged to link scientific knowledge about technologies and institutions with local knowledge, in order to come up with problem-solving strategies that really meet the needs of an affected population. In this respect, a major pitfall for research in meeting such demands consists in conducting research as if the social world were a place of gender neutrality or gender equality, ignoring one of the reasons for human diversity. Knowledge (Mueller, present publication), and exposure to the effects of developmental measures (Speranza, present publication) are often closely related to gender. Gender inequalities build barriers against sustainable development and are objectionable for moral reasons. Therefore, to address demands for knowledge for developmental strategies effectively, research for sustainable development has to be conducted in a gender-sensitive way, which means conceiving of gender relations as one of the core dimensions in practical knowledge for sustainable development. To deal with gender as an integral part of issues, as well as of problem-solving or mitigation strategies, means to conceive of gender as increasing the diversity, complexity and variability of issues such as land degradation, disease or poverty.

Investigating the diversity, complexity and variability of issues and developing problem-solving or mitigating strategies requires a transdisciplinary research culture. Collaboration between researchers coming from the social and natural sciences as well as engineering and the humanities is important. Also important is working together with local actors to improve understanding of issues and engage in deliberation, analysis and planning about why and how practices and institutions have to be changed. The transdisciplinary culture of research for sustainable development has major implications for the role of research in societal problem-solving, as Funtowicz, Ravetz and O'Connor have pointed out: "The objective of scientific endeavour in this new context may well be to enhance the process of social resolution of the problem, including participation and mutual learning among stakeholders, rather than a definitive 'solution' or technological implementation. This is an important change in the relation between problem identification and the prospects of science-based solutions" (Funtowicz et al., 1998: 104). Besides "transdisciplinary research" (Jantsch, 1972) further terms have been used to describe the transformation that research is undergoing in addressing practical knowledge for societal problem-solving, such as "post-normal science" (Funtowicz et al., 1993)² "mode 2 of knowledge production" (Gibbons et al., 1994)³, "interdisciplinary problem solving" (Clark, 1999)⁴ and others (for an overview see Pohl, 2004).

The present article will explain what it means for researchers to commit themselves to transdisciplinary research for sustainable development. It will briefly summarize why and how transdisciplinary research emerged, what it is about, and what challenges must be tackled in transdisciplinary projects. This meta-analysis of research points out some important aspects in identifying and structuring issues for research, in investigating issues, and in implementing results. It deals with these aspects on the general level of research collaboration without presenting simple general solutions for how to integrate gender in research for sustainable development. To be valid in relation to concrete issues, such models require common problem identification and structuring by the research group, together with local people (Pohl, 2004). No research results about how gender affects and is affected by developmental strategies will be presented; this is the subject of other contributions in this volume.

1.1 The rise of transdisciplinary research for sustainable development

Transdisciplinary research was added to the science policy agenda in the 1970s because of growing concerns about the risks related to the increasing exploitation of nature to sustain an ever-expanding population. A major reason for the threatening side effects of technological development was seen in the progressive specialisation of the sciences. At the OECD conference "Towards Interdisciplinarity and Transdisciplinarity in Education and Innovation", held in 1970, Jantsch proposed an expert-based, top-down strategy: science should provide problem-oriented knowledge in a systems-theoretical ordering by coordinating goals, norms, pragmatic and empirical knowledge about the future development of society, thus providing a reliable knowledge base for decisions about the future directions of modern civilisation. He used the term "transdisciplinarity" to describe this "co-ordination of all disciplines and interdisciplines in the education/innovation system on the basis of a generalized axiomatic (introduced from the purposive level down) and an emerging epistemological ("synepistemic") pattern" (Jantsch, 1972: 106).

Another important line of thinking in transdisciplinary research is action research. Although it emerged at the time of the debate on transdisciplinarity, and like the latter represents a reaction to the development of technological civilisation, action research was initially an independent approach. Criticising a missing link between theory and practice in empirical social research, action research sees itself as an alternative scientific concept, in which theory and practice should be mutually beneficial, as in a political bottom-up process inspired by enlightenment and emancipation. Action research is intended to contribute to personal and societal development by stimulating learning processes from practical activities and by changing practices due to reflective consciousness. Similar ideas build the core of liberation education in the South, aiming at the "liberation of the oppressed" (Freire, 1967) by enabling people to engage in policy issues. By analogy, feminist action research (Gatenby and Humphries, 2000) is engaged in "creating new relationships, better laws, and improved institutions" (Reinharz, 1992: 175).

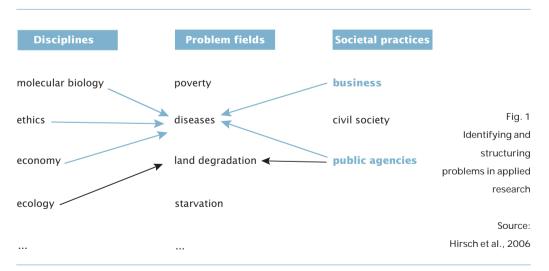
Systems analysis on the one hand and ideas similar to action research on the other are among the most important lines of transdisciplinary thinking that have shaped research for sustainable development (Hirsch Hadorn, 2002; Hirsch Hadorn, Pohl, Scheringer, 2002). Today, systems analysis and model-

ling are paradigmatic ways of describing and analysing complexity in life support systems as well as assessing the impacts of global change and alternative options for problem-solving. But it is also widely recognised that close collaboration among researchers and people in civil society, public agencies and business is crucial to arrive at a common understanding of long-term societal goals and to formulate development scenarios within the sustainability model. Thus transdisciplinary research for sustainable development is seen as a contribution in terms of knowledge for societal change, founded in making explicit and negotiating values and norms, and in attributing meaning to knowledge for societal problem-solving. Within such hermeneutic frameworks, problem-solving encompasses the transformation of attitudes, the development of personal competences, and ownership along with capacity building, institutional transformation, and technology development. Gender relations contribute to the diversity, complexity and variability of problem-solving contexts. Therefore, addressing knowledge demands for problem-solving without being sensitive to gender-relations would ignore a key variable within sustainable development. Hence, integrating the attitudes of people involved in the issue and of conditions that shape their positions, such as gender relations, has to start as early as the beginning of a research project, i.e. in identifying and structuring the issues for research. This is because the question of whether they restrict or support implementation of the resulting problem-solving measures has to be part of the investigation (Maier Begré et al., 2004).

Although there is general consensus on the abstract sustainability model, proposed problem-solving strategies are often sharply contested among parties or simply ignored. The problem is not the general concept, but its more concrete conception. The endorsement of sustainable development as a normative political concept by a wide range of interest groups and organizations is due to the vagueness of its elements on the first level of meaning, such as environmental-economic integration, futurity, environmental protection, equity, quality of life, and participation. On a second, more concrete level of meaning, these elements are interpreted controversially, often in line with a preferred political position. For political scientists, the "search for a unitary and precise meaning of sustainable development is misguided. It rests on a mistaken view of the nature and function of political concepts" (Jacobs, 1999: 25). Political concepts need to serve as regulating principles in negotiating interests and options. Therefore, research about changing practices in accordance with the sustainability model has to include deliberation, which means "a way of reasoning together to promote the common good where an affected population reviews evidence, deliberates on specific policy issues, and advises the appropriate legislature" (Mansbridge, 1998: 152). Otherwise, the investigation would not come up with well-based understanding and deliberation of issues, or ideas about how related societal practices could be made more sustainable, and it would risk poor implementation of results.

1.2 Designing transdisciplinary projects for sustainable development

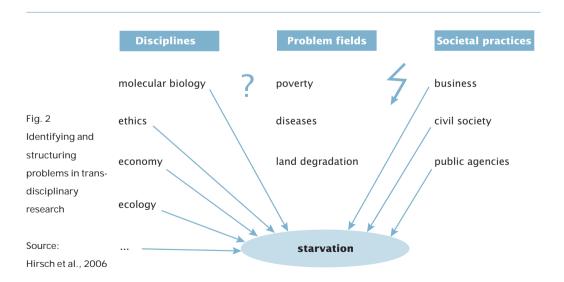
Usually, knowledge is concerned with how practices in business, civil society, and among public agencies can be improved and addressed in applied research. This means that one or more disciplines specialise in one specific problem field. One example is agricultural ecology, specialising for instance in problems of land degradation in agriculture. Another would be molecular biology, economics or ethics applied to diseases in order to better understand the variability of processes in this field and develop measures for mitigating or solving the corresponding problems. For better understanding and learning, e.g. regarding the analysis and management of land degradation or the analysis and medical therapy of diseases, applied research is often conducted in close collaboration with practitioners (Figure 1).



Problem / Problem-solving: describing and explaining the variability of processes in a problem field and developing measures to improve practices of clients.

Problem identification and structuring reflect the practical problems of collaborating practitioners and the meanings they assign to them. Complexities in the problem field are reduced by the guidance of a disciplinary paradigm or an interdisciplinary map. Scientific models are adapted to concrete problem situations by adding further variables stemming from other disciplines to tackle diversity and complexity in the search to explain the variability of processes in the problem field. This way of dealing with complexity is important in developing management strategies.

When societal practices related to a certain problem field are contested, and when it is uncertain how to structure associated research problems, identification and structuring of problems must transcend disciplinary paradigms and extend beyond the practical problems of a certain practitioner, stakeholder or societal actor. Next, a transdisciplinary research design and culture must be developed. There are two challenges here: first, the need for orientation in practical problems because of multiple attitudes, and second, the need for scientific orientation arising from the diversity and complexity of parameters that constitute particular issues. The diversity and complexity of parameters vary in different concrete problem settings, thus leading to uncertainties in empirical knowledge. These challenges are indicated by the flash, question mark, and arrows in Figure 2.



Problem / Problem-solving: understanding the complexity of issues and considering related practices with regard to the common good and the precautionary principle.

In a transdisciplinary project, research starts by identifying the related diverse dimensions of a problem field and investigating its complexity, its dynamics and its variability with regard to how they can be transformed (Pohl, 2004). Ecological economics as a scientific approach, addressing related knowledge demands, insists on transcending disciplinary paradigms: "By transdisciplinarity we mean that ecological economics goes beyond our normal conceptions of scientific disciplines and tries to integrate and synthesise many different disciplinary perspectives. One way to do this is by focusing more directly on the problems, rather than the particular intellectual tools and models used to solve them, and by ignoring arbitrary intellectual turf boundaries. No discipline has intellectual precedence in an endeavour as important as achieving stainability. While the intellectual tools we use in this quest are important, they are secondary to the goal of solving the critical problems of managing our use of the planet" (Costanza et al., 1991: 3).

In addition, it must be determined whether crucial dimensions of a problem field are neglected in disciplinary models, as is often the case with gender. In order to know the relevant dimensions, it is also necessary to learn in which ways the interests and needs of the range of stakeholders are affected by certain practices and their consequences. Participation of societal groups in research is of great help in this respect. Lawrence thus points out that "transdisciplinarity is not an automated process that stems from the bringing together of people from different disciplines or professions. In addition, it requires an ingredient that some have called "transcendence". This implies the giving up of sovereignty over knowledge, the generation of new insight and knowledge by collaboration, and the capacity to consider the know-how of professionals and lay-people" (Lawrence, 2004: 488f).

As a consequence, knowledge about empirical processes gained through transdisciplinary research goes beyond the ideal of scientific knowledge as universal, explanatory and proven as true. It is largely based on empirical evidence, consisting of data, which can be structured as systems knowledge with the help of statistics and mathematical modelling. Although the generation of systems knowledge can be methodologically sophisticated, systems knowledge in transdisciplinary contexts lacks the explanatory power of basic and applied research, and exhibits considerable uncertainties. In addition, the meaning that societal actors in the problem field attribute to the processes under investigation must be taken into account. The plurality of norms and values in civil society, public agencies and business is a reason for ongoing negotiation about the concrete purposes of sustainable develop-

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North-South perspectives

Fig. 3 Integrative and recurrent collaborations among

disciplines and social groups in transdisciplinary research for societal problemsolving **Empirical** aspects: systems knowledge with considerable uncertainties and plurality of associated meaning: transfer and adaptation to concrete settings

Purposive aspects: target knowledge about better practices (technologies, management, institutions): consensus-building among plural and contested attitudes in society

Pragmatic and **normative** aspects: transformation knowledge to solve conflicts between better practices and existing practices: learning and experimental implementation

Source:

Hirsch et al., 2006 modyfied

ment. It can be of help in negotiating goals and means among societal groups to improve and communicate the knowledge base on empirical and pragmatic aspects of alternative ways of problem-solving, to establish modes of consensus-building, and to elaborate ethical arguments.

mutual interdependencies

1.3 Quality assurance in transdisciplinary research

For reasons related to uncertain empirical knowledge, contested purposes, and habits related to existing practices, there is also argument about whether and how practices and institutions should be changed to promote sustainable development (transformation knowledge).

Quality assurance about knowledge produced in transdisciplinary research has to take account of mutual interdependencies involving the empirical level of systems knowledge, the purpose level of target knowledge, and the pragmatic and normative levels of transformation knowledge (Figure 3).

Furthermore, collaboration among researchers and social groups for recurrent validation and adaptation of empirical models in concrete situations, recurrent efforts in consensus-building about purposes, and recurrent implementation, monitoring of effects and adaptation of transformation strategies are needed to face the risk of getting lost in complexity and ending up by simply muddling through (Krohn et al. 1998). Collaboration not only requires organisation and management, but also structuring so that diverse research activities and results can fit together for development of problem-solving measures. This need is often articulated as a call for a common language, but properly understood, it is a matter of how to integrate disciplinary paradigms. The means to tackle this challenge include formal methods (Petschel-Held, 2002), ordinary language (Nicolini, 2001), metaphors (Maasen et al., 1995), mutual adaptation of concepts and methods for integrated research (Maier Begré et al., 2004), and the creation of new concepts (Oswald et al., 2003).

Besides disciplinary paradigms, the integration of stakeholders' attitudes – consisting of perceptions, values and willingness to act – is also crucial in formulating effective problem-solving measures. Practitioners must be prepared for changing practices. They need to learn about the potentials and risks of problem-solving strategies and develop competence in the implementation and monitoring of effects to adapt strategies and sometimes also purposes (Joss et al., 1999).

This changes understanding of the term "problem-solving strategies" from the implementation of definitive (technological) solutions to social learning about problem-solving strategies, including technology design and institutional structures. It also includes changing attitudes. From this it becomes clear that transdisciplinary research needs to be carefully embedded in the societal context of the issues to be addressed. This requires spelling out which changes should be addressed by whom and how – and what the underlying hypotheses on the effectiveness of research results are (Thissen et al., 2001).

Although transdisciplinary research needs to be carefully embedded in concrete contexts to produce knowledge that can become effective, it is also expected to yield knowledge that is of use in other contexts. Otherwise it would result only in counselling. These two expectations need not create a paradox. Instead of generalisation based on standardised settings and statistics, comparison of contrasting cases can throw light on what is peculiar for a certain case and what several cases can have in common. This means that models and methods have to be tested to determine whether they are valid in another case and adapted if necessary before they are used. This kind of analysis, by comparing selected cases, is used in grounded theory to get an in-depth understanding of problems (Glaser et al., 1967).

1.4 Conclusions

When needs are at stake, when societal practices related to an issue are contested, and when it is uncertain how to structure and investigate problems, research should be transdisciplinary. This is the case with issues related to gender inequalities: here, needs are at stake that give rise to dispute, and they increase the diversity, complexity and variability of issues. But transdisciplinary research is not an easy-going exercise. It rarely ends up with clear-cut suggestions for effective problem-solving measures; instead, these usually focus on social learning about problem-solving strategies, including institutional structures, changing attitudes, and technology design. Therefore, researchers, practitioners and stakeholders must be willing and prepared for joint learning in transdisciplinary projects. Their challenge is how to focus and structure their project and how to shape mutual expectancies in order to come up with reliable suggestions for real improvements.

Endnotes

- ¹See e.g. the definition of the World Commission on Environment and Development (WCED): "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs." (WCED, 1987: 43). This definition was used as a guideline for the United Nations Conferences in Rio de Janeiro 1992 and again in Johannesburg 2002.
- ²⁴⁴In response to the challenges of policy issues of risk and the environment, a new type of science – "post-normal" – is emerging. This is analysed in contrast to traditional problem-solving strategies, including core science, applied science, and professional consultancy. We use the two attributes of systems uncertainties and decision stakes to distinguish among these. Postnormal science is appropriate when either attribute is high; then the traditional methodologies are ineffective. In those circumstances, the quality assurance of scientific inputs to the policy process requires an 'extended peer community,' consisting of all those with a stake in the dialogue on the issue. Post-normal science can provide a path to the democratization of science, and also a response to the current tendencies to post-modernity". (Funtowicz & Ravetz, 1993: 739).
- ³ "Mode 1: The complex of ideas, methods, values and norms that has grown up to control the diffusion of the Newtonian model of science to more and more fields of enquiry and ensure its compliance with what is considered sound scientific practice. Mode 2: Knowledge production carried out in the context of application and marked by its: transdisciplinarity; heterogeneity; organisational heterarchy and transience; social accountability and reflexivity; and quality control which emphasises context- and use-dependence. Results from the parallel expansion of knowledge producers and users in society." (Gibbons et al., 1994: 167f.).
- ⁴⁴ All nations face the challenge of developing and applying effective problem-solving strategies to manage their natural resources for the common interest of their citizens. Strategies that integrate knowledge to improve policy and on-the-ground action are being demanded by many sectors of society. In universities calls for interdisciplinary problem-solving are growing, in natural resources arenas the new emphasis is on comprehensive ecosystem management, and in business the focus is on integrating environmental concerns to modernise operations. Interdisciplinary problem-solving is the means by which knowledge integration can take place" (Clark, 1999: 393).

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2 Integrating Gender-Sensitive Approaches: A Challenge for the Natural Sciences

Franziska Pfister

Introduction

Gender is a distinct category within society, like wealth classes or age groups. Traditionally, natural scientists exclude these categories from their research, as they focus on natural phenomena and the creation of new technologies. In recent decades, however, the scientific community has increasingly become aware of the importance of intergrative approaches in research projects. Growing ecological problems caused by human consumption patterns have strongly reinforced this awareness. In this context, nature can no longer be regarded as detached from society. While both components must be understood on an individual basis, interactions between the natural environment and human behaviour need to be explored in order to find longterm solutions to present and future problems. The Brundtland Report (WCED, 1987), highlighted three main components of sustainable development: environmental protection, economic growth and social equity. As these issues cannot be investigated by one discipline alone, interdisciplinary approaches are being widely promoted, despite a continuing lack of mutual understanding between the natural sciences and the humanities.

Intergrative approaches are always essential when trying to resolve complex problems. New technologies, for instance, can be developed on the basis of mere engineering. Nevertheless, an understanding of the social and cultural setting is often crucial for their implementation and acceptance. Implementation is understood here not as a top-down approach, but a process of mutual exchange and negotiation between different stakeholders. Many development projects have failed because the planners did not consider factors such as existing gender relations or the impact of projects on these factors prior to implementation. Nowadays, development agencies are increasingly aware of the significance of gender aspects in their work. Why, then, is the concept of gender not integrated without hesitation into research projects undertaken by natural scientists, especially in development research? What are the barriers and the opportunities involved? The present article tries to explore some of these questions. It is divided into two parts: gender in research in the natural sciences, and gender in the implementation of research results.

2.1 Gender in natural science research

Promoting gender-sensitive research in the natural sciences is a complex task. As the natural sciences do not constitute a homogeneous group, there is the question of which sciences we are talking about. There are fields such as mathematics, physics and chemistry – the so-called "hard sciences" – and those with bridges to social sciences, such as geography, agronomy and health. The more of these "bridges" there are in a discipline, the more probable it is that gender-sensitive approaches are relevant and should be considered in research projects. Thus, there is a big difference between a cell biologist investigating stem cells and an agronomist studying a peasant society. As male and female stem cells are equivalent, the former is not confronted with a gender dimension in research. Yet the latter may be concerned with such factors as labour availability, shortages, and costs. Generally, the female workforce is very important, although this may not be explicitly stated by men during interviews or informal discussions.

This can be demonstrated in research on Central America, where women play a crucial role. Although they usually do not work in the fields themselves, they are responsible for several tasks such as the post-harvest processing of crops, the raising of chickens and pigs, the manufacturing of cheese, the cultivating of home gardens, and the preparation of meals for day labourers. If there are many workers during harvest periods, additional women have to be employed for the cooking. Consequently, this means higher costs for the farm family (Pfister, unpublished). Furthermore, for other tasks such as picking coffee beans, there is a strong demand for women's labour. Firstly, during the coffee harvest, women are not busy with agricultural tasks in the fields. Thus they constitute an "idle" workforce that can be employed during peak labour times. With this additional income, women can help meet household expenses and may have some savings left for the upcoming dry period, during which cash is scarce. Secondly, when picking coffee beans, women are often accompanied by their children, who work alongside them but are not considered to be "full workers" (e.g. they eat from the same plate as their mothers and do not get their own food). In San Dionisio, Nicaragua, peasant women working in a nearby Free Trade Zone make considerable contributions to farmers' off-farm income. Besides covering part of the household expenses, this steady flow of money gives farmers additional options for making investments in their land. In short, women contribute considerably to the work carried out on farms: Usually there is a clear division of labour according to gender, and often women's work is less visible than men's. Hence women as a workforce cannot be neglected when analysing the issue of labour in farmers' societies.

In general, natural scientists may exhibit a certain cautiousness or even reluctance tackling gender as a topic in their research. This may be due to general prejudices, some "fuzziness" in the concept as perceived by outsiders, and the fact that it has its roots in the social sciences. Thus, the notion predominates that the topic of "gender" is the same as women's studies, whereas it actually includes women and men and their respective roles in society. Furthermore, for many researchers, the scope and benefits of gender-sensitive studies are unclear, especially in regard to the natural sciences. In order to foster its integration into a growing number of research projects, the concept of gender should therefore be communicated more effectively in order to sensitise people who have not previously dealt with it. It might be helpful to approach non-social scientists with concrete examples of research or development projects in which gender has been included, in order to show them how these were complemented and enriched by a gender-sensitive approach. In other words: What additional insight could be gained with the gender-sensitive approach?

In Carrasco valley in central Bolivia, for example, agriculture is considered a male domain, while women are more closely associated with silviculture and the care of livestock. At the same time, each of these sectors encompasses multiple levels of participation and differentiation, according to age and gender. In the agricultural sector, men take greater responsibility for the principal crops (mainly potatoes and wheat), whereas women make decisions concerning secondary crops (broad beans, peas, *quinua, millmi, poroto, tarhui, squash,* and others; Paulson, 2001). In order to rely on the right source of information, an agricultural scientist carrying out research in this area has to be conscious of the fact that knowledge and management of agricultural products differ between men and women. Otherwise, the results may be seriously biased. This example shows clearly the great relevance of gender-sensitive approaches in certain contexts. This is not only crucial for researchers, but also for policy-makers, development agencies, and agricultural extension services, in terms of addressing the right group of stakeholders.

Nevertheless, there are limits to the integration of gender-sensitive approaches into research projects, since they are not relevant to every topic in the (natural) sciences. Thus, in studies focusing on topics such as the impact of climate on river flow (Ershova, 2004), or the engineering of decentralised wastewater treatment systems for small communities (Koottatep, 2004), a gender perspective hardly makes sense. In cases where this is less clear, careful checking should be done – e.g. in exploratory studies – to determine whether a gender-sensitive approach might yield additional knowledge in answer to the specific questions raised by researchers. Thus, when investigating the relationship between land use change and land degradation, gender is irrelevant at first glance. Yet, if we look at the causes of this change, gender may suddenly be of great importance: Seasonal labour migration from Tajikistan to Russia leaves women, elders, and children in many Tajik households to do the work in the fields and care for the livestock. Initial results indicate that the lack of a workforce resulting from male labour migration may be the main driving force behind intensified use of land in the surroundings of the villages. This is leading to increased land degradation and especially degradation of soil resources in these areas. This is because women and older people tend to walk less distance than men (Wolfgramm, personal communication). This example shows that careful observation and contemplation of all factors related to a system are crucial, as modifications in the framework of a society are often tightly linked to environmental change, e.g. through changes in natural resource management. Therefore, we must understand both in order to give sound explanations and propose feasible solutions. However, research projects are often confronted with serious time constraints, and not all interesting aspects can be considered. For this reason, gender may not be incorporated, despite the important contribution it could make to a certain topic. Yet it is important that scientists make this choice consciously, being aware of the fact that they might have to adapt their research plans according to the specific context they are working in and to their initial findings. When elaborating a project proposal, researchers should be aware of the possible implications of their decision about whether or not to include gender issues. It is crucial to sensitise natural scientists to such a degree that they:

- know what gender is and that it may be important in their research;

- are attentive enough to discern research questions where gender may be relevant;
- are flexible enough to integrate gender aspects, if they discover in the course of their research that these are of utmost importance to their topic.

Another hindrance to integrating gender-sensitive data into a research project may be a lack of data. An investigation of nutrient balances for different categories of farmers in Nicaragua, grouped according to the size of their holdings (Pfister, 2003), showed only a small number of female-headed farms. Even then, male relatives usually gave advice on agricultural issues. Thus plans to study the differences in nutrient management between maleand female-headed farms in this particular context, for example, would have been pointless.

If natural scientists are to incorporate gender-sensitive approaches into their research projects, they must be acquainted with the appropriate instruments. As these mainly originate in the social sciences, an interdisciplinary dialogue becomes necessary. Natural scientists need to gain insight into the theoretical and conceptual approaches of social scientists, into their ways of developing research questions and hypotheses, and into the instruments they use for data collection during fieldwork. The same process must also take place among social scientists. Scientists need to learn about and to respect each other's approaches, language and tools. This starts with the means of communication: While natural scientists tend to depict and underline their mostly quantitative findings with graphs, social scientists are more inclined to describe their mainly qualitative results in a text. For truly interdisciplinary cooperation, partners must understand these different approaches. In order to establish a dialogue, a common language has to be developed for effective communication. In other words, real interdisciplinary work is crucial in tackling the topic of "gender" in research projects carried out by natural scientists.

Creation of an interdisciplinary research tandem provides a good opportunity to carry out fruitful research involving different disciplines. A topic is tackled by two (or more) researchers, one from the social sciences and one from the natural sciences. If serious time constraints inhibit natural scientists from carrying out gender-sensitive research, such an approach is a possible solution. A common focus allows for intense discussions and promotes mutual understanding of the respective methods. The author's research may serve as an example. In a joint project, two PhD candidates investigated farmers' households in the municipality of San Dionisio, Nicaragua. One was an environmental scientist, studying nutrient balances with a method called Material Flow Analysis (MFA), on a farm and at the regional level (Pfister, 2003). The other was an anthropologist, investigating farmers' economic strategies (Leemann, forthcoming). In the beginning, the question of how to link the two research topics was predominant. This was an important process, as each scientist dealt seriously with the other's research approach. During this period they also chose their study area, which gave rise to several discussions and proved to be a big challenge. The anthropologist wanted a great variety of crops on and between farms to study farmer's strategies; the environmental scientist needed a limited number of crop patterns to quantify regional nutrient flows. Through this intense dialogue, a strong bond was created. Nevertheless, it later on became clear that each had to concentrate on her own research hypotheses and questions, without constantly consulting her partner. During an initial concurrent field phase, discussions between the researchers became more substantial: both had interviewed the same farmers independently and complementary information had been gathered. During these exchanges, both tandem partners got to know each other's research tools, focus of interest, and ways of approaching the research hypotheses, and perceived the differences. Thus, while the environmental scientist determined the area of a specific crop the farmers were growing, the anthropologist was more interested in the variety of crops on a farm. After intense discussions and other common field phases, a potential outline for a joint publication took shape. The focus of the latter had changed compared with assumptions made in the beginning. Thus, a research tandem undergoes various stages of collaboration. It is an iterative process progressing through steady exchange. This research tandem enriched both sides: The author learnt about the importance of norms and institutions in a society, about the possible hidden interests of stakeholders, and about farmers' strategies such as risk-prevention. Her research partner learned about methods in the natural sciences such as material flow analysis and GIS, and used the latter as a complementary instrument in research for her PhD study.

If natural scientists do opt to carry out gender-sensitive research within a project themselves, they are not likely to do a full gender analysis as understood by social scientists, but rather to elaborate a gender-sensitive database. In other words, they will not be doing social science. However, they will pursue a truly interdisciplinary approach by enriching their perspective on a topic through another perspective "borrowed" from social science, in order to get a more complete picture. Thus, the integration of gender into a natural scientist's project will be largely "low-scale" – it will usually be complementary but not part of the focus of the project.

Until now, the arguments used here have concentrated mainly on the research of natural scientists. Nevertheless, something should also be said about engineers. Many of their innovations are developed in laboratories, and are at times close to basic research; at other times, they have their clients clearly in mind. Depending on the product, gender-sensitive approaches may be crucial in determining the success or failure of the implementation (see the section on implementation below). In some cases, however, failures in implementation can be omitted by basing the adaptation of a technology to a specific context on a participatory negotiation process. Thus, despite a growing wood shortage, the introduction of solar cookers in Nicaragua failed. The researchers had not taken into account that women in the countryside get up when it is still dark in order to prepare a (hot) breakfast. As the solar cookers depended on direct sunlight, they were useless to their potential users. Had this aspect been taken into account from the beginning, the researchers might have designed a different type of solar cooker that stores a small amount of energy during the day which would also be available at night.

In summary, in order to increasingly integrate gender-sensitive approaches into natural science research projects, scientists must first be sensitised to the subject (see Figure 1 for all steps). Then they must determine whether gender is relevant to their research topic. If it is not, they have probably decided to carry out a traditional research project. It is important, however, that scientists remain sensitive to gender issues, especially during the field phase. This will keep them attentive if their assumptions should prove to be wrong. If gender issues are recognised as relevant from the beginning, researchers then determine whether they have the time to include a gender perspective in their project. They must also check the availability of the relevant data. If both conditions can be met, the scientist involved needs to be acquainted with the instruments relevant to carrying out gender-sensitive research. If time is lacking, the idea of forming a research tandem with a social scientist may be pursued. The advantage is mutual exchange of knowledge about the research subject and about the scientific disciplines as such. Although the tandem may not actually save time, it certainly is an added value for the research as such.

2.2 Gender in the implementation of research results

The issue of gender in relation to sustainable development and the implementation of research results and technological innovations has vast dimensions. It is not within the scope of this article to tackle it in a conclusive way. Yet development research usually aims at subsequent application of scientific findings. In this respect, there have been many shortcomings in the past as well as the present. Agricultural research is a well-known example. For many decades it concentrated on agricultural innovation in developing countries, e.g. the development of new breeds. The conventional top-down approach in research institutions gave scientists little opportunity to become well acquainted with the conditions, objectives and knowledge of "traditional" farmers. For the same reason, agricultural research for a long time tended to focus on male farmers. It paid little attention to female farmers' points of view and, in the design of new technologies, often disregarded important questions about women's influence on decision-making and labour allocation. An example of a typical agricultural modernisation project in the Department of Carrasco, Bolivia, was described by Paulson (2001): Until the mid-1990s, an internationally funded NGO implemented a relatively conventional long-term agricultural project that had the goal of improving the quality of life for local families. The project's main activities included technical training and institutional support to farmer syndicates and wheat producer's associations (whose members were virtually all male), provision of certified wheat seed and chemical inputs, and the sale of tractors and threshing machines on credit. Technically, the project was a tremendous success, and wholly fulfilled its operational goals of increasing the area of cultivated land, production figures, and the (monetary) income of participants. Nevertheless, the project drove farmers to open larger fields on increasingly steeper slopes, which displaced and degraded the communal space that women and poorer families had been using for silvicultural and livestock management. Consequent overgrazing and intensified firewood collection on shrinking green areas contributed to deforestation and erosion. As degradation and erosion continued, women were forced to take their herds over greater distances to find forage. This took a toll on the health and vitality of both the women and the livestock. Finally, while tractors and threshing machines provided by the program easily reduced men's workloads, women's and children's tasks – notably weeding – were increased by the greater area and density of wheat. Thus, the project had focused merely on the economic wellbeing of the farmers' families. However, the effect on the workload of women and children, as well as on the environment, had been detrimental. In short, in implementing "technical" solutions, it is crucial that development agencies have thorough knowledge of the context in which they plan to carry out their projects, in order to prevent undesirable negative impacts.

Nowadays, it is increasingly acknowledged that gender aspects are an important key to development. In 1997, for instance, the CGIAR systemwide Program for Participatory Research and Gender analysis (PRGA Program) was established to raise the profile of participation and gender as key strategic research issues (CGIAR, 2005). Most development agencies have developed strategies for gender mainstreaming. SDC's gender policy explicitly states that "all interventions are based on a gender-aware analysis" (SDC, 2003). Hence, a gender-aware analysis is mandatory prior to the formulation of any country program and its associated procedures. Similarly, gender needs to be incorporated at the project design stage and reflected in the project cycle. Such an analysis identifies the problems and needs of different groups of women and men, as well as key gender inequalities and issues in the context.

Gender is also increasingly being integrated into research on implementation and into action research projects. The NCCR North-South carries out small-scale activities organised on a partnership basis. These so-called Partnership Actions for Mitigating Syndromes (PAMS) contribute to enhancing knowledge about transdisciplinary processes. In the new guidelines, gender is explicitly mentioned as an important factor that has to be taken into account when implementing a PAMS project. In the past, several examples have shown that understanding the roles of women and men in a particular society may be of utmost relevance when carrying out these actions. One PAMS aimed at increasing (economic) literacy and promoting knowledge about labour rights and health among labour migrants from Far West Nepal in Delhi, India. The staff reported that due to the shyness of Nepali women and the patriarchal nature of their society, there was no female participation until the last phase of the program. Yet, the trust built between the team and the (male) migrants was the basis for beginning to involve women in the future (SASC, 2004). Another example is a project that supported health care activities through information, education and communication in nomadic settings in Chad (Mahamat and Schelling, 2004; Schelling et al., 2004). Several vaccination campaigns for women and children had failed in the past. The researchers found that one of the problems was that women had to watch the camp during the day. They could not go to the places where vaccinations were given. Furthermore, women were not allowed to vaccinate the children without the authorisation of their fathers, who were heads of the families. Vaccination campaigns therefore had to be adapted to the nomadic life-style in order to be successful.

2.3 Conclusions

Gender issues, as well as other topics in the social sciences, are important components for a thorough understanding of the problem setting in a specific context. Depending on the focus of their research, it could thus be very important for natural scientists to explore these themes. It may even be necessary to integrate them into their studies. This constitutes a challenge for most researchers. On the one hand, while they have been primarily trained in a specific discipline, they suddenly have to deal with and accept new concepts, new approaches, and a different scientific culture. On the other hand, a scientist will need to determine whether a given topic should be integrated into a research approach, and how. In short, the planning and carrying out of research projects becomes more time-consuming and challenging.

The need for and the benefits of intergrative approaches, however, can be clearly seen in the implementation of research results. For many years disciplinary blindness has led to straightforward technical solutions with negative impacts on certain groups in the target societies. A more comprehensive view of existing problems by researchers, policy makers and implementation specialists can considerably diminish these impacts, while leading to more effective and sustainable solutions.

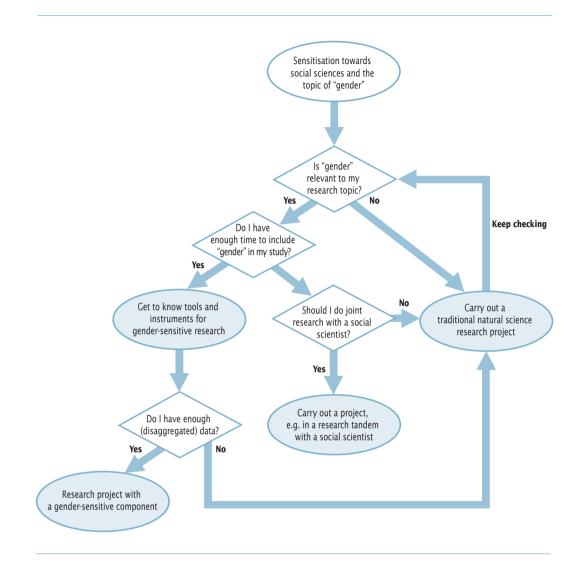


Fig. 1

The concept of gender is usually not integrated into natural scientists' research projects, although for certain topics it is of utmost importance. Thus, researchers need to be sensitized to the subject in a first step. Then, they have to determine whether gender is relevant to their research topic. If it is, time constraints have to be analyzed: Natural scientists may get acquainted with tools of gender-sensitive research themselves, or consider working with a social scientist in a research tandem. Another important issue to be kept in mind is the availability of sufficient (disaggregated) data. If researchers opt for traditional natural science research, they should keep checking on the possible importance of gender during their field study and be ready to consider it even at a later stage.

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3 Developing Gender, Transforming Development: Epistemic Shifts in Gender and Development Discourse over 30 Years

Sabin Bieri

Introduction

From the women in development approach to gender mainstreaming: this could be a rough description of the epistemic shift in the concept of gender in development discourse. The formula "from women in development to gender and development" is emblematic of a transition in perspective: women are no longer discursively classified as the utterly needy, poorest of the poor, and privileged victims in any type of social change. Instead of being regarded as mere recipients of aid and the chief objects of concern, women are increasingly approached as influential agents of the specific situations in which they are implicated. These situations are analysed in terms of their gendered nature and, importantly, men are similarly addressed as agents embedded within a particular gender regime. The various stages by which this proposed shift has taken place need to be integrated within a broader frame of paradigmatic reorientations of development theories and related practices. Nevertheless, the picture will remain incomplete as long as the larger impacts induced by post-1989 geopolitical transformations and the socio-political and economic dynamics subsumed by the term "globalisation" are neglected. It is the author's intention in this chapter to draw some of the discursive strands together. As a matter of course, the picture is bound to contain its blank spots, as any endeavour to present an exhaustive account would prove far too ambitious.

At the outset, some of the major influences left by feminist theorising and practice in development studies will be traced. Bridging some recent debates in gender research and the field of development serves to identify common ground as well as to clarify contradictory arguments. In the course of the suggested major reorientations of contemporary discourse on development, concepts that aim to integrate a gender dimension are being revisited. In addition, the problems and imminent pitfalls arising when gender concepts are implied in development policies will also be addressed. Although this section will merely be exemplary, a number of close-ups on ruptures and contradictory outcomes may modify a picture of linear succession and unambiguous delimitations which, it is argued, would inadequately reflect today's debates and practices. Finally, without pretence of actually assessing gender mainstreaming for development practice, its limits and perspectives will briefly be outlined. In conclusion, an attempt will be made to tease out the potential to integrate gender not only as a theoretically sound and practically "useful" category, but as an indispensable parameter for negotiating theoretical advancements at the intersection of international cooperation, development work, and the social sciences.

3.1 Foreign aid, development and early feminist critique

The invention of foreign aid dates back to post-war efforts to create a new world order in the face of the challenge of polarisation arising from two socio-economic and political systems represented by the Soviet Union and the United States. The era of development politics was heralded by US President Harry S. Truman's famous speech in 1949, in which he addressed the "underdeveloped areas" of the Southern Hemisphere for the first time. "Development" as the emblem of the US-led discursive regime of the time symbolised neighbourly relations, established the US system as a paradigm, and served as a weapon against communism. The shape of any tie between "the North" and "the South" has since been cast as a mixture of generosity, corruption and discrimination, as Sachs contends (Sachs 1993, p.7). According to Arturo Escobar, development discourses flourished in the post-war era. It was at that point in time that the masses of "underdeveloped" people eventually were "discovered". The focus was widened or redirected, as ever-new target groups were included - peasants, women, ethnic minorities - and categories such as the environment or governance became redefined (Escobar 1995)."Development" referred to economic growth, and aid was directed towards the "Third World" - a region which had been so designated for its non-affiliation with either of the cold war parties, but with a volatile potential to destabilise the geopolitical balance.

The new social movements of the late 1960s stirred the complacent post-war mentality which had emerged from economic prosperity based on male full-

time employment and the housewife-breadwinner model throughout the Western world. Although social democratic voices engaged in a discourse on redistribution, they merely focused on class, neglecting gender and race, let alone other markers of social determination. As a reaction among radical youth, a first wave of feminism¹ arose, challenging the hegemonic norms and regulative structures of post-war society. Feminists of this first phase shattered the traditional political imagination, which resonated to some extent in the universities, where initial research focused on discrimination against women. In questioning the position of women in modern Western societies, and with their genuine commitment to applied research and actual improvement of women's situations, feminist approaches were bound to eventually extend their scope into the non-Western world (Becker-Schmidt & Knapp 2000, Connelly et al. 2000).

As it became obvious that while total gross national income was rising and a majority of the world's population was impoverished, development efforts came under fire. Feminist voices have fostered debate on this subject since the early 1970s. However, feminist critics went beyond the efficiency discourse by targeting the ideological undercurrents of development programmes. Their critique centred on the andro- and ethnocentric nature of mainly charity-oriented development politics, namely the unquestioned reproduction of the stereotypical division of labour between genders and the very definition of labour as restricted to wage labour. The scientific debate on women's roles in development was launched by Esther Boserup (Boserup 1970). Within a framework of redistribution (Fraser 2001), the protagonists of the WID approach - Women in Development - outlined women's manifold contributions to development and claimed an equal share of the benefits (Braidotti et al. 1994). Feminist endeavours based on this stance soon exhibited different emphases (see Moser 1993). While social development approaches dominated the beginning of post-war development activities, a focus on equity² emerged in the 1970s. Aiming primarily at legal dimensions and strategic gender interests³, the advancement of traditional female activities constituted the core of anti-poverty-programmes in the late 1970s. Measures fostering access to resources were implemented in order to increase women's productivity and at the same time stabilise the number of children being born into poor societies. The integration of women into the market economy was seen to be the most promising means not only of poverty reduction but eventually in the struggle against the encumbrance of national economies as well.

In sum, WID has stirred up conventional development policy in terms of questioning the adequacy of programmes that were usually directed towards a neutral but implicitly male beneficiary. By rendering women visible, WID provoked a long-overdue debate on the adequacy of development approaches. The question of how to achieve advancement for specific target groups was addressed as part of this debate. WID representatives were seen as largely responsible for advancing the dynamics unleashed by the political departures of the 1970s. The enhancement of the emancipating potential of development work was made manifest in the first World Conference on Women in 1975. This event, which took place in Mexico, was strongly WID-driven. Congruent with national women's advancement and gender awareness campaigns, amendments to development programmes were widely implemented (Koczberski 1998, Moghadam 1998, Young 2002).

3.2 From WID to WAD

WID approaches did not challenge the structural origins of gender inequalities or any other power asymmetries. Critics therefore held WID partly responsible for the shortcomings of development programmes, as they sustained and perpetuated existing social disparities. According to critics, WID not only misconceives the role of women in development; WID approaches comprehend women mainly via their reproductive functions, whereby they are considered a homogeneous group. Although unintentionally, WID lent itself to a practise in which improvements in women's lives were subordinated to a general improvement of social conditions (McIlwaine & Datta 2003, p. 370). Another legacy of WID concepts, with their exclusive focus on women, is the neglect of men, whose participation in redressing power imbalances is indispensable. Marxist critics have pointed out that the fundamental shortcoming of WID-related approaches was to ignore the fact that women are and have always been part of development. By relegating women's contributions to the reproductive side, WID-oriented discourses get caught in the trap of reifying traditional gender stereotypes. Further criticisms emanated from development experts: applying the parameters generated by WID, development practitioners concluded that women's concerns were sometimes contradictory to the programmes' aims (see for instance Bejarano & Soriano 1997, pp. 11-14). These drastic criticisms led only to minor reassessments of classic development aims.

As development cooperation moved towards a basic needs strategy in what today is referred to as the second decade of development policies (Nuscheler 1996), agencies embraced poor but economically active women as the principle targets of their programmes. Poverty, which up to the late 1960s was discursively framed as a type of epidemic to be expunged, could hence be measured. The thresholds between rich, less rich, poor and very poor became objectified (Illich 1993). Adopting the principles of the increasingly disseminated theory of dependency, materialist strands of feminist theorising blended their critique of WID into an alternative framework which came to be known as WAD – *Women and Development*. Numerous studies, whose origins lie in the Marxist-feminist critique of Boserup's classic, gave rise to discourse on the "feminisation of poverty", which still persists today. This discursive shift was epitomised by Diana Pearce's article on women, work and welfare published in 1978 (Pearce 1978).

In practice, the basic needs approach becomes a trap, as Annemarie Sancar, gender expert at the Swiss Agency for Development and Cooperation, argues. So-called beneficiaries often respond on the basis of stereotyped gender roles promoted by cooperation agencies (Femina-Politica 2004). As feminist critics further point out, this perspective conceived of women as a human resource whose underprivileged situation would improve as economic conditions for the working class improved in general. Women's advancement was therefore seen as a corollary of continuous efforts in foreign aid. Thorough analysis of the phenomenon of rising female poverty as part of a complex pattern of social disparity was neglected (Rodenberg 2004). The household perspective prevailed, whereby differences in household constitutions were subsumed. The demand for a comprehensive perspective assessing the interpenetrating dynamics of scales, i.e. supra- and sub-household-dimensions, was not met.

3.3 Environment and sustainable development

As WID and WAD programmes grew increasingly popular, these approaches began to mix with the discourse on environmental degradation following publication of Rachel Carson's *Silent Spring* in the early 1960s, and came to public attention again with the manifesto published by the Club of Rome shortly before the economic crisis of the 1970s. Within the WID or WAD framework, women were seen as the source of ecological disturbance but also, and by the nature of their traditional reproductive role, as the bearers of responsibility for natural resources. Whereas these designations tended to instrumentalise women in solving environmental problems, eco-feminist concepts celebrated women for being intimately bound to nature and natural processes by mechanisms of biological and spiritual reciprocity.⁴ From an eco-feminist perspective, what has been perverted by patriarchal and colonial systems of subjectivisation must be re-enchanted in self-sustaining communities.⁵ Further developments resulting from these impacts, among others, were the women, environment and sustainable development approach (WESD) and feminist environmentalism, which opposed the mythological blending of women and nature and the ways in which this theorising had led to a misconception and instrumentalising of women as cheap labour in environmental projects. WESD, as well as programmes in the framework of feminist environmentalism, focused on decision-making processes that fostered the participation of women within relevant structures and analysed ideological nexuses of production, reproduction and distribution, leading to exclusive spaces for particular members of a given society (Braidotti et al. 1994).WESD was the guiding principle, if not the exclusive reference, for a study conducted by Claudia Michel and Sabin Bieri in the Bolivian Andes. The following section will give a brief outline of the study and further research based on it. The theoretical assumptions guiding this chapter are grounded in some of its crucial findings.

3.4 A close-up through the gender lens: unintended consequences in integrated watershed management

The "Manejo de animales en la Cordillera del Tunari. Estrategias familiares en un contexto social dinámico" project consisted of an ethnographic investigation focusing on household strategies in three Andean communities (Bieri & Michel 1997). The guiding question focused on the cultural meaning of herding and herding practices in households, communities, and between communities in the Valle region near Cochabamba. As herding is traditionally assigned to women in the Andean region, our primary interlocutors in the field were the shepherdesses: women and girls whom we interviewed and assisted as they went to work. In the course of our field study, which amounted to several months, we lived continually with different families, completing participatory observation by regular visits through the year. As we spoke regularly to the peasant families, held workshops, assisted in community meetings and worked with school children, the picture was complemented. The study was involved in a programme on integral watershed management supported by the Swiss Agency for Development and Cooperation (SDC).⁶ Based on ethnographic data, we extended the scope of the study by assessing theoretical concepts and their implementation by the programme and the donor. This was done by using a feminist critique developed by a local women's grassroots organisation (Bieri & Michel 2000).

The qualitative approach traced subtle shifts between gender roles within households induced by incentives directly associated with the programme. As the programme consultants introduced a range of measures which are apt to reduce ecological degeneration processes and enhance agricultural production, traditional structures such as gendered division of labour underwent considerable change. Job offers, mostly for the young men in the communities, changed the economic perspectives of single households, if only on a temporary basis. Women had to fill in the gaps left by the men on programme jobs, regardless of the season. As a result, a number of agricultural chores were transmitted to the women, leaving animal care to ever younger children or elderly women. In many cases neglect of careful seasonal herding practices led to dramatic problems with livestock. In a cycle of negative feedback, overgrazing increased, since the herds were not guided to nourishing grounds following seasonal changes. As the herds grew weaker, investments in agricultural production were intensified. Instead of the proposed reduction in area under crops, even more land was reclaimed, mostly by burning – a practice which the programme initially set out to extinguish. Production was subsequently extended to cash crops, and the women went frequently to market to sell potatoes and, from communities at lower altitudes, vegetables and flowers. Increased mobility made it easier for young women to establish ties to the city and therefore become engaged in the only labour market accessible to them: work as maids in middle-class households. For transport to the city, they relied mostly on the programme's drivers, a practice which turned these men into key figures in the communities. Every month the rotation of drivers changed, and as the end of a month drew closer, people would eagerly ask who the next man on duty was.

What has been sketched here in rather rough outlines is meant to illustrate some ways in which development programmes with allegedly well-designed purposes induce a series of consequences that are not only unintended but likely to undermine some of the programme's primary objectives. However, these changes cannot be appraised without taking determining factors from a wider context into account, namely developments in the market economy such as global prices or changes in entitlements to land. To name only one significant transformation in the case presented: large-scale decentralisation and community participation programmes were promoted at the time in Bolivia. As a top-down strategy, women were implicated to a great extent in these processes. In terms of workload, women in the area experienced an intensified demand for their presence and labour. This tendency was aggravated by the recruitment of male family members for watershed prevention. Many women found themselves confronted with charges and responsibilities they were eventually unable to fulfil.⁷

Another crucial finding of the research was a detailed picture of how women peasants carefully choose between subsistence production and cash crop strategies. Herding pertains to the former, and as the analysis showed, women's calculations do not coincide with the logic of the liberal market economy, which induces the skimming of agricultural surpluses. The reluctance to engage in market-related economic activities applies more to women than to men in the given context, as men are more likely to be recruited for jobs outside subsistence production. Women are therefore left with and relegated to traditional risk-minimisation strategies. On the other hand, the traditional strategy is undermined by the programme's focus on agricultural production which, by self-induced mechanisms, induces surplus production. The possibility of integrating women into regional markets, turning them into small-scale entrepreneurs and consumers, is roughly limited to agricultural production and thwarts the household logic and self-understanding by which women guarantee a balance of risk. In the context of these dynamics, which were accentuated by the project intervention (as indicated above by offering temporary jobs to the local male community in construction work for streets, control of river beds and sliding zones, by inducing crop rotation, and delivering sophisticated technology for agriculture), the study generated suggestions about how to integrate women in communal decision-making structures that would take account of their individual situations and responsibilities, determined by parameters of class, ethnicity and age. As this empirical example shows, an analytical limitation to the category of women as social agents does not adequately take account of the social dynamics in a given context. Research such as the study mentioned therefore turned to a relational concept addressing socially constructed gender roles and their inherent dynamics.

3.5 The promise of gender

Development efforts oriented towards economic efficiency persisted in the 1980s, culminating in the adjustment programmes of the IMF and World Bank. In what has been termed a "lost decade" (Nuscheler 1996), large-scale deregulation not only affected women disproportionately, but led to an actual "feminisation of responsibility" as a consequence of the economic survival of the poorest households (Wichterich 1991). The feminist response entailed the recognition that the "add women and stir" strategy had failed entirely, leading, at worst, to women's de- or maldevelopment (Harding 1995 296). Recognition of this failure prepared the field for the critical assessment of a concept that produced considerable theoretical shifts in feminist theory. The innovative and analytical promise of gender was its relational dimension. As an analytical category, gender seemed to hold great potential and in fact provided much insight, as it was implemented internationally in a series of research projects. As an analytical tool, gender is conceptualised in different dimensions, ranging from the individual scale of identity production, to gendering roles in social interaction, to culturally defined social orders, symbolic systems and comprehensive gender relations as the main structuring principles of societies (Knapp 2003, Scott 1986). By adopting a perspective on gender, it is possible to discern hierarchically structured values that are attributed to culturally specific male and female stereotypes. Embracing a gender-sensitive approach enhances the understanding of complex dynamics and interdependencies of social organisation in different cultural and cross-cultural contexts and interactions. However, before analysing target contexts and groups, it is crucial to clarify the gender dimension to be aimed at and to what extent intersections with other structuring principles are considered relevant. The author holds that many failures of so-called gender perspectives are due to shortcomings in clearly identifying the axes of a gender analysis. By scrutinising the nexus of gender along with other social markers such as ethnicity, race, social origin, class, caste or generation, the profile constituting the individual, structural and symbolic place of a subject is delineated (Harding 1995). As subordination works most effectively when the subordinating criteria are naturalised – i.e. made invisible, deconstructivist accounts of gender highlight its historical variability and de-essentialise political debates. Politically, the implementation of gender in feminist theory indicated a retreat from an additive perspective on women to claims for the transformation of gender relations. In terms of research, Sandra Harding advocates the concept of "strong objectivity" by adopting standpoint approaches ("starting from women's lives") in order to obtain the most accurate accounts of social realities in different contexts (Harding 1995 p. 306) (Harding 1990). Harding's adherence to the concept of objectivity, which ultimately sustains traditional notions of the scientific endeavour, barely caught on in the feminist scientific community. However, central to this position is how knowledge production is involved in the constitution of power relations, as well as relations between humans and the environment. As such, Harding's ideas were still widely diffused among feminist and developmental scholars.

The initial marks left by gender in development contexts were printed in an approach called GAD – gender and development, central to which was the analysis of gender relations in every field involved. Such analyses showed to what extent a narrowly capitalist understanding of development, namely the commercialisation of agriculture and industrialisation, entailed adverse impacts on women's productive and reproductive lives (Young 2002). Development experts advocated the introduction of gender into development programmes as a cross-sectional responsibility. Concomitant with this was a change of the definition of development, which is no longer reduced to the improvement of economic circumstances but refers to a complex process of advancement of social conditions in terms of the capability building of a social entity to react to the structural but also the physical and emotional needs of its members (see also Long & Long 1992). The household, at the interface of individuals, families and the socio-economic structures, remains the primary focus of the GAD approach. Advocating the redistribution of power within gender relations, GAD promotes the self-organisation of women as they are conceived as active agents engaged in transforming their proper social realities. As such, GAD differs from the macro-structural focus implemented by the WAD philosophy. GAD programmes embraced welfare and anti-poverty strategies as they were introduced in WID approaches; however, these are regarded as a means to achieve gender equity, not as goals. In order to evoke the emancipating potentials of marginalised groups, GAD approaches urge the state to enhance women's economic independence by providing jobs, as well as legal reforms such as inheritance or land reforms.

The widespread embrace of gender in development discourse was regarded rather suspiciously, namely by small grassroots and feminist organisations.⁸ Feminist scholars were among the critical voices who pointed to the tendency of simply replacing "women" with the term "gender" and operating with gender as the apex of a hierarchy of under-theorised categories of difference

(Longhurst 2002). Some deprecate the elimination of "women" from feminist initiatives, diagnosing a neglect of the question of power and expecting a de-politicising effect, as measures shift from the advancement of women to the sensitising of men. In fact, depoliticised approaches did catch on as programmes began to be implemented, a process in which the concept forfeited much of its feminist edge (Baden & Goetz 1997).

The shortcomings of the theoretical instruments provided by the GAD framework can be illustrated, if not exhaustively discussed, in the context of resource management. Numerous appraisals demonstrate how the division of labour shifts towards men as soon as basic provisions become technically sophisticated and expert knowledge is involved (on technologies, see for instance Mitter 1995; for an overview see Visvanathan et al. 1997). Generally, women prioritise security in food supply and provision, whereas men, due to their integration into markets and financial sectors, tend to prefer marketcompatible and monetary measures. Feminist debates on the reasons for these gendered rationales used to be highly controversial, ranging from essentialising eco-feminist analogies between women and nature to the principle of complementary responsibilities and reciprocities as integral parts of a female morality featuring care. An encompassing framework, which cannot be expanded upon here, is presented by Naila Kabeer, who emphasises intra-household relationships of cooperation and conflict in a model of mutual influence with wider social structures provided by collective identities and interests of race, class and community (Kabeer 2000). Developmental sociologists concur on the gendered division of labour and the respective assignment of gender roles. Based on this perspective, the risk-minimising strategies adopted primarily by women become intelligible as a form of subsistence pragmatism (Lachenmann 1989). As a general outcome, women's rationales and resource management practices have to be contextualised rather than globally marked as either damaging or conservative. Gender roles are culturally embedded and contingent. Claudia von Braunmühl provides an illustration in her example of the water sector, an area of much recent concern where women's roles tend to be particularly naturalised.9 The aim of obtaining water is usually reduced to the technical satisfaction of a reproductive need. On the other hand, fetching water can also be associated with sovereign management of time, access to public space, and an autonomous division of tasks and roles among women (Femina-Politica 2004 p. 16). These examples demonstrate to what extent questions of access, use, and maintenance of resources are negotiated according to complex patterns of social positioning among, but not exclusively limited to, local populations. Interventions by development programmes tend to reify stereotypical rationales, especially because the expert's own involvement with gender roles and gendered identities is rarely subject to reflection. Rather, they are equipped with recommendations boiled down to checklists and detached from theoretical insights. Thus, doubts as to what extent GAD policies have fulfilled their promises remain. By the mid-1980s, implementation lagged far behind initial aspirations (Braidotti et al. 1994 p. 181). Gender does not constitute an alternative to traditional development concepts, read the argument, but dilutes the principles brought into the debate by WID and generally promotes a technocratic approach to questions of inequality and discrimination (see for instance Femina-Politica 2004).

3.6 Critical framings of GAD, deconstructivist and intersectionality approaches

Nevertheless, theoretical and methodological premises, as promoted by GAD, managed to achieve widespread acceptance of the significance of gender relations in research and development practice. According to McIlwaine and Datta, re-theorisations of GAD concepts therefore need to be envisaged in the frame of a more sophisticated theorisation of diversity among women, a shift from a needs-based approach to a rights-based approach, and finally, in what would really be keeping the promise of gender, the explicit integration of men and masculinities into GAD (Laurie 2005, McIlwaine & Datta 2003, p. 371). Taking up the claim to differentiate among women and challenge existing assumptions which misrepresent them as a homogeneous group, Anglo-American feminist scholars, in recent debates, have focused on the concept of intersectionality. Intersectionality/intersectional analysis refers to race, class and gender as constituent axes organising social fields and their contingent interrelations. The term coined by Kimberlé Crenshaw in 1987 seems to have advanced to the guiding principle of theoretical reorientations in gender studies. Although the social and cultural parameters of the US context at the concept's roots have to be critically assessed and its theoretical implications need to be further investigated, Gudrun-Axeli Knapp appreciates the critical potential of this theoretical project. However, surging ahead with programmatic initiatives without substantial theoretical reflection will lead straight to the same pitfalls that affected past gender initiatives (Knapp 2005; McCall, 2005). In development contexts, with their well-known tensions between theory and practice, this peril is particularly evident.

Debates on gender have proliferated within recent decades; there is no single paradigm that serves as a collective reference for gender theory. However, the prevailing influence for over a decade now has been the deconstructivist/post-structural concepts mapped out by Judith Butler (Butler 1991. 1999). What subsequently seemed (and for some exponents certainly was) like a dramatic disruption of the feminist scientific community has unfurled in some of the most path-breaking debates, sometimes referred to as historicisation versus deconstruction approaches, or simply the primacy of the social versus the cultural (see Adkins 2002 p. 27f.). As a result, gender studies were positioned at the forefront of cultural studies, fuelling theoretical developments in the post-linguistic turn era. In turn, gender studies were heavily influenced by these concepts, which incisively shifted the relation between "words" and "things". As the main focus was removed from what is generally referred to as "social reality" to be directed towards the constituents of meaning and "truth," a number of feminists were left with doubts regarding the political relevance and practical applicability of these theorems. In a nutshell, deconstructive theorists were blamed for losing sight of the redistributive aspects of social transformation and the actual nature of social relations, for being transhistorical, and for using elitist language (Fraser 1998, Nagar 2002, Staeheli & Nagar 2002). Some feminist scholars were concerned about what they feared was the loss of instruments to capture women's "real" experiences and their material grounding, i.e. the "things" (Duden 1993, Gildemeister & Wetterer 1992, Landweer 1993). Others embraced these philosophical models for their very potential in terms of radical politics and science. Some are pushing further in an approach that has come to be known as "queer theory" (see, for instance, Halberstam 2005). In social scientific contexts, attempts have been made to reconcile some of the more traditional sociological categories with deconstructivist terms (Adkins 2004). Among the proponents of poststructuralist theorising were postcolonial theorists who framed critical appraisals of GAD policies.

3.7 Dawn-ing: focusing power relations

Critical appraisals of gender and development approaches evolved from postcolonial theorising. By means of a genealogical account of development concepts, Chandra Mohanty concluded that, by and large, relations between the North and the South continued to be colonial (Mohanty, Russo & Torres 1991). Western feminist discourse, according to Mohanty's seminal thesis, was constituted by adopting a universal category of "women" that was indifferent to culturally and historically distinct meanings of patriarchy, gender and sexual difference. In this discourse, a universal and transcendent female concern for the same problems was evoked along with the construct of the "Third World woman". Mohanty suggests deconstructing these Western frameworks in order to develop geographically, culturally and historically grounded strategies for addressing the variety of problems, including politically delicate equity issues, that women in the South must cope with.

On the occasion of the UN summit in Nairobi in 1985, activists and NGOs from the South formed a network and submitted radical counter-drafts to the prevailing principles of gender and development. DAWN – *Development Alternatives with Women for a New Era* – put forth the concept of empowerment, whereby the generalising category "women" was accepted in exchange for "mobilising capacity and political potential," the term formerly rejected by GAD initiatives (Kühl 2004). Empowerment comprises a process that includes awareness and capacity building aiming at greater participation by women in decision-making processes (Frey-Nakonz 1998). The potential of the concept lies in the nexus of subject formation and political action (Karl 1995). In other words, it is the vanguard of the long-overdue project of combining issues of redistribution and political recognition.

3.7 Framing the global context: from basic-needs to basic-rights approaches

Owing to their critical roots, debates on gender and development have often been linked to discussions of a paradigm shift in development theories and practice in general. Along with other influential concepts such as participation and sustainability, development experts were armed with gender to fight on the "battlefield of knowledge" (Long & Long 1992). Hopes for a paradigm shift were nurtured again at the beginning of the 1990s. Even though development agencies had widely begun to integrate gender into their programmes, it was the larger impact of the downfall of Communist systems after 1989 that was primarily responsible for the radical resetting of their agendas. On the global level, critiques of the structural adjustment programmes of the World Bank and the IMF led to a concentration on human development goals and a shift of orientation from basic needs to basic rights (McIlwaine & Datta 2003, Mohan & Holland 2001, Rodenberg 2004, Sengupta 2000). In the context of neoliberal resignification of the state and reduction of the range of official politics, women's organisations and NGOs¹⁰ always find themselves between the desired aim of political participation and the need to fulfil tasks left to them by the withdrawal of the state. This means that the structure of contacts between the state and NGOs needs to be scrutinised in terms of content as well as power relations. Today, discourses on development and globalisation are tightly knit (Braunmühl & Padmanabhan 2004).

The core of the new strategies was manifested in a UNDP paper on human development, where the shift of traditional concepts towards human development, equity and empowerment was evidenced (Rodenberg 2004). The previous narrow goal of economic development was gradually replaced by an engagement with basic social transformation at a global scale. The main shift reflected was the step from satisfaction of basic needs towards participation and basic rights. This change of perspective on poverty reduction strategies is bound to be questioned in terms of gender. Amartya Sen's groundbreaking resignification of poverty and his focus on entitlements was an important contribution in this respect (Sen 1999). The focus on entitlements does not imply giving up completely on classical WID measures such as access to basic services, land and other primary resources. These measures are embedded in a broader scope on women's rights as an integral part of human rights, to which major donor institutions are committed. In the early 1990s the question of gender, poverty and development was characterised by a highly problematic interpretation which either positioned women as a vulnerable group in need of special protection, in terms of basic services, or, on the other hand, held women responsible for the effects of economic and ecological crises. As Rodenberg points out, neither of these antagonistic positions - victim perspective versus feminisation of responsibility - nowadays fully determines the policies of development agencies (Rodenberg 2004). Within development organisations, specific aspects of the advancement of women are being gradually replaced by gender mainstreaming competence centres, equipped with so-called cross-sectional responsibilities. This implies a shift from the traditional focus on women and children as target groups towards integration of gender into formerly gender-blind sectors such as transport and social security, or large-scale approaches such as development financing or debt relief programmes. In order to unlock their full potential, however, gender mainstreaming measures need to be combined with approved approaches to advancement of women - a dual strategy that has been adopted by numerous agencies. Rodenberg refers to the action plan of the Copenhagen World Summit for Social Development, where women were guaranteed access to social services, land and productive resources. This classic focus on practical gender interests was embedded in a broader human rights strategy that sustains the notion of women's rights as a fundamental aspect of human rights (Rodenberg 2004, p. 78, UN 1995). In this approach, discourses on violence and the dignity of women's lives have found relatively broad diffusion within development policies, whereas cultural and economic rights for women rarely receive attention. Rodenberg's findings evidence a rhetorical consensus among different donors within the realm of poverty reduction. Combining approaches is seen by a number of development experts as a win-win-situation, as it blends gender equity with economic progress and poverty reduction. In the framework of economic discourse, gender policies are subsequently much easier to legitimise. However, feminist critics fear that the principle of gender equity will be subsumed under the overarching strategies of poverty reduction and economic growth. These apprehensions are echoed in a number of statements by theorists and practitioners who feel uneasy with the smooth integration of empowerment into the strategies of numerous agencies. Critics such as Gabriele Michalitsch point out how discourse is fuelled by neoliberal thinking (Michalitsch 2005). As the state withdraws from its social responsibilities, civil society is charged with bridging the growing gap; women have been recruited and have assumed broad responsibility. However, responsibility often relates to empowerment in the sense of competition, since it does not imply co-determination and participation (Kühl 2004). Women's associations are therefore limited to the local scale and directed towards practical gender interests. Since the empowerment approach focuses on an individual scale, it is compatible with neoliberal logic, whereby its utopian substance disappears. Poverty alleviation programmes that adopt an empowerment strategy can be interpreted as a shift from political governing to self-regulation. Paradoxically, the right to selffulfilment claimed by empowerment approaches was turned into the duty to implement the aims of the state through personal accountability (Rodenberg 2004). In the rather polemical view of Braunmühl and Padmanabhan, development co-operation has become a balancing act between actively making Third World countries fit for globalisation and advocating gender-equal, socially and environmentally compliant accomplishments (Braunmühl & Padmanabhan 2004).

As a reaction to such criticisms and to the "lost decade" (Nuscheler, 1996), post-development approaches emerged in the mid-1990s, drawing on the so-called cultural turn in the social sciences. Within this framework, a variety of theoretical and methodological practices are featured; however, they share a critique of core concepts of development such as sustainability¹¹ and pover-

ty. The post-development approaches are among those that have adopted Michel Foucault's concepts such as discourse, genealogy or archaeology for development studies (Dreyfus & Rabinow 1994). Even though Foulcault has never explicitly dealt with questions of development, he proposes to unravel such terms and actually points out the problems triggered by them. This is exactly the strategy pursued by so-called post-development approaches, which are beyond the scope of the present paper – although their reception of Foucaultian concepts requires scrutiny.¹²

3.8 Livelihood concepts, gender mainstreaming and open questions

As numerous studies have shown, gendered patterns continue to prevail in discourse on sustainable resource management. An in-depth analysis of gender relations and the aforementioned identification of the dimensions in question is therefore a prerequisite in order to understand social relations to nature, environmental crises, and resource management (Wichterich 2004). Feminist critiques have long pointed out that within the WED perspective women were exploited as unpaid protectors of the environment and frugal users of resources, while their access to property and property titles remained precarious. It has become very clear that fair development with respect to gender has to be connected to a transformation of the economically saturated notion of development. Concurrently, women's relations to local environments have been conceptually differentiated and de-essentialised.

Today, questions of access to land are being interpreted in the wider framework of human rights, the principle of non-discrimination, and gender mainstreaming perspectives. A human rights strategy emphasises the indivisibility of human rights. Furthermore, human rights approaches focus on the most marginalised and excluded social groups. However, even if equal rights standards are embedded not only in supra-national but also in many national legal frameworks, the practical possibilities of access to resources, namely for women, are far from satisfactory. Compensatory measures have not brought sweeping success in overcoming historical and cultural discriminatory structures. Equity is not simply achieved by equal treatment of all the groups involved. As a result of the neoliberal orientation of the land reforms of the 1990s, structurally weaker participants are not competitive in the process of redistribution, since they lack prerequisites such as qualification, technical support, marketing, and access to financing. Liberalisation of the agricultural sector has undermined the local capacity to secure subsistence while concurrently establishing the new paradigm of market-led nutrition security world-wide. In such contexts, women's organisations demand a reorientation of distribution policies according to socially relevant criteria. Human rights agencies aim to strengthen the legal status of women peasants by advancing gender mainstreaming in every sector of development work. There is a need for additional data in order to assess the social realities of women in agricultural contexts (Schüssler 2004). Without seriously redressing current basics, the human rights approach will be relegated to mere rhetoric to veil the social technology implicated in it. In an effort to combine grassroots accounts and advantageous concepts provided by the hegemonic discourses, the livelihood concept has come into focus.

In contrast to a macro-development strategy, the livelihood concept aims at the local level and the micro-politics of daily subsistence. This concept was found in the DAWN network prior to the UN Conference on sustainable development in Rio de Janeiro in 1992. Dawn criticised the concept of sustainable development as inherently contradictory, since development is defined by economic growth, the market economy and efficacy, all mechanisms which undermine sustainable use and the protection of resources. Traditional definitions of livelihood have an emphasis on nutrition and conservation of the natural environment, whereas some authors use the concept to indicate the sum of all the material, social and cultural resources of subsistence. This livelihood concept draws on the empowerment approach as well as on Sen's entitlement concept, clearly differing from the efficiency principle of the World Bank or development policies promoted by WED, which integrated women as "privileged environmental managers" (Wichterich 2004, p. 86).

By eliminating unequal power relations, approaches that feature decentralisation and participation, the strengthening of democratic processes, and the self-organising capacities of local communities tend to romanticise precolonial living conditions. Development agencies that promote individualistic programmes aiming at generating the local actor's "ownership" and responsibility for questions of poverty and the environment barely consider diverging intra-gender interests. Conflicts of interest need to be scrutinised in regard to the social context in which they arise, and the results should be taken into account when negotiating rights and resources for livelihood (Wichterich 2004). Gender mainstreaming, on the other hand, has to go beyond intervention and integrate social action as an outcome of different rationales and knowledge. It is one important task of gender mainstreaming to systematically reflect on the ways in which interventions disrupt or perpetuate gender roles. Differentiation is always an act of balance, and every situation has to be carefully assessed in terms how far the deconstruction of categories can be pushed (Femina-Politica 2004). However, tools can only be as good as the framework by which they are implemented – this underlines the need to expand the framework and investigate complex interdependences across social scales.

3.9 Conclusion

Analysis of recent development strategies indicates a shift towards more comprehensive policies. Social disparity is being recognised as a significant and systematically reproduced limitation on progress. Nevertheless, consideration of the non-economic dimensions of social disparity and integration of questions of gender within these strategies has not brought about an encompassing gender focus in development policies. Traditional initiatives in advancement of women and accounts of beneficiaries as economic actors have prevailed over measures oriented towards structures and cross-sectional initiatives. Rodenberg argues that the persistence of traditional WID approaches is due to the lack of gender-sensitive reform of the macro-economic frameworks used by global development agencies such as the World Bank. The fundamental segregation between a growth-oriented market economy and social reproduction remains unchallenged as long as the market is not subject to an analysis of its functioning as an institution according to social networks and social norms. A further criticism points to global strategies such as the Millennium Development Goals, which serve to present complex and regionally specific conditions in universal terms, reducing the battle against poverty and social disparity to quantifiable operations such as reducing the level of HIV/AIDS or primary school rates for girls. Public discourses are very much determined by these political approaches, thereby bypassing conventions and small-scale agreements which have been established in long-standing participatory negotiation processes (Rodenberg 2004).

The present paper has outlined some of the major epistemic shifts in discourse on gender and development in the last three decades. It is important to note that these shifts are not to be framed in chronological sequence but intertwined, shaping programmes mutually and in sometimes contradictory ways. The author holds that, while there is a definite commitment from earlier "feminising development" approaches to more sophisticated and ambitious human-rights frameworks, some basic problems continue to haunt the "engendering" of development. As a general pattern, these problems consist of implementing new insights into proved frameworks in a market-led context where states tend to withdraw and NGOs compete for limited resources. Such is the balance between recognition of diversity and the thriving of common goals, joint agenda-setting and transnational alliances, or, as in the livelihood concept, the maintaining of small-scale tailor-made approaches against the backdrop of a global, universalising human rights discourse. Another area of tension is between social development approaches underpinned by a postcolonial logic and a post-development thrust which takes a critical account of the power relations involved in a development setting. Tension between theoretical and practical positions is not new at all but still persists.

As recent feminist endeavours for recognition, diversity and representation coincide with a global discourse on human rights, some claims for headway in gender and development studies can be made. First of all, the full engendering of the development process remains one of the fundamental requirements for sustainable development. There is no retreat from foregrounding embedded local practices and the imbrications of gender regimes according to place and space. This includes the critical inspection of gendered processes in which development agents and programme design and planning are implicated. These findings have to be forged into strategic commonalities for women and men to bring about change. With reference to the rightsbased discourse, this implies foregrounding not only negative rights such as anti-discrimination, but also positive rights, i.e. empowerment and equality projects (Gideon 2002). Furthermore, the call for rights needs to be followed by initiatives to actually perform these rights and transfer them into choices and improvements in the lives of both women and men. So far, development studies have been reluctant to incorporate men and masculinities into their concepts.¹³ Gender mainstreaming will only be achieved by seriously engaging with both sexes. Finally, the redistribution of power asymmetries within gender relations has to occur along with a politics of cultural recognition. To come to terms with the above claims, accurate analyses based upon a sophisticated gender approach that extends to the planning process and is rooted in specific socio-spatial contexts are greatly needed. Such analyses would be best connected with critical assessments of globalising development discourses. Scrutinised for conveying specific cultural norms, development can be deconstructed as a multiply biased social practise.

The "tour d'horizon" on feminist discourses, gender and development presented here has demonstrated different versions of how initially critical concepts and unorthodox attempts have moved from their radical potential as they were implicated. There is a need for critical genealogical analysis of the ways in which originally subversive concepts infuse mainstream institutional actors and their strategies. Sometimes this is owing to the thoroughness with which innovative concepts have swept traditional approaches away; in many instances this has happened in political negotiations. Even if, as in some post-development approaches, a re-invention of development is attempted, it is bound to bear the traces of traditional models. Informed by gender or other progressive discourses, power structures may be realigned in unforeseen ways. Engendering development, rather than referring to a uniform concept, implies adopting a critical attitude towards such silent shifts in power relations. This requires instruments that constantly attempt to undermine post-colonial underpinnings of development initiatives which are flexible and yet tailored to specific local requests. To engage with gender today means above all pushing theoretically sound frameworks further, reimagining geographies of development, and dealing with innovative models that account for the complex structures of the globalised time-space in which local societies are embedded.

Endnotes

- ¹The term "first wave feminism" refers to the framework used by Nancy Fraser, who identifies this uprising with a politics of redistribution, in contrast to the second wave that emerged in the 1980s and focused on recognition. For a summary in German of Fraser's talk, see Fraser, 2005.
- ² The term commonly used is "equity," not "equality." Equality denotes sameness; it is a distribution-oriented concept referring to uniformity– every person gets exactly the same. Equity, on the other hand, indicates distributions regarded as fair, even though equalities and inequalities may exist (Stone 1997). Equity approaches therefore can include programmes for advancement of women within which systematic privileging of women may apply.
- ³The distinction between practical gender interests and strategic gender interests was made by Moser (Moser 1993, p.230). Practical gender interests refer to women's needs which conform to gender stereotypes established by a specific society. Practical gender interests encompass, for example, food and water supply or health care. Practical gender interests do not interfere with traditional gender roles. Strategic gender interests, in contrast, contest women's subordination. Strategic gender interests focus on issues such as legal equality, violence against women, or the right to abortion.
- ⁴ (For a summary of the formation of the ecofeminist movement, see Bieri 2000 pp. 5-8)
- ⁵The romanticising and largely essentialising approach was initially represented by Vandana Shiva and Maria Mies, who later engaged in more differentiated analyses. At the time, a number of feminist authors fancied mythically charged ecofeminist concepts; see Mies 1982; Mies & Shiva 1995, and critical assessments of it; Rocheleau, Thomas-Slayter & Wangari 1996; Shiva 1989; Sturgeon 1997.
- ⁶ Programa Manejo Integral de Cuencas, PROMIC, Cochabamba, Bolivia. For detailed information see http://www.promic-bolivia.org/ (July 2005)
- ⁷ An inquiry that carefully integrates intra-communal and intra-household changes with externally induced transformation is Wiesmann's actor-oriented study for the sub-Saharan context: (Wiesmann 1998)
- ⁸For a compilation of critical appraisals in Switzerland, see Mosquito 1997.
- ⁹A Bolivian case study with a specific focus on the construction of masculinities within the privatisation discourse and battle in the water sector Cochabamba, Bolivia, was conducted by Laurie in 2005.
- ¹⁰ The term "Non-Governmental Organisations" (NGO) is used in this chapter in its broadest sense. I am very aware that the nature and structure of NGOs vary considerably, depending on cultural context, aims and scale. For extended discussion of types, scope and the political relevance of NGOs in transnational settings, see Keck & Sikkink, 1999 or Kaldor, 2003. In the German-speaking context Brunnengräber, Walk and Klein 2001 offers a good overview (Thanks to Claudia Michel for these cues). The organisations generally accounted for in this section are nationally or regionally anchored. Due to their involvement in local and culturally specific structures, they potentially take over national or supra-national responsibilities in

social development. NGOs acting at a global scale, such as human rights advocacy groups, correspond to a lesser extent to the conclusions drawn in this chapter.

- ¹¹ See Eblinghaus, 1996.
- ¹² However, even if representatives of the post-development discourse frequently refer to Foucault, his interpretation of discourse analysis relates to post-development approaches in far more complex ways than what some exponents allude to. See Ziai 2003:411 for a more thorough critique on post-development concepts. For theoretical accounts in the post-development tradition, see Escobar, 1995. A genealogical account of sustainability as a power structure is given by Eblinghaus, 1996.
- ¹³ Some advances have been made, as demonstrated by UNDP/GIDP monograph No. 10, authored by Alan Grieg, Michael Kimmel, and James Lang 2000: Men, Masculinities and Development: Broadening our Work Towards Gender Equality.

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4 Engendering Development: Challenges and Opportunities for Mainstreaming Gender in Development Policy

Smita Premchander and Roshni Menon

"A gender perspective means recognising that women stand at the crossroads between production and reproduction, between economic activity and the care of human beings, and therefore between economic growth and human development. They are workers in both spheres – those most responsible and therefore with most at stake, those who suffer most when the two spheres meet at cross-purposes, and those most sensitive to the need for better integration between the two" (Sen, 1995: 12).

"[P]eople, especially poor women, are capable of promoting their own development if their own efforts and initiatives are recognised and supported. The first steps must be to build the "infrastructures", the context in which women can feel some sense of control over their lives" (Antrobus, 1987: 112).

Introduction

In the aftermath of the Fourth World Conference on Women in Beijing, it is still questionable whether women have made significant steps towards achieving greater gender equity. On the one hand, it can certainly be argued that there have been some hopeful developments, as evidenced by the increased visibility of women in elected assemblies and state institutions; the growing female proportion of the formal work force; lower fertility rates, and increased enrolment of girls in primary and to a lesser extent, secondary school (UNRISD, 2005). However, these positive strides do not reflect the nuances of how women's lives are changing – or not changing, as the case may be. Indeed, despite greater visibility by women in the public domains of formal work, politics and education, gender asymmetries continue to persist in public and private spheres, inhibiting a woman's ability to access not only the basic resources required for a sustainable livelihood, but also the same

resources available to her male counterpart (Morrison and Jutting, 2004). In fact, evidence demonstrates that in the so-called private domain, the overall structure of household relations is such that it "openly discriminates against women and keeps them in a state of permanent subordination vis-à-vis males both inside the household and in the wider public domain" (Friedmann, 1992: 109). Meanwhile, even where women may be entering the work force in greater numbers, a concomitant trend towards deteriorating terms and conditions of work is also evident.

In view of these developments, it is instructive to reflect on the types of policies that have been implemented thus far and the manner in which the approach to women in development policies has evolved over the years. To put it simply, what is the position of women in development and, more specifically, in development interventions? And how has this approach evolved over the years? This requires an examination of the historical backdrop of public policies that have been implemented, and a corresponding analysis of the evident gaps – that is, areas in which women continue to be excluded – in development interventions. Thus, a corollary question is, how can women's interests and priorities be better addressed in policy circles?

The present analysis will show that gender inequality is deeply entrenched in many societies. The household level remains a critical arena of gender-based discrimination; this in turn is promulgated through a variety of social practices and institutions, including policy interventions. Although discourses on the reasons behind and ways to redress gender-based discrimination have moved forward, policy interventions have lagged behind. The latter, which tend to reflect the dominant socio-economic paradigm of a particular time, remain stagnant as they continue to prescribe to an efficiency-based principle, regardless of whether women's concerns are explicitly integrated. Women's subordinate status in both the private and public domains is often the result of a mutually reinforcing process: gender relations at the private level have ramifications in the apparently distinct public sphere, and the resulting unequal relations in this arena are replayed back into the household. Therefore, any model for achieving sustainable development must redress the structural inequity of gender at the micro, meso, macro and even global levels. However, engendering change at the crucial household level remains the most important and difficult arena for intervention. This can only occur through a) realigning the discourse of gender in development with practice, and b) integrating policy interventions at each level of change, from macro to meso to micro.

4.1 Forging links through a gendered lens

A gender perspective in research and policy requires that explicit trans- and interdisciplinary links (see papers by Hirsch and Pfister in this publication) be made between various, often compartmentalised disciplines, administrative divisions, and both public and private institutions. Incorporating such a multidimensional perspective might shed light on the links and the quality of the research in question, as well as corresponding policy, which can range from being coherent to contradictory in nature. This is important, as early efforts at understanding 'gender' as a concept tended to emphasise gender-differentiated roles – that is, there was an inordinate amount of focus on descriptive accounts of what men and women do and receive in return (Miller and Razavi, 1998). However, an analysis of the relations of subordination and domination underpinning gender as a power relationship were missing. Thus, in order to draw out the latter set of connections and implications, it is necessary to methodologically break down such abstract sociological dimensions.

Kabeer (2003), for instance, points out at least three sets of connections that are essential in gender studies: a) those between production and reproduction, economic growth and human development; b) links concerning the nexus between the public and private domains; and finally c) a third set of linkages between different levels of analysis, from micro to meso to macro.

A. Production and reproduction

The first set of linkages, between production and reproduction, refers to the distinctive role that women traditionally play across cultures. Boserup, for instance, in her seminal work, *Women's Role in Economic Development* (1970), argued that while women were almost always principally responsible for reproductive work, it was their divergent roles in a productive capacity that were the most crucial variables explaining differences in their status across the world. Thus, where women were excluded from the productive functions of deriving a livelihood and relegated to fulfilling primarily reproductive responsibilities, they were likely to suffer from low status. She supported her assertion by providing two contrasting illustrations: first, one from the East Asian and African contexts, where women enjoyed relatively higher status as a result of their participation in the production process of farming; and second, from South and West Asia, where women's roles were restricted largely to their reproductive and domestic responsibilities.

B. The public sphere and private domain

Thus, Boserup's analysis reveals how the division of men's and women's productive and reproductive roles in society stems from the type of relationships embedded within the household. Friedmann, for example, writes that it is important to analyse the internal workings of a household for, in addition to being an economic unit, it is also "a polity, the smallest territorial unit exhibiting political behavior" (1992: 107). This means that households, not unlike other larger community social structures, incorporate a hierarchy, mediated by various factors, including gender, and are based on contractual relations between spouses (Friedmann, 1992). This hierarchy, in turn, spills over into social relations in the wider so-called public domain through institutionalised norms and practices of international and national bureaucracies, as well as markets and societies. In fact, "[b]oth women's reproductive and nurturing roles and their limited but growing insertion into the market economy conclusively show that women's disempowerment is structurally determined" (Friedmann, 1992: 111). Thus the relationship between the public and private domains can become negatively synergistic: in situations where women's rights are circumvented by social norms and where households are organised along corporate lines, with control, resources and decision-making power centralised in the hands of the male household head, gender discrimination occurs in extreme forms (Kabeer, 2003a). The net effect is the reinforcement of societal gender stereotypes of women's and men's differing capabilities and natures, thereby laying the foundation for continual perpetuation of gender inequity. As a result, even when women and men participate in the wider economy, they do so on different footings: relations within the household serve at least as a partial framework for the roles, responsibilities and agency women and men later maintain in the public sphere.

C. Micro-meso-macro links

Finally, it is essential to analyse the question of how macro-level forces influence the micro-level events and interactions between people, located in the varying institutional domains of society. Their response to these forces and how it, in turn, feeds back into the wider economy and society at large is also important to garner a more complete view of how women's lives are affected by the social relations and processes around them. For example, examining the structure of decision-making within the household constitutes a micro-level phenomenon, as does the analysis of the gender division

of labour, resources and power in terms of participation in the work force. It is worth noting that studies by Martina Locher, Heidi Kaspar and Cecilia Cross, among others in the present volume, make some progress in exploring these links between the household and societal levels. Such scrutiny is certainly important, not only to understand how macroeconomic forces impact on and are reacted to by women and men, but also to understand how they are filtered through the variant institutions of society. The latter point focuses attention on the macro and meso levels of activity.

Meso-level analysis is usually used to describe the relationships among institutions, for example, corporations, community-based organisations, banks and local government offices, that mediate the distribution of resources and activities at the household and individual or micro-level. Gender is an important factor at this level because there are often inherent inequalities and biases in the public distribution systems and rules of operation by which different markets abide (Kabeer, 1994). For example, Susanne Fleischli's study (in the present volume) of the management of conflict transformation shows that although women are often most affected by ongoing conflicts over water, they remain largely absent from decisionmaking processes at the institutional level. Thus, even the structure of decision-making is crucial at this level as policy makers in financial institutions, governments and businesses provide services based on visible social and physical infrastructural needs. If women's priorities and needs are not addressed in the latter process, women themselves are left out of development practice.

Finally, gendered macro-level analysis is used to describe the connections among the different productive sectors of the economy, for example industry and agriculture, in order to demonstrate how even these larger structures are governed by "social relationships that structure the way activities, resources, power and authority are divided between women and men" (Kabeer, 2003a: 35). Indeed, Diane Elson (2002), a feminist economist, maintains that economic institutions themselves are not gender-neutral. As a result, a gendered view of macroeconomic trends would take into account the unpaid domestic sector in addition to the formal paid sector, into which men have had easier and socially sanctioned entry. A gender-sensitive approach of these sectors would include the value of the often "invisible" work performed by women in the private and informal domains – a value estimated to be equivalent to approximately half of current global GDP (Kabeer, 2003a; UNDP, 1990).

In view of these trends and the analysis derived through drawing connections between gender in the various arenas of social relations, it is apparent that gender inequalities do indeed exist in various forms and domains of society – from the terms of exchange and division of labour, resources and decision-making control in the private domain of the household to that in the public sphere of the economy and society at large. Women's capacities to determine the choices they make in life – i.e. their agency – can often be entirely circumvented by their gendered identity. Their entitlements, which include their right to participate in the social and political life of their community, to the right to own property, to the ability to choose the type and amount of food they consume, are also similarly limited. As Sen (1990) and others have indicated: in both agency and entitlements, women's needs are subsumed and made invisible by various structural factors at differing levels of analysis. Moreover, it is this struggle over agency and entitlements that gives gender frameworks their political nature, and as this struggle begins, is perpetuated and has perhaps the greatest impact in the private domain; households inherently also have a political character (Friedmann, 1992). Thus, it is necessary to view development policy from a gendered perspective and ascertain if and how policies have addressed the needs, concerns and priorities of women. The remaining portion of this paper will concentrate on these issues.

4.2 Historical backdrop to policy approaches in development

Over two decades ago, Buvinic (1983) posited that approaches to women in development had moved from a welfare orientation to one concerned with poverty mitigation, and finally to one motivated by gender equity and equality concerns. Since then, other commentators have modified his argument by suggesting further policy shifts, including the efficiency approach and empowerment objective (Moser, 1989; Kabeer, 1994). Kabeer, in particular, places welfare and efficiency on opposing ends of the policy spectrum. The other approaches are considered transitional phases within this spectrum, with the possible exception of empowerment, which is "yet to be taken seriously by the official development agencies" (Kabeer, 1994).

Moreover, Morrison and Jutting (2004) outline three stylised strains of thought with respect to approaches to women in development. These include the modernisation-neoclassical approach, the Boserup (1970) approach and

finally, later feminist approaches. Briefly, the modernisation approach maintains that gender inequalities will decline as a country develops. This is because increased economic growth entails greater employment opportunities and competition, which in turn is claimed to reduce gender inequalities in education, finance and so forth. Later, Boserup contended that gender inequality and economic growth had a u-shaped relationship. Thus, in a situation where no market economy is evident, inequalities are negligible. With initial levels of growth and development, discrimination against women increases as a consequence of the specialisation of roles, with women, by default, assuming the 'reproductive role' of society and men, the 'productive' function. However, with even higher levels of development and the corresponding transformation of society, Boserup postulated that this trend may be reversed as a result of increased opportunities and demand for women in the workforce. Meanwhile, various feminist writers (for example, Semyonov, 1986; Tinker and Bramsen, 1976) began to emphasise the significant role played by institutions, such as patriarchal family structures, in perpetuating gender inequality. In this situation, economic growth may increase the vulnerability of women instead of mitigating discrimination.

Thus, the prevalence of macro schools of thought with respect to poverty reduction, as well as women and development, is sometimes critical in determining the types of policies that have been implemented. Before these variant positions are examined in the context of their impact on women, however, a brief history of the greater macro-policy environment is necessary. This includes the progression from modernisation theory to the basic needs approach to more recent neo-liberalism, as well as a shift towards "propoor" growth initiatives. Each is important, for they have impacted women differently, and have resulted in differing outcomes for women's livelihoods.

A. Poverty reduction strategies over time: an overview

Modernisation: economic growth with industrialisation

The theory of modernisation developed in the post-WWII era from the belief that it was possible to adopt a unilinear, evolutionary process of change, which could carry societies from a pre-modern stage through a series of phases towards total "modernisation" (Rostow, 1960). Modernisation, in turn, necessitated heavy industrialisation and investment in physical capital. Many developing countries also embarked upon "import-substitution" industrialisation¹ policies through which they could become more self-reliant. Therefore, the achievement of a developed, modern society, entailed a complete breakdown of what was perceived to be pre-modern constructions, including associated institutions, cultures and activities. The result would be a reorientation, from an old structure rooted in relationships of patronage and obligation to a new system based on individual effort and achievement. Labour and human capital, meanwhile, were seen merely as an additional undifferentiated input on the same level as physical capital and monetary investment. The combination of inputs was expected to catalyse a cumulative process of improvements in economic and, by extension, social standards. However, by the end of the 1960s, modernisation had proved a failure as poverty and inequality remained problems to be confronted.

The 1970s: basic needs approach and financial crises

Thus by the 1970s, there was greater emphasis on meeting basic needs and facilitating production on small-holder farms. However, several commentators point out that these approaches were project-based and consequently lacked overall coherence (Kabeer, 2003a). Meanwhile, while these projects were undertaken, the international oil crisis resulted in a general deceleration of growth rates in industrialised countries and a mounting debt crisis in developing nations. The solution, therefore, was to switch focus from fulfilling basic needs and poverty reduction to maintaining macro-economic stability, by controlling budget deficits and balance-of-payments imbalances.

The 1980s neo-liberal ideology: structural adjustment

The 1980s ushered in an era of neo-liberal macroeconomic policies, which emphasised domestic deregulation and fiscal austerity, as well as a 'rollback' of government intervention worldwide. The results were three-fold at the national and international levels: a) the market became the main determinant of price setting; b) state expenditure and intervention was cut back, and c) international trade and foreign investment were more readily accepted by the greater number of countries liberalising their economies (Kabeer, 2003a). On the surface, these developments seemed positive: the markets and their attendant reliance on the profit motive would lead to a more efficient allocation of economic resources, thereby leading to the domino effect of higher economic growth, rising incomes, declining poverty and through the "trickle-down" effect, lower inequality. Overall, "development" would become widespread. While neo-liberal thought, even on its own terms, has proven to be largely unsuccessful, the more important point is that it exacted a tremendous social cost. Thus, organisations such as UNICEF released studies arguing that human welfare had to be an essential component of the economic package, as opposed to a residual hand-out. Arguments along these lines resulted in at least a partial return to direct development initiatives to reduce poverty.

The 1990s: 'pro-poor' growth

While the neo-liberal paradigm has continued to remain dominant at many levels of activity, policy and decision-making, there has been renewed interest in alternative strategies to promote growth. For example, the 1990 *World Development Report* (World Bank) suggested two ways of promoting growth, including encouraging labour-intensive strategies to generate income-earning opportunities for the poor, and increased social investment in basic education and healthcare. Transfers and safety net packages were also seen to be part of a larger package to assist the poor.

Concurrently, the 1990 Human Development Report (HDR), released by the United Nations Development Program (UNDP), built on the work of Amartya Sen and his capabilities framework. This approach puts human agency at the centre of development. Therefore, poverty was a symptom not only of the deprived living conditions of the poor, but also the lack of opportunities that enable people to choose a better way of life. Thus, the UNDP recommended the promotion of "human-centred" development. They also constructed the Human Development Index (HDI) to include measurements such as infant mortality and educational attainment, that were not included in traditional GNP or GDP composites.

The 2000 WDR (World Bank) approached poverty in a more comprehensive manner than the earlier report. It reflected the growing literature on poor peoples' livelihoods and suggested that simultaneous action was required on several fronts to mitigate poverty. Therefore, there had to be a synergy between various policies so that livelihood strategies would have a greater impact. Additionally, the report contained a section on voice, which referred to the inability of the poor to participate in and inform the policies that affect their lives.

Finally, most recently, much attention has been committed to the United Nations Millennium Development Goals (MDGs). Both developed and

developing countries adopted these principles in 2000. The principle goal of the MDGs is mitigating income poverty and achieving human development, gender equality, environmental sustainability and global partnership. Targets and benchmarks are corollaries to these goals, in order to assess their achievement.

B. Women in development policy

WWII to the 1960s: early strategies

In light of these developments, it is necessary to question what position women as a constituency were accorded in each of the stages of development policy planning. Several early theorists posited that modernisation would benefit women for, at the very least, it would replace primordial traditions and institutions with scientific, rational thought and processes. In this way, the traditional extended family, for instance, would be supplanted by the modern nuclear family (Kabeer, 1993). Within the family, labour would be divided between men and women, ideally according to the principle of comparative advantage (Becker, 1965). Because women had a central role in childbirth and child-rearing, it was "rational" for them to specialise in domestic activities. As reproduction was the domain of women, men would be engaged in full-time productive activities. This, in effect, underlined the reproduction-production dichotomy between men and women.

The sex-role theory had a corresponding impact on the way development agencies implemented policies. Kabeer (1993: 24), for instance, contends that the "imprint of sex-role stereotypes on the data-collection practices of development agencies had played a powerful role in defining women as housewives, regardless of local reality." Moreover, the construction and perception of the nuclear family with men as breadwinners and productive agents, and women as mothers, housewives and even 'at-risk reproducers' further marginalised women's position in the policy process (Jaquette and Staudt, 1988). Consequently, much of the mainstream development interventions were focused on men, whilst women were beneficiaries of various welfare programs, from maternal and child health care to family planning. Indeed, Buvinic (1983) notes that while national and international agencies increasingly targeted their welfare programs at women, they also defined their priorities in terms of their reproductive domestic roles.

This deeply entrenched normative assumption regarding the role of women in the household by national and international donor agencies had serious implications with regard to their status in the economy and the long-term sustainability of development interventions. At the very least, it served to further widen the male-female productivity gap and to reinforce the notion of women as dependents. It also failed to recognise the economic value of women's work, as women were largely unpaid although they worked long hours under taxing conditions. Furthermore, it failed to conceive of the large numbers of women who were producers in their own right, even if this was outside the boundaries of the modern, industrialised sector. And where women were producers, as in Boserup's example of female farmers in Africa and East Asia, governments had continually failed to deliver productive inputs to them, including extension services and new technologies, due to widespread and largely erroneous perceptions of female domesticity.

Overall, as the notion of 'development' was conflated with economic growth and this in turn was associated with male-dominated productive efforts in the formal sector, programs for women were treated as an after-thought, dispensed only after mainstream development efforts had been planned and implemented apart from women's needs and priorities (Kabeer, 2003a; Morrison and Jutting, 2005). Women, consequently, were treated as passive beneficiaries, recipients and clients without being actively engaged or consulted in the planning and implementation processes.

The 1970s and 1980s: the emergence of gender-oriented discourse and strategies in development policy

Thus, in the 1970s, when basic needs and rural productivity came to the forefront of development thought, the issue of women in development was also accorded more attention. Moreover, the publication of Boserup's book in 1970 constituted a direct challenge to the development orthodoxy that equated women solely with domestic responsibilities. Her thesis that planners had continually overlooked the needs and priorities of women because of entrenched social stereotypes of their domestic roles, even when they were integral parts of the formal production process, forced the discourse on women in development to move from a welfare orientation to one concerned with gender equality. Boserup's arguments provided an economic rationale to invest in women's issues: women were productive agents and their economic potential had been ignored under the earlier welfare-oriented attitudes towards women's programs. Her work catalysed the "Women in Development" (WID) approach, which acknowledged the significant contributions of women to development and strove for their greater political and economic autonomy and equity. Thus, advocacy work on the part of WID shifted the discourse from welfare sector efforts to efficiency-based arguments in order to integrate women into the mainstream.

However, Boserup's equity-based argument had little success in practical terms in the 1970s. The type of programs she suggested to improve the economic opportunities available to women implied a reordering of gender, and more extensively, power relations in society. This would have run counter to the cultural bases on which societies operate. The largely male-dominated development agencies were equally reluctant to adopt her recommendations, as she also called for gender equality in these institutions.

Moreover, feminists analysing the WID approach revealed that proponents of the approach continued to rely on neoclassical economic-growth models in articulating their development goals. The approach was based on the premise that development planning ignored women and, as such, argued for the re-allocation of financial and natural resources to benefit them. However, the WID approach failed to question whether the concept of economic efficiency was based on the exclusion of the specific gendered constraints women face as producers (Barriteau, 2000). In addition, theorists did not explore whether responsibilities traditionally considered as falling in the realm of women's work could have contributed to creating conditions of economic inefficiency (Barriteau, 2000).

Nevertheless, Boserup's argument, as well as the WID framework, reverberated with other scholars for many years to come. Rogers (1980), for example, in her analysis of women and their marginalisation in the development planning process, also underlined the point that women were rational economic agents. She, however, included an interesting new aspect to the argument: the continued exclusion of women in development would be detrimental not only to women, but also to the development process as a whole. Against the backdrop of the growing debt and financial crisis of many countries in the developing world, women as a constituency could no longer be ignored as economic agents and producers. Thus, the primary issue was not that "women needed development, but that development needed women" (Kabeer, 1993: 25). This argument, in the end, proved most effective in persuading development agencies to concentrate on women's priorities as it spoke to the agencies' prerogative of encouraging efficient allocation of resources (Kabeer, 1993).

Box 1: Empowerment: The Role of Power and Choices

"Empowerment," is a highly contentious notion. The lack of clarity surrounding it reflects the nebulous definitions that characterise its root concept, power – one of the most contested concepts in the social sciences (Rowlands 1997 in Kabeer 1999). Indeed, because the nature of power is highly contested, any definition of empowerment is bound to be more value-laden than other concepts in the social sciences (Kabeer 1999). Nevertheless, understanding the notion of power is central to approaching empowerment as a concept, and power in turn, can be considered in various ways.

Kabeer (1999) provides a particularly effective way of looking at power and empowerment. She frames the concept of power in terms of the ability to make choices, though this alone is not to be equated with empowement. Empowerment necessitates a pre-existing stage of disempowerment, whereby "those who have been denied the ability to make choices acquire such ability" (Kabeer 1999: 3). Thus, empowerment involves a process of change. To illustrate, people who have always had choices available to them in life are not necessarily empowered – though they may be powerful--for they were never in a position of disempowerment.

Empowerment should also be conceptualised within a framework that accounts for the interdependence between individual and structural processes of empowerment. The latter concept, in particular, can affect individual resources, agency, achievement and even individual interests. Three levels of change can be discerned: immediate level change, which occurs as a result of individual agency and achievements; changes at the intermediate level, which are alterations in the distribution of rules and resources; and finally, deeper transformations in structural relations of class, caste or gender.

Thus, various efforts were initiated in this time period – that is, from the mid to late 1980s – to promote not only income generation projects and production skills, but also to encourage enterprise skills. Women's microfinance was one such effort, as it played on the economic efficiency motive and encouraged local entrepreneurship in a way other programs before it had not (Premchander, 2005). These efforts constituted an attempt to target women and use them as factors of production to deliver greater benefits to the wider family or community unit. Overall, the efficiency argument provided a powerful argument to focus more attention on the concerns of women, especially in light of the neo-liberal policymaking climate of the time. However, inputs

to enhance access to economic resources on its own do not necessarily translate into better or more sustainable livelihoods for women.

The 1980s also marked the beginning of the Gender and Development (GAD) critique, which came into vogue in the 1990s. The activism and research of various international feminist movements revealed the need for more explicit efforts to address women's concerns, through a restructuring of society, as well as the removal of remaining sources of structural inequality between women and men (Morrison and Jutting, 2004; Barriteau, 2000). In fact, many Southern and some Northern feminists insisted that development policies would not succeed if they were not "engendered" (Barriteau, 2000). Thus, by 1986, DAWN, an influential women's organisation based in Bangalore, India, had initiated work that defined development in gendered terms - as "socially responsible management and use of resources, the elimination of gender subordination and social inequality and the organisational restructuring that can bring these about" (Sen and Grown, 1987: 2). This outlook was a precursor of the emerging empowerment approach, which advocated "progressive changes in public-private relations to benefit women" (Barriteau, 2000).

The 1990s and beyond: the move towards social policy-based approaches and the empowerment framework

The advent of the 1990s precipitated a shift in global policy pronouncements, towards a greater emphasis on the crucial role of social policy in the development process (UNRISD, 2005). However, this has not occurred without conflict: diverging views on the appropriate scope and institutional mechanism of social policy have led to different institutions championing differing methods for achieving change. For example, some international financial institutions continue to base their policies on a largely neo-liberal economic model, wherein targeted aid by the state is used to fill existing gaps by providing safety nets for the poor, while the non-poor seek social provision through the market (UNRISD, 2005; Kabeer, 2003a). Meanwhile, an alternative view holds that any development strategy must integrate social objectives. This requires that the state be a major provider of resources to ensure adequate and equitable social protection.

In light of these differing views, international organisations have approached poverty and human development in different ways, with a greater emphasis on concepts such as empowerment and participation. However, Kabeer (2003a) notes that despite these larger changes in language, the approach to gender has remained largely the same: it is still an issue relegated and addressed within specific social sectors, with many development agencies focusing on women's access to education, particularly primary education. Thus, gender-based issues continue to be on the margins when it comes to the design of policies and production-related strategies.

Box 2: Intra-Household Economic Models

Economic analyses of the household tend to be framed in terms of decision-making. A prime example is the neo-classical Beckerian view of the "joint household welfare function" (Becker 2001 in Kabeer, 2001: 263). This approach, however, is being replaced by methods of analysis that attempt to view households as arenas wherein "different members have different, possibly conflicting preferences" (Kabeer, 2001: 263). This, in turn, necessitates negotiation or bargaining. Bargaining power is not, however, equally distributed between members of the household and as such is a reflection of their 'breakdown' or 'fallback' positions (Kabeer, 2001). This concept refers to the "potential utilities" they would have in case household co-operation collapses.

A deeper analysis of household power dynamics is provided by Sen (1990) in his 'co-operative conflict" model of household decision-making. In his assessment, Sen points to certain intra-household and extra environmental features which are likely to affect bargaining power and hence allocational outcomes within the household. Perhaps the most important of these is the perceived economic contribution of members of the household. In this regard, it is not so much the actual value of any particular contribution towards the household that matters, but the perceived value. Often perception is influenced by the mode in which the contribution is made – that is, whether productive contributions arose from market transactions or subsistence consumption; whether they consisted of cash, as opposed to kind; and whether employment occurred outside the home or within, all contribute towards a certain perception of contribution, regardless of whether this matches up with reality. For example, the World Bank's 1990 WDR did little to address the gender dimension of poverty. While it did collect gender-disaggregated data on variables such as health, education and labour force participation, which showed women were often disadvantaged in comparison to men, a gendered analysis and recommendations were often confined to disparate boxes, which focused on issues such as women's higher rates of loan repayment. Additionally, where gender issues were addressed, it was largely confined to sectors that dealt with social services for the poor (World Bank, 1990; Kabeer, 2003a). Women's issues continued to be conflated with both welfare-oriented approaches and their reproductive roles, as demonstrated by pronouncements to mitigate maternal mortality and the negative effects of high fertility on mothers' health. Girls' education was also given special attention. Thus, policy recommendations varied, from introducing scholarship programs for girls to increasing the number of female teachers and female participation in the work force, in general, to finally improving primary health care targeted at mothers.

The *Human Development Report* (UNDP, 1990) that same year also only addressed gender issues in a cursory manner. While it noted that poverty had been 'feminised' and recognised that gender inequality was a global problem, it also pointed out that women were less qualified than men and as a result, garner lower paying jobs which encumbers their ability to earn a living to support their families. The 1995 HDR (UNDP), however, had an explicit focus on gender equality, due to the impending UN Fourth World Conference on Women in Beijing. The report, though differentiating between the bases for discrimination in countries of the global South and North, found overall that inequities in the structures of power would impede the realisation of gender equity through reliance on market processes alone (Kabeer, 2003a). Instead, positive action was required by governments to ensure women had equal access to productive resources.

Five years later, the 2000 WDR offered a more comprehensive view of gender issues. The report particularly noted gender as part of its key theme of empowerment. It recognised the structural determinants of gender inequity, as demonstrated by discriminatory kinship and community norms and larger public systems of provision and authority (Kabeer, 2003a). Thus, the report argued for a gender approach to poverty mitigation as it viewed gender equity as instrumental in conferring social and economic benefits. It did not, however, offer a gender-based analysis of the working of markets, suggesting "the Bank continued to see the market as impersonal and hence "genderneutral" (Kabeer, 2003a: 17). Furthermore, the World Bank's 2001 Report, entitled *Engendering Development: Through Gender Equality in Rights, Resources and Voice* was perhaps the most far-reaching contribution to date on the issue of gender inequality. It had a renewed focus on micro-level household dynamics, which serve to subordinate women, and used newer models of household economics to further explore structures of power. It also linked gender-biased customs and traditions at the household level with practices in larger legal, social and political structures to show how processes at different levels work together to reproduce and exacerbate gender inequality. While the report analysed labour markets and the processes of globalisation, its final recommendations encompassed broad-based economic growth strategies, as well as rights-based approaches to development.

Finally, in 1996, countries in the Organisation for Economic Cooperation and Development (OECD) presented a number of International Development Targets (IDTs) which were designed as part of an over-arching goal of reducing poverty. These subsequently became the basis for the Millennium Development Goals (MDGs), instituted in 2000 at the United Nations Millennium Summit. The MDGs encompass a variety of goals, including halving world poverty by 2015 and encouraging human development, environmental sustainability and gender equality. Targets and indicators were also set to monitor progress on each of the goals. However, the goal of achieving greater equity and equality for women was often subsumed by the larger agenda of meeting human development targets. Thus, the goal of making progress towards gender equity was largely demonstrated by targets to mitigate gender differences in primary and secondary school enrolment and through a commitment to the reduction of maternal mortality. There was also an emphasis on improving reproductive health services. While these goals on their own are vital, they are not sufficient for the achievement of gender equality and equity. Women's agency and voice, their ability to make choices, and the value they assign to themselves are also necessary for the achievement of equitable and sustainable livelihoods for women. Nevertheless, the MDGs are important, for they make gender equality an explicit goal. And while gender goals may be conflated with human development objectives, intermediary targets such as achieving higher female political participation and education levels can go some way in eventually closing the gender gap (Kabeer 2003b).

4.3 Gender in development research and policy: challenges and opportunities

In view of the preceding discussion on women in development planning and more importantly, development practice, it is important to return to the question of whether planners have attended to the needs and concerns of women in a way that has mitigated gender discrimination and inequality, leading to more sustainable livelihoods. Moreover, have development agencies to date been successful in mainstreaming gender concerns into their planning and implementing processes?

Box 3: A Case of Marginalizing the Most Vulnerable: Food/Cash- for-Work Programs in the Aftermath of the December 2004 Tsunami

Typically, relief programs – for example, food-for-work initiatives – implemented in the aftermath of the devastating tsunami in December 2004 are for rubble removal and reconstruction. These have traditionally been tasks performed by men in Indonesia. Cultural norms, therefore, often preclude women from working alongside men on these sites. Hence these food/cash-for-work programs, which were in theory designed to help all disaster victims, tend automatically to exclude households headed by women, in which women, as breadwinners, are responsible for earning a living to sustain the livelihoods of their families and themselves. Thus, the most vulnerable women to begin with are further marginalised and excluded from the opportunities provided for sustenance in the wake of a human and natural resource disaster (Kejser, 2005). In this scenario, an explicit examination of women's priorities, partnered with a programme design that incorporated women's realities, could have alleviated the extra burden placed on women after the tsunami.

Before addressing these questions, however, it is necessary to qualify both questions and possible answers with regard to several issues that continue to preoccupy scholars and planners alike. First, women as a group are not homogeneous. Indeed, class, caste and ethnic identities and alliances frequently cut into gender-based orientations and may in fact run counter to, or sometimes repudiate, the goals of gender-sensitive development planning and processes – that is, what is perceived as being 'good' policy for every woman may not be good for women of a particular ethnicity or class, as it

questions the inherent power structures that underlie the fabric of <society. For instance, a woman enjoying high status relative to other women (and men) owing to her class or caste affiliation may not benefit from certain gender-sensitive programs intended to mitigate inequality, as this would erode the basis of her power. Gender, as a concept, is conflicted. This means that policies which seek to address the concerns of women cannot necessarily capture all needs or priorities. Thus, planners need to formulate clear programs that are multi-dimensional in scope and nuanced in approach to achieve the objective of greater gender equity, and ultimately to improve the lives of women.

Box 4: Conflicting Prerogatives of Microfinance? Financial Sustainability vs. Empowerment

The proliferation of microfinance services has occurred in the past two decades, at least partially because these services rest on the economic rationale of financial sustainability through small-scale lending and savings - or 'thrift' - activities. While microfinance, and more specifically, the self-help groups (SHGs) through which women tend to save, remain a powerful means to break individual women's isolation and provide a forum for collective action, the underlying principle of operational and financial sustainability has been problematic. This is primarily because inordinate amounts of time and money are invested in maintaining the sustainability of the intervening microfinance institution itself and not enough effort on building capacities at the community level and ensuring the sustainability of women's livelihoods (Premchander, 2005). Thus, the model of credit for credit's sake or as an end on its own is in danger of subsuming the concept of credit as a means for achieving social mobilisation and empowerment. Hence even microfinance - an oft-purported route to mitigate poverty and gender-based discrimination - is in itself not achieving what it had initially set out to do.

The second contested policy discourse concerns the issue of 'mainstreaming' gender prerogatives in development planning. While on the one hand gender mainstreaming is viewed as being essential for the formulation of policies that are sensitive to women's unique circumstances, it often happens that by "mainstreaming gender," the explicit focus on issues important to women will also be removed. This is not a far cry from gender-neutral or gender-blind policies, which may purport to help all people, but in reality exclude women. On the other hand, maintaining women and women's issues as a separate category in the policy planning and implementation stages may continue to marginalise women, as initiatives formulated to address their needs are considered separately (and in a derivative manner) from other more "conventional" forms of intervention. Both these arguments are valid, and as such it is important to develop comprehensive and multivariate policy mechanisms to ensure that women's priorities are not ignored at each of the institutional and structural levels of society. As a result, any policy change must address the biases inherent at the macro, meso and micro levels of social relations.

Thus, in view of these qualifications, several comments are warranted on the general trends in development discourse and policy as they pertain to women. First, at the most basic level, a large gap remains between discourse and practice. While advances in theory have purported the benefits of empowerment, "the actions of individual donors often fail technically" (Morrison and Jutting, 2004: 12). In fact, a report entitled Transforming the Mainstream, Gender in UNDP (UNDP, 2003) notes that development agencies have failed to adopt a "social relations' framework, a concept that addresses the power structure of a society in a broad sense, including processes and relations. Instead, agencies have continued to use the "gender roles" approach, which is primarily concerned with the household unit and the allocation of resources among family members (Miller and Razavi, 1998). Consequently, many development interventions have lagged behind in addressing the power imbalances that underpin women's lives. While voice and participation have entered the development lexicon as the new catch phrases, many agencies are slow to internalise these values and continue to operate according to the prerogatives prescribed by the economic efficiency argument, or worse still, ignore women's needs altogether. As a result, serious attention needs to be paid at all levels of action - including the micro, meso, macro and even global - to ensure that women's priorities are better addressed. The factors that could affect change at each of these levels are included below.

A. Affecting macro-level change

In recent years, there have been explicit commitments on the part of various national and international development actors to both the goals of poverty reduction and achieving greater gender equity. There is also an increasing conceptual and theoretical understanding of the connection between the two. As a first step, legally and institutionally engendering a rights-based approach to development is essential as an over-riding principle for action (World Bank, 2001). In fact, the World Bank publication, Engendering Development, suggests that a state can:

tax and subsidise, persuade and regulate, prohibit and punish, or provide services...It can directly prohibit prejudicial behaviour – such as when it requires enterprises to hire workers on the basis of skills rather than on the basis of sex, and sanctions or fines violations.

This can come in the form of instituting measures to redress systemic and persistent inequalities in political participation. For instance, legislation that stipulates a minimum 33% quota for women's participation in the municipal *Panchayati Rajsystem*² in India, is an example of overt state action to promote greater equity. However, it is important to keep in mind that the system is also prone to misuse by local elites, who appoint leaders aligned with them through family, caste or political affiliations. Therefore, in addition to measures designed to encourage equal participation of women in political bodies, it is also necessary that women-only forums be created to provide the space for women to develop their confidence and leadership abilities (Premchander and Chidambaranathan, 2004). This would facilitate women's efforts to occupy community spaces on more equal footing.

In addition to direct state action, it is also necessary to entirely debunk several precepts of orthodox economic thinking, which pervade development interventions by national and international organisations. Kabeer (2003a) lists three such biases: the "deflationary bias," the "marketisation" or "commodification" bias and the "male breadwinner" bias. The deflationary bias refers to the undue concern that international financial institutions, such as the World Bank and IMF, have given to what is perceived to be "sound" economic policies. Price stability, the avoidance of high inflation and controlling budget deficits are among the primary indicators of "sound" policy. However, these concerns are often placed in opposition to social justice prerogatives. Indeed, macroeconomic stability and a concern for ensuring essential public services are not mutually exclusive, although the discourse still occurs in the language of trade-offs. Meanwhile, the marketisation bias refers to the widespread belief in the price-mechanism as a benchmark for valued work. This has obvious implications for gender-sensitive policies, as this approach often renders women's work, which is often unpaid, invisible. Finally, the "male breadwinner" bias refers to policies implemented on the premise that men tend to be household heads. As a result, interventions intended to support livelihoods and provide safety nets are often targeted at men, thereby preventing many women – including household heads – from claiming their entitlements. Taken together, these policies seek to promote economic growth through individual efforts in the market, without recognising that people participate in markets on a highly unequal footing. It also fails to acknowledge the social justice argument for public policy. As a result, equity as a concept, let alone gender equity, is precluded by the continuing application of only the efficiency and growth prerogatives over other public policy goals.

In addition to theoretical shifts, practical efforts at the global level to institutionalise gender-sensitive planning and design by international and national institutions include carving out a greater role for women's needs and priorities in the design and implementation of Poverty Reduction Strategy Papers (PRSPs). Kabeer (2003a) notes that one way to fulfil the scope for mainstreaming gender in the PRSP process is through the development of a national Poverty Reduction Strategy Gender Action Plan. This would serve the purpose of ensuring that the gender gaps and shortfalls identified by poverty analysis are redressed through instituting assessments and assigning programs and projects that could address these concerns.

Another policy instrument shown to engender greater transparency and accountability of policy processes, as well as to ensure that resources are allocated in accordance with policy objectives, is gender-responsive budget (GRB) analysis (Kabeer, 2003a). This can occur at a range of different policy levels, including the national, sectoral and local. Indeed, different countries have experimented with different methods and levels of GRB analysis. Often, the results have differed depending on the methodology chosen; however, the process has demonstrated the importance of the political climate for such analysis to have any influence on the design of policy (Kabeer, 2003a). For example, in the UK, Australia and South Africa, the process has been aided by the election of progressive political parties. This has had the effect of associating GRB with particular political platforms, instead of being viewed as an aspect of development policy (Kabeer, 2003a).

There are several advantages to using GRB. Because budget analysis necessarily involves government departments and ministries, it furnishes officials across sectors with the opportunity to integrate gender into their work. Additionally, because finance and planning in budget management and general policy decision-making are crucial, GRB initiatives could establish gender issues as a core component of government operations and financial management (Kabeer, 2003a). This can occur in several ways. For example, a government could decide to explore the gender implications of decisions about overall levels of deficit or surplus through examining "their likely feedbacks in terms of unpaid time or estimating the economic costs of various actions that might affect women and men differently" (Kabeer, 2003a: 221). It could also solicit the views of women and men to measure responses to proposed policy changes. While beneficiary assessment exercises have largely been exercised in relation to specific programmes, Kabeer and others have noted that this practice could be "upstreamed' to the assessment of policy measures. Depending on the answers derived, GRBs could be used to better align public expenditure with professed development goals. This could include anything from greater expenditure targeted specifically at women and women's programmes to re-channelling existing expenditure towards measures designed to promote gender equality. These measures could ultimately catalyse systemic gender-aware policy appraisals of various policies at the international and national levels (Kabeer, 2003a), leading to the implementation of more appropriate and gender-sensitive programmes and processes across various sectors.

B. Affecting meso-level change

As PRSPs, for example, are only one component of a larger net of national policies, it is important to translate the potential for participatory processes and strategies at this level into sectoral policies. In addition to performing gender analyses in different sectors, this also entails identifying the interlinkages that conflate at the meso level by considering: a) livelihood strategies at the micro-level, with their emphasis on the numerous ways poor people survive daily; and b) macro-level trends of growth, which incorporate the importance of human, social, financial, natural and physical capital (Kabeer, 2003a). Practically, this involves identifying various synergies and trade-offs between and within sectors that are relevant to reducing gender inequalities. One significant example of a limitation facing women involves the availability and use of time: women face severe time constraints, diminishing their productivity and income derived from farming efforts. Several time-allocation studies performed in South Asia and Africa (Premchander, 2004) to examine the activities and time available to rural women have found that women farmers are often plagued by poor productivity and returns on labour. As a result, they are unable to upscale or purchase agricultural inputs (Kabeer, 2003a). This tends to happen where "it is common for women to engage in more than one task at a time" (Premchander, 2004) often resulting in work overload. Men, by contrast, are able to expand into off-farm enterprises and diversify their profit sources, which they can use to improve their farming inputs. Thus, in situations where men do not share their profits with female members of the household, women's time constraints emerge as a significant limitation. Consequently, this could be addressed in a variety of ways, including government intervention to distribute subsidised labour-saving technology to women farmers or through the facilitation of collective forums for mutual self-help.

Thus, at the meso level, it is critical to create, reorient and facilitate institutions to encourage and establish equal rights and opportunities for women and men and to create new structures and forms of association to bring women into the public domain on a (more) equal footing. These structures or institutions can take any number of forms: they may be cooperatives, which encourage collective action; microfinance groups that confer credit as a means to empowerment and not just an end in itself; labour unions to address the interests of working women in various sectors, including home-based and informal sector work; and/or social movements that demand fair and equitable access to resources and rights. In addition, the improvement of infrastructural capacities – for example, improved roads, better or closer access to facilities such as water pumps – are essential for lightening women's work loads.

All in all, collective action is necessary to build capabilities and engender participation at the grassroots level. This straddles the meso-micro divide, as it involves individual action that can lead to collective community-level mobilisation.

C. Affecting micro-level impact

Instituting changes at the household and individual micro-level is the most difficult challenge for planners interested in developing gender-sensitive development programs. However, it is only when change occurs at this level that impact is most clearly felt. Household and individual-level impact is created in a variety of ways, but for analytical purposes, two methods include: a) top-down policy approaches that support transformations in socially constructed norms and principles, and b) collective action at the grassroots level. These top-down and bottom-up methods of invoking change cannot occur in a vacuum: they are interdependent and often synergistic. Thus, policy changes and implementation at the macro and meso levels are certainly needed to mobilise active citizenship and action at the grassroots. By the same token, increased social mobilisation at the grassroots engenders changes in wider social norms and practices. In this way, a positive synergy between macro, meso and finally micro-level activities can lead to overall improvements in women's livelihoods.

Finally, some studies have demonstrated that in addition to outward structural impediments, both women and men retain inner barriers, which prevent women from coming forward and becoming leaders and decision-makers in their own right. These fears relate to the conflicting inside-outside dichotomy and demands on women's time for their reproductive and productive roles. Thus, ultimately, deeper attitudinal shifts in both women and men need to go hand in hand with other social, economic, institutional and political efforts at change, in order to catalyse a true transformation towards more equitable gender relations. Arguably however, systemic political and institutional amendments need to precede attitudinal shifts where cultural orientations can become obstacles to achieving greater equity for women.

4.4 Conclusion

The preceding analysis has sought to unravel the processes whereby societal and institutional structures have perpetuated the inequality of women. Unequal relations between women and men begin at the private household level, but are replayed in the public domain through a variety of institutional arrangements, practices and attitudes. While it is apparent that strides have been made in thinking and conceptualising the causes and consequences of gender-based discrimination in recent years, it is also clear that actual policy re-orientation and the reconstitution of institutional structures on the part of international development agencies have occurred at a much slower pace. Indeed, while a formal agenda encompassing gender equity is now commonplace in the stated goals of many donor agencies and governments, the translation of these policies into greater resource transfers and inclusion of women in planning and design processes, remain limited. For example, key interventions such as microfinance continue to target women as productive factors rather than agents of "development" in their own right. Instead, investments in women's collectives, perhaps in the mould of the SelfEmployed Women's Association (SEWA) in India, may do more to not only strengthen individual women's capacities to access resources and power, but to also support collective capabilities in the struggle for gender justice.

All in all, it is necessary to mainstream gender concerns at all institutional levels, from the micro to meso to macro, in order to affect change. In this way, it is possible to connect private efforts with community-based struggles; these in turn, are relevant to national and international struggles, and *vice versa*. Thus, what begins as a request for subsidiary welfare benefits of development becomes full-fledged demands for rights. Similarly, individual or community-based opposition to structural norms, such as oppressive labour divisions or women's lack of decision-making power within the household, can be translated into wider efforts to institute meso- or macro-level changes that make it possible for women to reach positions of authority or improve their bargaining positions. In the final analysis, it is through the creation and integration of these kinds of links and measures that development planners and agencies, governments, NGOs and social movements alike can better facilitate the transformation of individual women's agency into collective capabilities in the fight against gender-based discrimination.

Endnotes

'Import substitution entails replacing imported goods with products produced domestically.

²The Panchayat Raj institutions refer to the third-tier municipal level of government administration in India. The 73rd Amendment to the Indian Constitution, passed in April 1993, further stipulated that one-third of the total number of seats be reserved for women. One-third of the positions of chairperson of the Panchayats at all levels were also to be reserved for women.

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Part II

Case Studies from NCCR North-South

5 Gender-Based Analysis of Vulnerability to Drought among Agro-Pastoral Households in Semi-Arid Makueni District, Kenya

Chinwe Ifejika Speranza

This study analyses how gender relations shape vulnerability to drought in the semi-arid areas of Makueni District, Kenya. As an empirical study, it uses both gualitative and guantitative methods and data based on the 1999/2000 drought. The study area is a marginal environment of low agricultural potential and poverty is widespread. The interplay of environmental and socioeconomic pressures on agro-pastoral households, and the compulsion to conform or to be perceived as conforming to the prevailing gendered traditional rules and norms, influences the capabilities of men and women to secure their livelihoods in non-drought periods. There is a repeated pattern whereby changes in household responses to environmental pressures come mainly at the expense of women. In times of drought, gender relations also shape the coping strategies of women and men in various ways, and the impacts of drought on household welfare challenge the traditional roles of men. Thus gender roles and relations, as well as expectations, are in flux. The study examines the different impacts of drought on women, men and children that may occur as a direct result of drought or indirectly through accompanying changes. Age also influences exposure to the impacts of drought. It is concluded that strategies to mitigate the impacts of drought need to take account of these disparities in gender relations in order to strengthen the capacities of women and men to overcome vulnerability to drought.

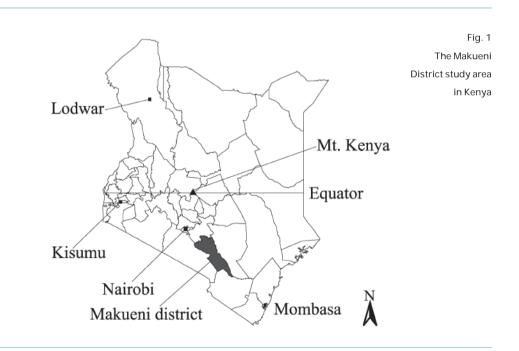
Introduction

Drought has different impacts on various household members and social groups. Several studies have shown that the poor, the aged, women and children, are more vulnerable to livelihood stresses and the impacts of drought (Njiro, 1999; Ernason, 2000; Bradshaw, 2004; Mishra et al., 2004; Premchander, 2004). Although such impacts are influenced by age and wealth status, this study primarily focuses on how gender influences the differentiated impacts of drought on members of agro-pastoral households.

This research is part of a broader work on modelling drought vulnerability and risk, which aims at using an integrative approach to capture the different dimensions of drought. At the outset, data were collected on households using questionnaires and targeting either the household head or the spouse. During the literature review, the author perused reports on gender and drought. However, during the fieldwork and analysis of the responses of men and women from the pilot survey, it became clear that gender is not only an analytical category but a crucial one that has to be highlighted as such, by lifting it out of the livelihood concepts within which it is implicitly embedded. Thus, the methods of data collection and analyses were expanded to incorporate gender into the analysis framework. This integration will facilitate a better understanding of women's and men's capabilities and strategies in mitigating the impacts of drought. A gender-based analysis of vulnerability to drought provides a framework for examining how societal rules, norms and identities cause unequal distribution of capabilities between men and women, and how this influences their responses to drought and their experiences of the impacts of drought. This disparity can be in terms of roles/ responsibilities, division of labour, decision-making authority, power relations within households, or access to and control over household resources and benefits. The specific aim of this study is to assess how men and women respond to drought, and how gender roles and relations mediated the impacts of drought during the 1999/2000 drought.

5.1 The study area

The semi-arid area of Makueni District (Figure 1) is a marginal environment of low agricultural potential. Rain-fed agriculture and livestock keeping are the two main sources of livelihood. The rainfall pattern is bimodal with very erratic and unreliable rains of short duration that allow for only short cropgrowing periods. The major crops grown are maize, cowpeas, pigeon peas and beans. In most seasons, the value and amount of the labour invested in crop farming is greater than the amount and value of the harvest (Jaetzold and Schmidt, 1983). In addition, the area is prone to drought, and in the last ten years has experienced droughts of various extent and intensity in 1997, 1998, 1999/2000, and in 2003/2004. As a result, crop failures and food shortages are common. Off-farm employment opportunities are limited in the local economies, and many, especially men, migrate to urban centres to look for employment.



5.2 Definitions and concepts

The four key concepts underlying this study are gender, household, action theory, and vulnerability. Gender refers to the constellation of rules, norms and identities in a specific society that prescribe and proscribe behaviour for persons, in their social roles as men and women (adapted from Kevane, 2004). In every society, access to and control over resources and social position is gendered and related to specific rules, norms and identities. Gender is socially determined and dynamic between and within societies, and as such also changes as cultural norms and values change. Gender is distinct from sex. Sex is biologically determined, while gender is socially constructed. Among other things, activity profiles, access-control profiles and gender needs assessment are part of gender analysis.

The household is the unit of analysis in this study and forms the framework within which gender roles and relations are analysed in detail. A household is a group of people who share household resources and contribute to the welfare of the household, including those household heads that live off-plot, because they regularly remit money to those living on-plot and considerably influence decision-making, use and control of household resources. A household continuously varies in its characteristics. Sometimes household members cooperate to achieve family well-being through acts of love, altruism and reciprocity. At other times, men, women and children aim to satisfy their own self-interest. They negotiate and bargain over household resources and make choices based on their preferences because of their positions within a social structure.

According to Wiesmann (1998: 37-44), action theory provides "an actor-oriented perspective for interpreting the actions and strategies of individual actors and their underlying meanings". Action theory is based on the premise that the actions and strategies of individual actors are exposed to and shaped by environmental conditions and that actors are embedded in value systems, social norms, networks and hierarchies.

Vulnerability is generally defined as exposure to livelihood risks and the incapacity of people to cope. It has both an internal aspect, comprising peoples' capacities, and an external aspect, dealing with exposure to livelihood risks (ibid). Bohle et al. (1994) define vulnerability as "an aggregate measure of human welfare that integrates environmental, social, economic and political exposure to a range of harmful perturbations". The Intergovernmental Panel on Climate Change (IPCC 2001) defines vulnerability as "a

function of the character, magnitude and frequency of climate variation to which a system is exposed, its sensitivity and adaptive capacity". According to Knutson et al. (1998) vulnerability can be measured by "the ability of the actors to anticipate, cope with, resist, and recover from drought".

Drought is an interval of time during which rainfall at a given place rather consistently fall short of the climatically expected rainfall (modified from Palmer 1965). It does not have the same impacts within a household or a society because of the different entitlements of people. Vulnerability is a key concept in analysing these different impacts and their underlying causes, as it not only focuses on limitations and lack of access to resources important for coping, but also focuses on the prospects of being able to cope in future. Thus, it is important to analyse the assets, entitlements and livelihood strategies of men and women prior to a drought in order to understand why they experience drought impacts differently and how they cope with them. An analysis of current vulnerability serves as a basis from which future impacts can be predicted and mitigated.

5.3 Methodology

This study uses a mix of quantitative (statistical analysis) and qualitative methods to analyse data collected in a longitudinal survey on agro-pastoral households, data from participation in farmer field days, interviews, and group discussions. Data were also collected through analysis of secondary literature, especially recent reports of Participatory Rural Appraisals containing activity, access, control, and seasonality profiles as well as gender needs assessment. Using the household as the unit of analysis, two surveys focusing on 127 respondents in 8 villages were carried out between January 2002 and March 2003. In the first survey, the aim was to collect baseline data on the livelihood conditions and strategies of agro-pastoral households and factors that affect them in non-drought periods. The second survey focused on the 1999/2000 drought and how agro-pastoralists perceive drought, how they coped with and recovered from its impacts and the factors that influenced their actions.

The reason for carrying out two surveys was to facilitate understanding and analysis of agro-pastoral livelihoods and strategies in non-drought times, how these change in drought times, and to facilitate comparison between the two situations. The preliminary findings were validated at the district and village levels in workshops and group discussions.

5.4 Research questions

The following questions were the entry points for analysing how gender shapes vulnerability to drought:

- 1. Are there differences between how women and men perceive drought and famines?
- 2. How does drought impact differently on women and men in the study area?
- 3. Do gender roles and relations positively or negatively influence vulnerability by strengthening or weakening:
 - a. preparedness measures?
 - b. coping and response strategies?
 - c. recovery capacities and strategies?
- 4. What mitigation measures can be implemented to reduce the vulnerability of households to droughts, bearing in mind a gender-balanced approach?

Firstly, these questions are answered by analysing the baseline situation of men and women, gender roles and relations, division of labour, decisionmaking, access to and control over resources, social organisation and networks, and the household structure of the interviewed persons. Based on this background knowledge, their perception of famine and drought, as well as their experiences of and responses to drought impacts, were examined. The key gender variables that influence intra-household vulnerability to drought were then classified according to their negative or positive contributions.

5.5 Results and discussion

Gender and vulnerability prior to drought

Gender roles and relations

The rural areas of Makueni District are still predominantly governed by traditional norms and values. Rain-fed agriculture and livestock keeping are the major livelihoods. Off-farm activities are increasingly becoming crucial, especially for access to cash. In the Akamba patriarchal system, the husband is the head of the household. In the traditional subsistence farming system, the norm was that the wife contributes her labour to work on the family farms. Although these traditional norms and values have partly become obsolete with the advance of the market economy, they still influence the definition of roles for both women and men. In the context of the prevailing patriarchy and the onset of the monetary economy, the husband is expected to provide for his family as a breadwinner, or be perceived as doing so. In the same context, the wife is the homemaker, takes care of the home and children, and is expected to support the husband to achieve household goals. However, in such a semi-arid and dynamic marginal environment, the input of both husbands and wives is needed to achieve household welfare. Hence traditional roles may seem to be maintained on the outside, but within the family women play a vital role in maintaining household welfare.

In the case of widowhood, divorce or single parenthood, women also head households. Where an elderly woman with an adult son is the household head, the adult son generally takes over headship after marriage and the birth of the first child. This change in headship also depends on intra-household power structures, as well as individual expectations and understanding of household roles.

Generally, providing shelter, security, education, clothing, and cash to meet medical expenses are the husband's responsibility, but wives also make considerable contributions to achieving these. Both provide food and work on the farms. Nursing the sick and maintaining family cohesion, especially in polygamous families, is the responsibility of women as co-wives. Both men and women perceive family needs as being shared responsibilities, but wives expect husbands to provide the cash to purchase household needs. This can be explained by the role of husbands as breadwinners and the fact that husbands have more access to cash income from off-farm activities than their wives. The foregoing reveals the dichotomies in the perception by women and men of household responsibilities and the changing views of what is expected of a man or his wife.

In order to secure their livelihoods, husbands and wives have become flexible about what they should do and their own expectations of who does what. The minimal income from sale of farm produce and the demand for cash to meet household needs forces men to take on off-farm income-generating activities in urban and rural areas. As a result, women increasingly take on men's roles. However, men are not taking on women's roles *per se*, but are also increasingly contributing their labour to roles formally regarded as female. This overlap/shift in roles is mainly under conditions of stress for the household, as in times of drought. As the situation normalises, the participation of men in women's roles generally declines.

The influence of gender roles as a limiting factor on women's mobility is different for married and unmarried women. The mobility of married women is restricted by their roles in the household, especially the care of young children and the elderly, while young unmarried women also migrate to urban areas like their male counterparts, in search of employment.

Gender-based division of labour

The primary human capital of smallholder farmers consists of labour, time and knowledge. In the study area, men engage both in on-farm and off-farm activities, while most women do household and farm work. There is a shortage of labour that is increasingly becoming a major constraint in farm work. It has led to shifts in gender-based division of labour, mainly at the expense of women.

Women carry out both reproductive and productive work. The reproductive work is not measured in monetary terms and includes childcare, care of the elderly, cooking, cleaning the house and compound, milking animals, fetching water and firewood. The productive work comprises ploughing, planting, weeding, harvesting and post-harvest tasks. Women are usually not active in produce marketing; hence they have little or no access to and control over income from produce sales. In order to access cash, women make baskets and ropes, and engage in petty trade in vegetables, women's crops, and poultry.

Men are primarily engaged in productive work that has monetary value. They work on-farm, clearing farms, terracing, ploughing, planting, grazing animals and managing pastures, and are very active in the marketing of farm produce. Where men live off-farm, they come home during the harvest as a way of taking stock of what is being harvested and to regulate its use.

Many male heads (MH) mainly work in off-farm sectors. As a result, there is always a shortage of labour during the peak farming periods in February/March (harvesting, planting and weeding), and during July/August (harvesting, digging terraces and manuring). The lack of adequate family labour unfavourably affects timely harvests and preparation of the farm for the next season. Thus, the strategies of migration and the shift of male labour to off-farm sectors create labour constraints on the farms at the expense of women and other household members, who must take on additional tasks for which MHs were formerly responsible, thereby increasing their workload. Despite the increased workload, women have little or no control over the sale of grains and the income from it. This tension was exemplified by comments of villagers during the group discussions:

Village man: "What is wrong is people (men) opt to look for jobs but when they hear that there is good harvest, they just come to stay idle at home".

Village woman: "Others vanish, do not send anything home and only when there is good harvest do they re-surface".

During the rainy season, men (those who work on-farm) work between 10-12 hours daily, on the farm as well as grazing cattle, while women work for up to 13 to 15 hours daily in the household and on the farm. Women and children spend as much as 3 hours daily fetching water for domestic use and for watering livestock. During the dry season the workload for men is reduced to 8 hours daily, while for women the hours spent working remain largely the same.

Decision making, access to and control of household resources and benefits This section focuses on access to land, to crops for subsistence and as sources of income, to cash, and livestock ownership and utilisation.

MHs control family assets such as land, livestock, trees for timber, sand, and food, and they feel it is their responsibility to do so (Government of Kenya: GOK, 1999; author's fieldwork 2002-2003). Men own the land and its products, while women, through marriage, have access to but no rights to the land. Women do not own important assets and according to Njiro (1999: 114) "their ownership of any property is at the mercy of the men". According to traditional norms, if the MH dies, his children or male relatives inherit the household assets, while the widow cannot inherit these assets but may continue to use them. The situation is more unfavourable for childless widows, as they are totally dependent on the goodwill of their husband's relatives to continue cultivating the family land.

Both women and men can be the key decision makers in the specific farm activity they carry out. However, MHs can unilaterally decide which sections of the farm are to be used for crop production and grazing. They also decide what should be grown and how, even if they live off-farm. Those MH that live off-farm send money for the purchase of seeds or provide seeds. MHs put emphasis on income generation from crops and favour crops that have market value, while women tend to mix crops with the goal of guaranteeing food availability for household consumption. Through consultations, discussions and negotiation, a certain mix of crops is grown on the household plots. Women have more control over poultry, fruit trees and small farm implements such as hand hoes (*Jembe*). Just as poultry is for the women, there are crops known as women's crops: sweet potatoes, pumpkins and cassava. Although these crops are drought-tolerant, they have very low market value; hence in times of drought women feed their households on them, thereby cushioning their households against hunger.

Access to cash is determined by activities in the off-farm sector, wages from casual jobs, and control of income from livestock and farm-produce sales. Because men earn mostly off-farm income, they have more access to cash. The control over income from produce sale varies from household to household and is mostly negotiated, but men mainly have the upper hand. Based on consultation between husband and wife, grain is sold for payment of school fees and for expenses. It was reported in the group discussions that in many cases, MHs and their spouses do not consult on individual needs but sell some produce to provide pocket money for their own self-interest. Selling grain without the knowledge of a spouse means there is no overview of stocks and their duration. This exposes the households to food shortages. Moreover, very few households do food budgeting.

There is no distinct association between post-harvest strategies and household characteristics. The tendency to sell produce is associated with the need for cash. Hence grains are sold to generate income to meet current needs. Food is bought when the household reserves are exhausted, provided that cash is available.

Livestock is the major household asset. MHs control the sale of large stock such as cattle, goats and sheep, while wives need not consult their husbands before selling small stock such as poultry, which fetches little income. Women milk the animals and sell milk to buy small day-to-day items needed by the household. In some households, a wife works to buy livestock and once it comes home, the husband has to be consulted before the wife can sell the livestock. Generally, the husband has the right to sell the wife's property without her permission. The property of the wife belongs to the husband but not vice-versa. In case a household member falls sick, the wife cannot take the decision alone to sell goats and cattle for medical treatment. She has to use other avenues to generate money – borrowing until the husband is consulted. After she receives the husband's permission, the usual procedure is then to contact a male relative to sell the livestock.

During group discussions, the issue of mismanagement of household funds and assets was discussed. The women mentioned that they had limited powers to influence how and when household assets are invested or divested. However, the majority agreed that decision-making and work are progressively being shared between men and women, and that women are influencing decision-making and control of family assets more than ever before.

Social networks and group organisation

Since most women are relegated to life within the homestead, their social network comprises their female neighbours and clan. Men, on the other hand, have wider networks because they are more active in crop and livestock marketing as well as in off-farm activities. Both men and women attend village gatherings (Barazas), organised by extension workers and Non-Governmental Organisations (NGO). Group organisation can be differentiated between the mandatory organisations and the optional ones. Active membership (payment of fees) in the clan groups is mandatory but not enforceable for both men and women. The main goal of such clan groups is to foster clan welfare through contributions in the form of funeral expenses, education of some members, political support, financial assistance of the elderly and the sick, as well as various clan projects.

Another example of semi-mandatory membership is the burial association, which aims to reduce funeral costs for the individual. Culturally, relatives shoulder the funeral costs of other relatives; hence it is prudent to reduce the costs of a funeral by joining funeral organisations instead of bearing the costs alone. Church organisations are not mandatory, but it is expected that church members join a church group. These church groups foster the welfare of the poorest among the poor, as members contribute food or firewood and donate them to needy families. In addition, they also offer one another assistance with farm work. Groups in which membership is optional include the Mwethya mutual help/self-help groups and the self-help savings groups (Merry-go-round; Kielo). Mwethya is a group comprising relatives, friends and neighbours called upon by an individual who needs help with a definite short-term task, while Mwilaso traditionally consists of a group of friends who work on each other's farms on a strictly rotational basis (Tiffen et al., 1994).

While 35% of the respondents were organised in mutual help/self-help groups, 50% were members of savings associations. The activities of such groups can be economical in terms of promoting income-generating activities, or in the form of mutual assistance with farm work (farming groups)

such as terracing, weeding, planting and harvesting, or in ecological activities such as soil conservation, planting of trees, trenching steep lands to conserve soil, or social welfare activities such as construction of schools, wells, feeder roads, dispensaries and health centres. There is a significant difference (Fisher's exact test, p = 0.014, 2-sided) in membership in selfhelp financial groups between male and female respondents. Women are more likely than men to be organised in the self-help savings groups (Merrygo-round; Kielo). This can be explained by the fact that many women do not have access to cash income due to their engagement in reproductive and productive activities that offer limited control over income from crop and livestock sales. Thus participation in financial self-help groups offers them access to cash. Women mentioned that men spend a lot of time at leisure, but men maintained that the time supposedly spent on leisure was productively spent on maintaining social networks.

Household structure and organisation

The sample comprises 127 respondents representing the households. The age of the respondents ranged from 20 to 79 years; 32% were male and 68% female. The characteristics of the respondents are displayed in Table 1. The lower number of male respondents is due to the fact that during the field visits we mainly met wives at home, as their tasks are on the homesteads, while their husbands were migrant workers or already went to work off-farm.

The household structure can be simple, consisting of the Household Head (HH), usually a man, his wife/wives and children. It can also be complex, comprising three to four generations – the MH, his aged mother, his sons, their wives

Respondent's position in the household by gender	Respondent gender sample N (%)		Total households N (%)	
	Male	Female		
Household head	37 (29)	10 (8)	47 (37)	
Wife		69 (54)	69 (54)	
Daughter-in-law		4 (3)	4 (3)	
Son of household head	4 (3)		4 (3)	
Daughter of household head		2 (2)	2 (2)	
Mother to household head		2 (1)	2 (1)	
Total	41 (32)	86 (68)	127 (100)	

Table 1

Cross tabulation of respondent positions in the household by gender and children. The HH can also be a woman. A distinctive feature of a household is that all members share one major granary and are answerable to one HH.

Of all the household heads, 90% were male and 10% female. The 90% Male Headed Households (MHH) comprised 69%, where the MHs lived on-plot, and 21% where the MHs are active in off-farm sectors and lived off-farm. These 21% of households where the MHs lived off-farm are regarded as Female Managed Households (FMH) because the MHs continue to exercise considerable control over household assets and decision-making. Due to the limited off-farm income-earning opportunities in the rural areas, these MHs (21%) migrate either on a seasonal/temporal or permanent basis to urban centres, mainly Nairobi and Mombasa, and remit money back to the villages to support the household.

The 10% Female-Headed Households (FHH) constitute those households where the MH was dead or where the wives no longer had any ties to their husbands. If the FHH and the FMH are combined, there are 31% of the households where women are considerably involved in decision-making and carry the burdens of the day-to-day running of the households.

A differentiation of activities of household heads and their places of residence (Table 2) shows that all Female Heads (FH) live and work on-farm. However, the fact that all FHs live on-plot is not statistically significant (Chi-Square, p = 0.54, 2-sided; Fisher's exact test, p = 0.069, 2-sided). This can be explained by the small number of FHs (13/127).

N=127		Main activi	ties of hous	se <mark>hold h</mark> ead	ls N (%)		Cross tabulation of
Gender of house- hold head	Place of residence	Not active in off- farm sectors	Partly active in on-farm and off-farm sectors	Mainly active in various off-farm sectors	Mainly active in specific off-farm sectors	Total N(%)	residence of household head by activity (on-farm or off-farm) and
Male	On-plot	36(31)	33(29)	1(1)	18(16)	88(77)	gender of house-
	Off-plot	1(1)	0 (0)	1(1)	24(21)	26(23)	hold head
	Total	37(32)	33(29)	2(2)	42(37)	114(100)	
Female	On-plot	13(100)	0(0)	0(0)	0(0)	13(100)	
	Total	13(100)	0(0)	0(0)	0(0)	13(100)	

Table 2

In 68% of the households, either the HH or the spouse was engaged in offfarm work; this applied to 17% of the spouses. This comprises those that combine work at home with farm and off-farm work (13%) and those that combine work at home with off-farm activities (4%). However, a majority of the wives (73%) were active on the farm as well as in the household. There is a relationship (Chi-Square, p = 0.007, 2-sided; Fisher's exact test, p = 0.005, 2-sided) between the gender of the houshold and the HH being solely active in the off-farm sector, and between gender and the HH combining on-farm and off-farm work (Chi-Square, p = 0.024, 2-sided; Fisher's exact test, p =0.021, 2-sided). This means that MHs are more active in off-farm work than FHs, while FHs work in the household as well as on the farm.

Household size and dependency ratio

If only the HHs and those living permanently on-plot are considered, the average household size is 7 persons. This value slightly matches the districtwide average household size of 6 persons (GOK, 2002). However, it has to be considered that a household can consist of many generations with complex structures. The sons of a family usually migrate and remit money back home to their wives, children and parents, who live together. In some households some children visit a boarding school and only come home during the holidays. Thus considering all household members, the average household size was 10 persons, while FHH have an average of 14 members. A determining factor in household size was the age of the HH. There was a positive correlation (Spearman's rho = 0.46 at p = 0.01 level 2-tailed) between the age of the HH and household size. This particularly applies to the size of FHHs headed by elderly widows, due to their lifecycle stage.

The average demographic dependency ratio is 103 dependents for 100 working persons, whereby for 15% of the households this ratio ranges from 133:100 to 300:100. However, the ratio of dependents to income earners (including those working in subsistence agriculture) was higher, namely 142 dependents to 100 income earners, whereby for 15% of the households this ratio ranged from 200:100 to 500:100. In the context of widespread poverty, households with high dependency ratios do not have enough resources to carry them through drought periods.

Dependency ratio by household type

According to the Mann-Whitney U test, there was no significant difference (p = 0.063) in dependency ratios between male-headed households (MH) and FH. However, there was a significant difference (p = 0.033) in the earning/non-earning dependency ratios between MHs and FHs. MHs have a

higher earning/non-earning dependency ratio than the FHs. Since many FHs are elderly, the FHs consist of many working-class adults who earn income, by comparison with MHs consisting of fewer adults.

Income levels and poverty

The mean monthly household income in Kenya Shillings (Ksh) was 13,630, (USD 182, using an exchange rate of 1U\$D = KSH 75). MH earned on average Ksh. 3,774.- (USD 50) while FH earned Ksh. 2,212 (USD 29) and the wives of the MH earned Ksh. 1,969 (USD 26). The male respondents earned on average Ksh. 3,793 (USD 51) per month while the female respondents earn Ksh. 2,073 (USD 28). As illustrated in Table 3, there is greater variation in income between and within households.

According to the Mann-Whitney U test, there was a significant difference (p = 0.000) in monthly income between male and female respondents and between MHs and their spouses (Wilcoxon signed ranks text, p = 0.000). Male respondents earned more than female respondents, and MHs earned more than their spouses. However, there was no significant difference (Mann-Whitney U test, p = 0.61) between MHHs and FHHs in household income, income per capita, or the income of household heads. The fact that the difference between MHHs and FHHs was not statistically significant can be explained by the small sample of FHHs (N = 13, 10%) compared to the MHHs (114, 90%). However, intervening factors such as age and household structure also played a role. There was a positive correlation (Spearman's rho = 0.54 at p = 0.01, 2-tailed) between the age of HH and household

Table 3

Income in I	Ksh	House- hold income	Income level (MH)	Income level (FH)	Income level (spouse (s))	Male respon- dent income	Female respon- dent income
ample N		127	114	13	112	41	86
lean		13′630	3774	2212	1969	3793	86
Mode		5500	2750	1250	1750	2750	1750
Minimum		0	0	250	0	0	0
Percentiles	25	5500	1750	1250	1250	1750	1250
	50	10′250	2750	1750	1750	4250	2750
	75	17′750	4250	3500	1750	4250	2750
	90	30′000	8500	4250	4250	8500	4250
Maximum		75′250	15′000	4250	15′000	12500	15000

income. As highlighted earlier, households with older heads also have many adult members who contribute to household income. Thus households headed by older women make up for the gender-based difference in income between household heads through contributions from its many adult members.

The mean income per capita was Ksh. 1,303 (USD 17), which was slightly higher than the poverty line estimated for rural Kenya (Ksh. 1,239~USD16.5/Adult equivalent/month in rural areas - Government of Kenya 2000). However, in 58% of the households, members lived below the rural poverty line and had to do with less than Ksh. 1,239 every month. This widespread poverty and the fact that women have lower incomes than men limits their options to prepare for stress periods like drought, and thus contributes to their vulnerability.

Education

Education is a major strategy to escape poverty, and both male and female children attend school. The level of education is generally low, and does not go beyond secondary and local polytechnic levels (Table 4).

There was neither a significant difference between the education levels of the HHs nor between male and female respondents. As the education levels of MHs rose, so did those of their spouses (Spearman's rho = 0.51 at p = 0.01, 2-tailed). This correlation has to be understood in the context of education levels that are very low in any event, and the influence of gender differentiation at such low levels is not significant.

of ation of	N=127	Male or f (Percent)	emale HH	Male or female respondent (Percent)	
ehold heads	Level of education	Male	Female	Male	Female
espondents	No formal schooling	14	46	17	13
nder	Did not complete primary school	33	38	44	30
	Primary school certificate	25	8	20	34
	Did not complete secondary school	3	0	2	8
	Ordinary level (O Level)	16	8	15	15
	Informal training	3	0	0	0
	Formal training (e.g. polytechnic)	2	0	2	0
	Training after O/A levels	4	0	0	0
	Total	100	100	100	100

Table 4

Income and education

There was a significant positive correlation between the level of education and the income of the HHs (Spearman's rho = 0.57 at p = .01, 2-tailed). As the level of education rose, so did the income. This was also the case for income from off-farm activities, as off-farm activities correlated with higher incomes (Spearman's rho = 0.56 at p = 0.01, 2-tailed). The total income of the household also increased as the number of household members working off-farm increased. As previously highlighted, since all HHs active in the off-farm sector were male, it follows that they earned higher incomes than their spouses, who were generally active on-farm and the FHs, who also were solely active on-farm. Thus, women generally have limited access to cash incomes, which constrain their capacity to cope with livelihood stresses and thus increases their vulnerability.

Occupation

The major sectors in which household members were active were trade and transport, and the informal enterprise sector comprising *jua kali* (craftsmanship) – bicycle repair, manufacture of stoves, brick-making. Other sectors are production, education, health and social services, agriculture, ranching and forestry, as well as domestic labour (watchmen and housemaids). Very few persons worked in the civil service.

For those households where the MH lives and works off-farm, the wife becomes the manager of the household, receiving and carrying out the directives of the off-farm husband. Consequently, wives take on male roles and tasks such as clearing land, ploughing and making decisions for the family (GOK, 1999 [1,2,3]; Tiffen et al., 1994; own fieldwork 2002-2003). The wives are not really the HHs, but with the absence of MHs, their influence in decision-making increases. However, major decisions such as the sale of cattle or allocation and use of farm income are largely influenced by the MHs. On the other hand, an MH is under pressure to provide for his household, and not being able to do so puts him at risk of losing his decision-making power in the household. In such a context, where maternal influence increases and male influence and role diminishes, respect for the MH and his own self-respect decline. This can lead to conflicts over expectations in individual roles and shifts in power structures within the household.

Further, the absence of their husbands puts wives in an unfavourable position. For example, their turn in using the family oxen for ploughing can be easily overridden by a male relative of the MH. Because many MHs are engaged in off-farm sectors, the workload on their spouses increases. Wives have to manage the household, the farm and the livestock, and are constrained by the shortage of labour in maintaining or increasing production levels. Nevertheless, in times of drought, remittances from the off-farm MHs compensated for the reduced yields due to lack of rainfall.

5.6 Perceptions and impacts of the 1999/2000 drought on agro-pastoral households

In the following section, a gender-based analysis of the perception and vulnerability of the agro-pastoral households to drought is presented. The impacts of the 1999/2000 drought are used as entry points to assess the intrahousehold vulnerability to drought.

In semi-arid Makueni District, drought is closely intertwined with food shortages and famine. In a multiple response set, 69% of the respondents attributed drought to God's wish to punish mankind, 21% to a lack of trees due to deforestation and lack of afforestation, and 12% regarded drought as caused by changes in weather patterns and conditions.

On the other hand, famine was mainly attributed to lack of rainfall (73%). However various other factors such as poor farming methods – late planting, no weeding, choice of seed varieties (45%), mass selling of farm produce (29%), crop pests and diseases (23%) as well as small cropland sizes (14%), were also mentioned as causes of famine. Only 11% mentioned God's plan as a cause of famine.

In statistical terms, there was no significant difference between male and female respondents in their knowledge and perception of drought (Chi-Square, p = 0.119, 2-sided) and famines (Chi-Square, p = 0.184, 2-sided). The great proportion of man-made factors that foster famine reveals the current incapacity of the rural households to deal with livelihood constraints, even in the absence of drought. It also indicates that there are many options for interventions to increase the resilience of households to famine.

An important strategy for reducing drought vulnerability is the ability to access information on the likelihood of drought occurrence, be it in the form of seasonal outlooks broadcast on radio, information from extension officers, consulting diviners, or looking out for signs of drought in flora and fauna. The assumption is that with prior information, the farmers can take appropriate action to increase their resilience to the impacts of drought. Only 29% of the households had prior information about the likely occurrence of the 1999/2000 drought, mainly from the radio. As a common practice, 36% consult sources for forecasts on the next season, while 64% do not. Of those who had foreknowledge of the likely occurrence of drought, 70% adapted their strategies in anticipation of drought times ahead, by planting drought-resistant crops and seeds, planting early maturing crops, and stopping to sell their stored grains and saving money. However, there was no significant difference between what male and female respondents do to prepare for drought. If the practice of accessing information on the likelihood of drought occurrence is taken as a proxy for drought preparedness, the foregoing shows that only 36% of the households source this information, while others respond to drought when it occurs.

Although the households classified the 1999/2000 drought as a light drought, it impaired the well-being of 85% of the households in various ways. In what follows, a summary of the major impacts of the 1999/2000 droughts on household welfare and their interplay with gender is presented.

Food shortage and food insecurity

Food shortages are usually experienced in the months of January to February and during various periods between June and December. During the 1999/2000 droughts, 91% of the households experienced food shortages, for an average of 3 months in 1999 and 5 months in 2000. In the following nondrought year of 2001, 24% still experienced food shortages of at least 3 months' duration. By 2002 the proportion of households experiencing food shortages for at least 3 months had further declined to 4%.

Due to reduced harvests and crop loss from the 1999/2000 drought, households adjusted their consumption patterns by reducing the amount of food cooked (48%), the number of daily meals (45%), and food variety (36%), such that the staple meal (Githeri), which is a mixture of maize and beans became increasingly a maize-only meal with little or no beans. Both men and women had to purchase grains at higher prices compared to the prices for which they sold the same grains previously. By the end of the drought, 64% of the households had reduced the number of their daily meals, 56% the food amounts, and 42% the food variety. Thus, the longer the households faced food shortages, the less diversified their diet became. In what follows, the interplay between household structures, age of HHs, gender and drought impacts is explored with the aim of identifying how they foster vulnerability. Although larger households are more likely to experience longer durations of food shortages as compared to smaller ones (Spearman's rho = 0.194 at p = .05, 2-tailed), there is no significant correlation between dependency ratios and duration of food shortage. A distinction between FHHs which have elderly female heads (life cycle developments) and those that have younger female heads shows that the households headed by younger women have fewer productive members, and thus a high dependency ratio, which makes such households more vulnerable to drought impacts such as food insecurity.

In times of acute food shortage triggered by drought, some women elaborately "clean" and cook infected, contaminated or chemically preserved grains, thereby exposing themselves and their households to health hazards such as Aflatoxicosis. Knowing that the food might be poisonous, they test the effects of consumption on themselves before serving the household; thus they become the first victims of food poisoning. It was reported in the group discussions that the pressure on women to equitably distribute the little available food increased, and many reduced their own rations to the benefit of other household members. In households affected by food shortages, MHs are faced with their failure to provide for the family. Many avoid direct confrontation with their wives by spending longer hours outside the home to seek food or to be seen as doing so.

Changing gender roles and relations

As drought impacts increase and the capacity of the household to cope declines, domestic tensions rise as men are seen (and see themselves too) as failing to meet their responsibility of providing for the family. As noted in the group discussions, this may result in domestic violence and loss of authority for men. However, the major positive impact of drought on gender roles and relations is the change in the expectations of men and women about activities that are regarded as male or female.

Shifts in gender-based division of labour

The distance and time spent fetching water increased (5 km and 4 hours) considerably during drought. Under normal circumstances, it is the duty of children and women to fetch water. Because permanent water sources are few during drought and the groundwater recharge rate low, women spent longer hours at water sources queuing to fetch water. In addition, the amount of water needed in the household increased, as some households preferred to

water their livestock at home as a way of preventing the livestock from crossinfection through contact with other animals. These longer distances to fetch water and the responses to them further increased the workload of women.

Women acknowledged that men were increasingly assisting them in the household, hence in some households, both men and women equally collected water, grazed livestock, and did the planting. Due to the scarcity of water, the incidence of conflicts also increased. In crises and unsafe situations with great potential for conflict, men fetched the water, and sometimes during drought water had to be fetched in the night, as the recharge rate was faster than during the day. Thus, the drought triggered shifts in division of labour and caused changes in the expectations of men and women about their roles in household tasks.

During times of drought, both women and those MH who mainly work on farms invest a lot of time looking for alternative means of earning money through casual jobs, fetching firewood and water for sale, gathering wild fruits, and burning charcoal. As mentioned in the group discussions, women were increasingly taking over charcoal burning which was previously the domain of men, as men shifted to other more lucrative activities. Before the drought, 26% of the households produced charcoal for sale, of which 16% increased the amount of charcoal produced to compensate for missing income from crop sales during the drought. After the drought, only 5% of the households continued to produce charcoal.

Pressure on social networks and group organisation

During the drought, the financial self-help groups were forced to reduce their activities to the minimum. This was because of the impecunious circumstances of their mostly female members, as they could not afford to make their financial contributions anymore. Thus the vulnerability of the women increased, as they were not also able to meet other cash needs. After drought, as the financial situation of the women improved, activities within the groups also picked up. However, this fluctuation in activities curtails the effectiveness of such groups in the financial empowerment of the women.

Reduced income, assets and increased indebtedness

Most casual jobs available are linked to on-farm activities, hence wage labour became scarce for 22% of the respondents who were hitherto employed in on-farm wage labour. Since livestock sale is the dominant household strategy and a panacea for solving most problems, livestock prices plummeted during the drought, as many households sold their livestock to acquire money to buy food. Thus, the households experienced a decrease in income. In addition to livestock sales to compensate for lack of income from crops, 21% of the households sold other assets such as bicycles (6%) and land (5%), while 7% did not have anything to sell.

At the beginning of drought, 54% of the households were selling livestock to buy food. By the end of drought 33% could still do so. During the drought, 27% of the households borrowed money mainly from friends (12%), relatives (7%) and neighbours (5%) to buy food to feed the household. As an alternative, 24% of the households also borrowed food from the above-mentioned sources in addition to buying on credit from the local cereal stores. There was a significant difference in borrowing money between male and female respondents (Fisher's exact test, p = 0.017, 2-sided), as more female respondents borrowed money to buy food. In order to provide for household needs, and considering their already limited access to cash, women went into debt more than men by borrowing money or food to feed the household.

Government, NGOs and churches provided relief and used the number of children per household, age, widowhood, orphanage and health status, as criteria for distributing food to the affected households. 22% of the respondents participated in Food-For-Work (FFW) activities, while 47% received relief. The difference in gender participation in collecting relief was significant (Fisher's exact test, p = 0.023, 2-sided), while gender differentiation in participation in FFW activities was not statistically significant (Fisher's exact test, p = 0.07, 2 sided). It was confirmed in the group discussions that women mainly go to collect relief because they are the ones who cook. After the drought, 34% of the households continued to receive relief from the government and NGOs in addition to the school feeding programme, which was also running during the drought period.

Increase in school dropouts and reduced enrolment

As a result of reduced or no income from crop and livestock sales during the drought, some parents had difficulties paying school fees. For 17% of the households that could not pay the fees, the school authorities sent their children home from school. It has not been established whether male children drop out of school more frequently than female children, or vice versa. Rather, many children above 10 years old, including many that were attending class 4 to 8 in the primary school and those in secondary schools, dropped out and did not re-enrol after the drought. These adolescents were old enough to contribute to household welfare; hence they took on casual

jobs (Kibarua), as herds-boys and housemaids, to raise some money to help their parents. The tendency of early marriage is not common among the Akambas. For those households that could afford to pay the school fees, the School-Feeding Programme (SFP) remained a good incentive to leave the younger children in school. Without the SFP, attendance slowly drops as drought evolves (Information from Statistics office, Wote 2002).

5.7 Proposed indicators for a drought vulnerability index using a gender approach

It must be stressed that gender factors are mainly mediated by access to resources and social position, which are linked to cultural norms and values. As such they are mainly qualitative measures and are difficult to quantify. This limitation can be overcome through the use of proxy factors, which positively or negatively shape gender influence on drought vulnerability.

On the basis of data analysis and validation at field levels, indicators of the positive and negative contributions of gender to drought vulnerability are displayed in Table 5. This classification is based on the definition of Knutson et al. (1998), that vulnerability can be measured by "the ability of the actors to anticipate, cope with, resist, and recover from drought". Table 5 provides basic information on the major indicators that can be used for assessing the intra-household preparedness, response and recovery capacities and strategies. For example, the indicator "Women active in both farm and off-farm activities (paid work)" (see Table 5) would mean for a household that if a wife has paid work, she has better access to cash which increases her assets (+) and makes her better prepared (+) for stress such as in times of drought. The indicators for a drought vulnerability index. Integrating gender aspects into such an index increases the effectiveness of the index for drought vulnerability analysis and prediction.

Table 4

Level of education of	Indicators (*disaggregated by sex and gender)	Assets	Preparedness/ response	Recovery
household heads	Household structure and characteristics			
and respondents	Households headed by women with children younger than 15 years old	(-)	(-)	(–)
by gender	Level of education above secondary and technical levels*	(+)	(+)	
	Dependency ratio higher than 102:100	(-)	(-)	(-)
	Poverty and access to income			
	Income levels below poverty line for rural Kenya*	(-)	(-)	(–)
	HH or spouse active in both farm and off-farm activities	(+)	(+)	
	Women active in both farm and off-farm activities (paid work)	(+)	(+)	
	Other adult household members earn income	(+)	(+)	
	Division of labour			
	Ownership of oxen by the household	(+)	(+)	(+)
	Availability of permanent water infrastructure or source (< 3 km)	(+)	(+)	(+)
	Decision-making, access to and control of resources			
	Number of poultry in the household (>10)	(+)	(+)	(+)
	Cultivation of women's crops	(+)	(+)	(+)
	Availability of fruit trees	(+)	(+)	(+)
	Woman owns land	(+)	(+)	(+)
	Social network and group organisation			
	Membership of women in self-help groups	(+)	(+)	
	Membership of women in financial self-help groups	(+)	(+)	

5.8 Conclusion

The foregoing shows that gender is an important analytical category that determines vulnerability to drought. Gender determines access to and control over resources, as well as social position. Thus it shapes the capacities and strategies of women and men in decision-making, access to paid work, land and livestock. For men, this means that their role as breadwinners, which is already difficult to fulfil in non-drought times, becomes even more difficult. It also means that the situation of women, who are already overburdened and have limited access to resources in non-drought times, is further exacerbated by drought, thus increasing their vulnerability.

The key messages (KM) can be summarised as follows:

- 1. Because of the migration of MHs and the increased participation of other MHs who live on-farm in off-farm activities, women are taking on more male activities than before, but this is in addition to their other roles in the household and on the farm. Hence their workload continuously increases as men migrate and divert their labour to off-farm activities.
- 2. On the other hand, the off-farm incomes of the men cushion the households from the impacts of drought, provided that the MH remits money on a regular basis and that drought does not affect the off-farm sector where he is active.
- 3. Women are still mainly active in the households and farms and as a result have limited access to cash income from off-farm activities. Thus, their financial capacity to cope with drought is limited.
- 4. Men control income from livestock and crop sales. Although household expenditures are negotiated, MHs have more influence on the use of farm income.
- 5. Women are more likely to engage in self-help financial groups, but due to their limited financial capacities, the groups become dormant during drought and have to be reactivated after most droughts. Thus their effectiveness in the empowerment of women is limited.
- 6. Despite the increasing responsibilities of women, men continue to make the decisions and control household assets. Women have not been able to reap the benefits of their increased labour input on the farms by increasing their access to and control over income from farm produce sales. Although women can legally own land, for poor women it is more difficult to exercise this right due to their social position.
- 7. Age is another important analytical category that intersects with gender to determine vulnerability to drought. Adolescents are more likely to drop out of school, due to their relatively mature age, to look for casual jobs to help their parents. Many do not return to school after drought. Also, households headed by younger women have a higher dependency ratio than those headed by older women. Thus the pressure to achieve family well-being further increases with the occurrence of drought.
- 8. MHs are under constant pressure to live up to their roles as breadwinners for the household, and this pressure increases with drought.

It therefore follows that the resilience of both men and women needs to be strengthened to enable them to secure their livelihoods in normal and drought times. In relation to the above-mentioned findings, the following measures are proposed:

- Mainstream gender and ensure implementation by all the relevant institutions (Government of Kenya, NGOs, community organisations and churches etc.).
- Promote the gender-sensitive low budget mechanisation of farm work to reduce the amount of time and labour spent on the farms and to increase the efficiency of production. This relates in particular to KM1 above, and will reduce the workload of women.
- Institute gender-sensitive public awareness campaigns. This will reduce the pressure to adhere to gender roles despite changing contexts; this relates to KMs 4, 6 and 8.
- Establish community banks, extend micro-credit institutes to villages and guarantee transparent and fair transaction conditions applicable to poor rural areas. This relates to KMs 5 and 8.
- Develop rural infrastructure such as water facilities. This will reduce the amount of time women and children spend fetching water and improve rural health.
- Promote complementary farm activities such as fruit farming. This may influence men to invest their labour in farming.
- Strengthen and increase women's financial capacities through promotion of complementary off-farm income-generating activities such as poultrykeeping, where women traditionally have ownership rights, as well as through stabilising and increasing the efficiency of the self-help groups already established.
- Control and stabilise the spread of HIV/AIDS. The Makueni District Development plan (2002-2008), estimates that 10-20% of the district population are infected. Although, the issue of HIV/AIDs has not been focused upon in this study, it is very important, especially with respect to male migration.
- Maintain existing free primary education and extend it to secondary and technical levels. Institutionalise apprenticeship training. Although education is costly, the households recognise its value and all capable households already implement it as a long-term strategy to reduce their vulnerability to drought.

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6 Beyond Economics: Analysing Micro-Finance from Women's Perspectives Using a Sustainable Livelihood Framework¹

Smita Premchander and Jason Klinck

Micro-credit as a method of poverty reduction in India and internationally has become mainstream since the 1980s. However, the effectiveness of micro-credit programmes in improving women's lives depends on synchronisation of the end goals, as well as the methods of the provider and the client. These conditions are not always met, owing to vastly different contexts. Thus, despite provider attempts to improve outcomes by adjusting supply, there is still a gap resulting from differences in the ways that institutions and women operate. This article illustrates how integrated use of sustainable livelihoods frameworks helped to analyse impact of microfinance at different levels: individuals, self-help groups, community.

6.1 The evolution of the micro-finance industry

India, one of the poorest countries in the world, accounts for 15% of the global population and 27% of the world's 1.3 billion absolute poor. India has a hierarchy of social groups amongst its population, with the lower castes and tribes making up the majority of the poor. The resulting ethnicity of poverty (Satyamurti, Haokip, 2002) has created very high indebtedness among the poor, especially lower-ranking Scheduled Tribe (STs) and Caste (SCs) members in rural areas forcing to borrow from moneylenders. Historically, informal lenders – commission agents, pawnbrokers, goldsmiths, traders and landlords – have provided most of this credit. However, there is no assurance that these lenders will not exploit their clients, as market imperfections allow them to impose local monopolies whereby they can charge exorbitant interest rates (Harper, 1998). Over a long period of time, this relationship creates a strong dependency between money lenders and clients.

Credit on soft terms was intended to be a means by which the government, NGOs and international donors could combat poverty by removing indebtedness and freeing the poorest groups in society from the accompanying constraints (e.g. bonded labour, lack of assets). Rural credit interventions by the Indian government were initiated in the pre-independence period, with the involvement of the banking sector after the 1970s. Over the past two decades, there has been special emphasis on a wide range of partnerships involving government, donors and a range of civil society organisations for poverty alleviation and rural development. One of the major fields of intervention in recent years is micro-finance services and linkages, an industry that has grown tremendously in provision of services, both internationally and in India.

Micro-finance has proliferated all over the world in the past one-and-a-half decades, with a variety of models adopted for delivery of financial services. In India, the government-controlled institutional structures of the banking and cooperative sectors have developed micro-credit provision significantly over the last several decades. These structures cover financial demand in agriculture, industry, infrastructure and other sectors important for the development of the country, though they are largely driven by the State and leave control in the government's - not people's - hands. Donors introduced NGOs to micro-finance in India in the mid 1980s. Even as NGOs grappled with the issue and experimented with micro-finance through a group-based methodology, the banking sector experimented with it too. This led to a series of changes in the way banks reach the poor, occurring from 1991 to 2002, motivated by a closer relationship to the government's agendas, facilitated through the nationalisation of banks and provision of subsidised interest rates. The attitudes of bankers were slow to change; they did not initially see the poor as a market (Robinson, 2001; Harper, 2002). This has now started to change, with banks offering unsubsidised credit to women's self-help groups (Wilson, 2003; Srinivasan and Castro, 2003). There have also been positive changes in the cooperative sector, with legal reforms that reduce government control and offer greater scope for market forces to operate.

The success of such "improvements" in micro-finance delivery can be measured through their effective impact in reducing poverty. Studies of the impacts of development interventions, however, are often undertaken at the behest of donors, with a supplier's perspective on the use and impact of money. They can embody institutional cultures and perspectives, motivations, and understandings of the concept of poverty and development, and thus miss many significant impacts falling outside the scope of economic impact and outputs.

Women's self-help groups are central to understanding the impact of microcredit, since they are used as mechanisms of delivery of finance, and are concerned with gender issues. However, the dynamics of self-help groups in relation to changing gender relations has received little attention in impact studies (Johnson, 2003). Micro-finance clients are situated in a livelihoods context with geographical, ecological, economic, socio-cultural and institutional specificities that influence the way money is used in that context. However, these contextual factors are insufficiently addressed in studies of the impact of micro-finance. Traditional impact studies track the use of money from suppliers to women, to micro-enterprises, and then to benefits arising from these. In following this impact chain, studies encounter problems in determining benefits, due to the functions of cash as well as attribution of impact to one intervention.

Thus the impacts of micro-finance will be poorly understood without an understanding of what the central resource – money – means to the women using it to influence their livelihoods. Similarly, understanding the way they access and manage money is necessary for an appreciation of the learning that takes place. These aspects are necessary to discern the real impact of micro-finance as a tool for poverty reduction, which relates to the central question of this article and the author's research.

6.2 Women as the medium for micro-finance

As a practitioner in the field of micro-enterprise, the author knew how difficult it was to obtain bank credit for women, on their own terms and in ways that reduced rather than encouraged dependency. Yet when micro-finance projects aimed at reducing poverty began to proliferate, it was on the basis of an understanding that women are good about repaying credit (Harper, 1998). Micro-finance was delivered by establishing women's groups, and was aimed at achieving goals of poverty reduction, on the assumption that women were the most vulnerable in society and that their development contributed more to the family as a whole than did men's.

This was in contrast to earlier mainstream government programmes that had targeted men only through integrated rural development in agriculture. The

failures of agricultural cooperatives, due mostly to poor financial management, led to the disbursal of subsidies to poor farmers, almost exclusively men. Though they were under no requirement to repay, the assumption that men's increased incomes would benefit the entire family did not hold true (Karl, 1997). These reasons underline the focus on women in the vast majority of present-day micro-finance programmes.

If women were such important actors in micro-finance, why did they take all the responsibility for things that require accountability (e.g. population control, environmental protection, income-generating activities and microfinance), while men were used largely for project implementation, where targets had to be achieved relating to money to be spent, not money to be paid back! As a trained economist and founder of an NGO, the author sensed these injustices and was motivated to conduct research on this issue. This inequity in the disbursal of grants (rural agricultural credit) to men and creditbased loans to women underlined the need to understand women as more than passive, credit-worthy vehicles of programme delivery.

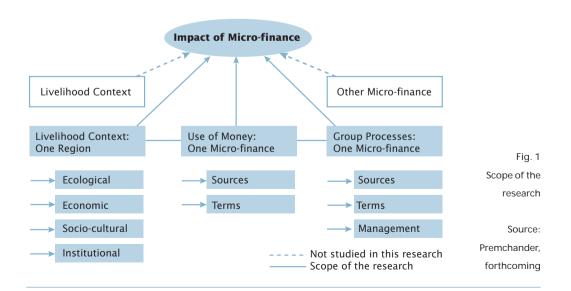
6.3 Research objectives

The central issue explored in the present article is *understanding of the impact of micro-finance on women's livelihoods*. This incorporates and contrasts the diversity in women's perspectives and actions – from one another, and from those expected or urged by the intervening agencies. Research on this issue takes a women-centred approach, where poor rural women are taken as the key actors in demanding and effecting livelihood change. Therefore, their perspectives on livelihoods and gender relations are important and are the key focus of this qualitative research.

The research also sought to gain insight into the process related to the impacts envisaged, by looking at the processes by which women's groups collect, loan and manage money. Understanding group processes brings a new set of impacts into play that would not otherwise have been realised, such as social learning and collective capacity building.

The impact of micro-finance was seen as influenced by three sets of key factors: the livelihoods context in which women live; the way women use money; and the processes by which groups manage money. Thus the three themes explored were:

- 1. How does the livelihoods context in which women are situated influence their use of money and the impact of micro-finance? The livelihoods context was viewed as comprising ecological, economic, socio-cultural and institutional elements. Women's own livelihoods were studied with respect to their assets, incomes and life histories.
- 2. When do women access money and how do they use it? The perspectives of women on the different sources from which they access money, the terms on which they accept it, the purpose for which they use it, and the reasons why they repay or default on repayments were studied.
- 3. What is the nature of social learning processes as a result of externally induced Self Help Groups (SHGs) on the one hand, and the internal pre-existing social setting on the other? As self-help groups of women form the basic groups through which micro-finance is delivered, the way in which groups access and use money was studied. The ways in which social learning takes place within these externally initiated forums, and how impacts are generated through group processes, were also studied.

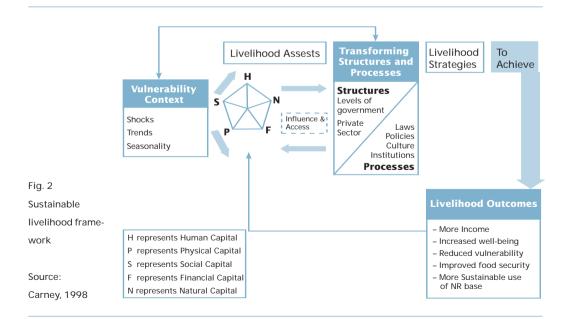


These three broad questions formed the key themes for grassroots research on the impact of micro-finance. To analyse these questions, three theoretical frameworks were adopted.

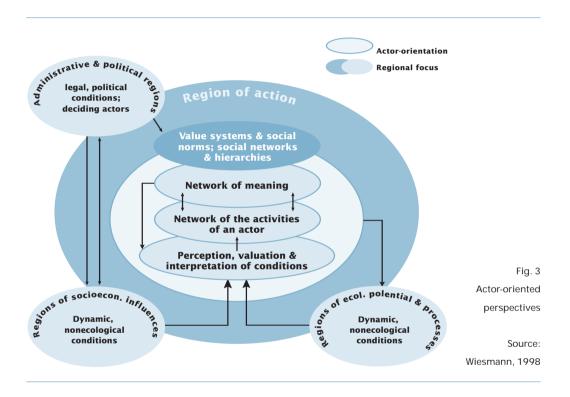
6.4 Sustainable livelihood framework

The first one, the sustainable livelihood framework defines secure livelihoods as the existence of sufficient stocks and flows of food and cash to meet basic needs (Chambers and Conway, 1992). It assumes that humans use their financial, human, natural, physical and social capital assets as a means of improving their livelihoods (e.g. increased income, increased well-being, reduced vulnerability, improved food security and/or more sustainable use of the natural resource base of an area). These components are linked to one another, and interact in a constantly dynamic fashion.

In the second framework used in this research, an actor-oriented perspective is emphasised, in the belief that this is central to development research, as local actors are central to development and change. Developed by Dr. Urs Wiesmann, this perspective locates all decisions made in an individual's values, attitudes and orientations, deriving from previous experiences, and



influencing current perceptions. Actor orientation reveals the underlying logic in which agency takes place, the room for manoeuvre that actors have, and the potentials they can develop to bring about development. It can be further expanded into an actor-network theory, which describes how, just as with individuals, groups can come to observe phenomena within a certain mindset and make decisions based upon that shared understanding.



The third framework employed was the nine square mandala, designed to capture the many instances in which non-economic motivation is employed in human action and development (Raju, Rani and Patel, 2000). The nine square mandala analyses people and their experiences within a livelihoods systems framework by understanding rationality and intuition within the "inner realities" of that system (Baumgartner and Högger, 2004). The system is captured in the nine different livelihood aspects arranged in a model: bottom row (physical, emotional, knowledge base), middle row (social space), and top row (mental/collective perspectives). In this way it bridges the outer and inner perspectives of people and their surroundings.

	9. Individual Orientation	8. Family Orientation	7. Collective Orientation
	 Visions Hopes Aspirations Fears Self image/ respects "Gurus", models 	 Ancestors Caste, social status Aspirations to leader- ship, education, jobs Aspiration to power, wealth, social mobility 	 Subsistence agriculture Food security Religion, traditions Common Property Resources, state laws World views, school Capitalistic values, city new prosperity
	6. Inner Human Space	5. Family Space	4. Socio-Economic Space
	 Integrity, identity Awareness Selfishness, compassion Responsibility Affection Curiosity, courage 	 Gender relations Nutrition distribution Health Family planning Distribution of work Solidarity 	 Production relations Systems of co-operation, community organisations Govt. institutions Markets for goods, land labour and capital
	3. Emotional Basis	2. Knowledge & Activity	1. Physical Base
g. 4 ine square andala burce: öqger, 2000	 Memories Attachments Feelings Anxieties Boredom 	 Technology Agriculture patterns Experiences, skills Traditional knowledge Labour, crafts, services, Modern professions 	 Natural environment (topography, climate) Natural resources Animals, habitat Accumulated wealth

Such a synthesised framework shows not only the change induced by microcredit but also the change women bring about. The impact of micro-credit is analysed on individual, group, and institutional levels, and along the context dimension of the research area.

6.5 Choice of research participants

Participants were chosen based mainly on social and economic characteristics. The economic spectrum was divided into four levels: extremely poor, poor, middle-income, and high-income levels, based on the income per person per year. The social spectrum was according to caste: scheduled castes (SC) and scheduled tribes (ST) at the lowest level, other backward castes (OBCs) at the middle level, and higher castes as the highest social stratum. A fourth category, on the lowest rung of the social ladder, was that of the devadasis (see following section), who not only belonged to SC/ST categories, but were also deprived of the right to marry. Five of the ten women selected for the case study are *devadasis*.

Ten women were selected to participate, representing women from each of these levels, through contacts made in Sampark, an NGO working long-term in the area. Longitudinal interviews were then conducted over a period of several years, and allowed for in-depth exploration of the direct and indirect effects of micro-credit, the challenges and difficulties women face, and their struggle for empowerment.

6.6 Multiple realities: the women of Koppal

The micro-level research was done in Koppal, a newly created district that lies in the semi-arid, drought-prone region of northern Karnataka. Within the relatively "developed" State of Karnataka (relative to other parts of India), the northern region is semi-arid, resource- and people-poor, and has a prevalence of demeaning social practices. The research focuses on this area in the Koppal district, which was split from the district of Raichur in 1994. Koppal *taluk* of the district, where the study villages are located, had a total population of 313,898 people in 2001, of which 50% were women and 80% lived in rural areas (GOK, 2004).

Livelihoods

The predominant livelihoods in the villages around Koppal town remain insecure for a variety of reasons. As this is an area dependent on agriculture, women work in the fields as year-long labourers (men work longer during certain seasons), while also fulfilling household duties and looking after their families. However, the area has been experiencing severe drought conditions for the past several years and the water tables are severely depleted, due to overexploitation from digging bore wells in the district. Much of the available water, meanwhile, is saline, and the use of this water for irrigation has, in turn, led to decreased yields and lowered incomes from agriculture.

These pressures and threats to livelihoods, along with small incomes, low skill levels and little opportunity to market goods, have led to a high level of migration out of the district. Twenty percent of the people from these five villages migrate to other places within and outside Koppal district for work as labourers. In four cases out of the ten studied, sons of case study participants migrated to the nearest towns for seasonal labour in construction, cabling and driving work. One participant's son, for example, migrated to the neighbouring state of Maharashtra for more than 9 months every year to engage in fishing. Thus current livelihoods are far from secure.

Socio-cultural context

The demographic profile of the study villages shows high levels of illiteracy and poverty, both of which were closely linked to social standing and gender. Eighteen percent of households belonged to lower castes, and caste discrimination was practiced in rural homes and temples.

At the bottom of the social hierarchy, and among the most marginalised in Indian society, were the *devadasis*, who engage in a cultural practice prevalent in Koppal. *Devadasi* women have been dedicated to the local deity in the area. Although the reasons for this were once based on religious ideals, the modern-day practice speaks far more of economic insecurity and emanates from the poverty syndrome and a corresponding lack of opportunities. These women are not permitted to get married, but instead are inducted into a system where they make sexual alliances with men. In return, the men are expected to pay to maintain the devadasis and their children, though research shows that male partners do not provide much financial support to *devadasis* (Chidambarnathan, 2002).

Although the support that *devadasi* women actually receive from their partners is minimal or nil, except for a few partners, they still seem to have a tremendous dependence on these male partnerships. They have no land, and perform only wage labour, so it is difficult for them to survive without a male partner. Thus the division of labour in the household is completely disproportionate, and family responsibility is exclusively theirs, while they receive at best only minimal amounts of financial support, and entirely lack the assistance and social sanction of a stable partner. They feel the burden of such responsibility, especially if they are poor, and have both young children and parents to care for. Among the higher castes and classes, women have greater support from their parental homes, and the families are closely knit, so they do not suffer the emotional isolation and exclusion that *devadasi* women do.

Other examples of collective orientations are customs related to child marriages, which arise from the concern that if girls are not committed to a socially valid sexual partnership soon after puberty, they are at risk. Similarly, the custom of joint marriages has arisen, owing to high social expenses during marriage, which create pressures on families that can lead them into debt, or bonded labour that takes several years to get out of. There is a custom that the last son does not get married alone, so Sangavva had the marriage of both her sons performed together; her son was 13 then, and her daughter-inlaw was 3 years old. The customs of child marriage, the *devadasi* system, and bonded labour persist in many villages despite laws that ban them, and were also associated with the social and economic situation of families belonging to the lower castes.

Thus social, cultural and gender denominations were critical to economic and other forms of deprivation.

Institutional context

The institutional structures in Koppal district included government departments, NGOs and banks, which implemented a wide range of development programmes. However, government programmes were insufficient and ineffective in meeting the basic needs of people and in poverty reduction. NGOs implemented projects for donors or for the government, and also had a limited outreach and impact. Banks provided micro-finance through government schemes that they were obligated to implement, and only one bank – the local RRB – had a marketing approach to micro-credit for the poor. Thus structures and processes were not conducive to long-term efforts in poverty reduction or sustainable rural livelihoods.

The research in Koppal shows a clear limit imposed on the demand for credit by the overall livelihoods context. This finding was compared with the data sets available for the other States covered in the research, i.e. Madhya Pradesh, Bihar and Orissa. In the forest regions of Bastar district in Madhya Pradesh, there were sufficient natural resources in the form of forests; however, inadequate infrastructure and markets prevented this from resulting in economic development of the region. The institutional context was one wherein the government, police and traders colluded to exploit forest resources without any positive impact on the tribals who lived there. The low literacy levels and the differences in tribal and mainstream language resulted in exploitation of the tribals by urban traders and middlemen (Premchander, 2000). One district in Orissa (Kalahandi district) and one in Bihar (Lohardaga), were remote and non-monetised, and had a similar livelihood context to that of Madhya Pradesh. In Madhya Pradesh, as in Koppal, the local livelihoods context offered few income-generating opportunities for use of credit. In another district of Bihar (Ranchi), the micro-finance project was located close to the city or small town markets, and, given the high soil fertility of the region, provided options for women to earn through vegetable and fruit cultivation and trading. In Bihar, where market opportunities existed, there was greater use of credit for small businesses (Sampark, 2000; Sampark, 2003). This reinforces the understanding that ecological, economic, institutional and socio-cultural factors play an important role in determining the vulnerability or security of livelihoods in a specific regional context.

6.7 Impact of micro-finance

Traditional micro-finance tracks use of money from a financial perspective. This research took a longitudinal perspective, and discussed with women the major changes in their lives. The intention was to "turn the telescope around", meaning that women first identified the major changes, then identified the factors that they considered critical to having brought about these major positive or negative changes in their livelihood conditions, and their position in the household or community.

Micro-credit impact is focused most directly at the individual and household levels. Not surprisingly, then, it was at the micro-level that the most significant positive change was observed in women's and their families' lives. This study supported others that found that the loans taken through SHGs increased the economic prosperity of women, which in turn benefited their families too. The creation of the savings habit had financial as well as social benefits. The knowledge and confidence that women gained gave them the power to exert greater control over their household income.

" Five years back we did not have food security and we used to have only one meal per day. Now I am able to earn more and give two meals per day, and clothes to my children. All these changes happened because of becoming a member in an SHG. After the formation of the group I was able to get the loan and expand the business. Not only the business, but also my confidence levels, increased to such an extent that now I am able to say "no" to my husband when he demands money for liquor". -Sushila It was also found that the impact of micro-credit depends on the form and source of its delivery. Women had more freedom and control over their own savings than over loans from external and formal sources. The group processes associated with savings and loan management created and enhanced the development of women's social capital. Social capital was shown to lay the foundation, in terms of learning processes, for augmentation of financial capital.

This study found that constraints on the use and impact of micro-finance arise from the ecological, economic, socio-cultural, and institutional contexts in which women live, and their initial capital base, especially human capital. The decisions that women made are understood in terms of the holistic and dynamic interplay between these factors and the constraints they placed on their ability to use credit to improve their lives.

6.8 Self-empowerment through self help groups (SHGs)

SHGs are group forums usually initiated by NGOs and designed to serve as the unit of delivery for micro-finance. Any group of women in the villages can form them, and generally they comprised relatively similar levels of income, though some variance existed within groups. Women belonging to the SHG meet once a week, and add whatever savings they accumulate during the week (which varies but generally amounts to about Rs.10) into a collective pool. The collective savings are then given out as loans (generally at less than 5% interest) to three or four women at a time, for self-determined uses, including both consumption smoothening purposes (usually household expenses), social and educational uses, and standard income-generating activities (small enterprises, animal procurement, etc.). Borrowers, however, must repay before any additional loans can be disbursed to other group members.

In this manner, the total savings grow while loans are continuously rotated among members. As they become recognised as local sources of credit, some groups pursue other avenues to further increase savings, such as giving loans to non-members at higher rates of interest or investing the money. Eventually, savings become sizable enough so that links with banks can be established, as the reputability and capital base of the SHG is much greater than that of any of the individual women. Loans taken from banks can be fairly large and facilitate greater returns. However, since SHGs represent a forum that has been introduced by external actors, they do not contain indigenous structures and therefore take time to be adopted and embedded in the social framework of the community. This is a slow process, but over time it is also an effective one, as women come to regard the groups as their own rather than part of externally imposed systems. This in turn embodies a host of process benefits for building the individual and collective capacity of women, extending far beyond the mainly economic benefits of NGO/bank mediated loans.

SHG Impact

The two main benefits that have arisen from SHGs relate to ownership of savings and decision-making ability. Ownership of the process is important because it gave women the freedom to tailor the groups to their own livelihood contexts, which they understood much more fully than external agencies. Loan rates were kept low, at less than 2% per month, to maintain accessibility to the very poor women who could not otherwise afford the credit. Consumption smoothening for social reasons, daily household expenses, and education were allowed as reasons for a loan, as their concept of what constitutes a productive loan was broader than merely income-generating projects. Finally, loan repayments were not rigidly scheduled and regular, but understood in "balloon" form (in a single repayment) to facilitate the irregular income flows of agriculture-based livelihoods. In this manner ownership facilitated women's concepts of their own development in a much deeper way than is possible even through participatory interactions with Micro-Finance Institution.

The second benefit arising from SHGs is the skills learnt through group processes involved in collecting, maintaining, and distributing savings. This finding was echoed by the women themselves, who acknowledged the habit of savings as the most important impact-generating feature of their participation in SHGs. As they dealt with the inevitable issues of savings groups (investment, non-repayment, group conflict), members also increased their knowledge, money management skills, ability to negotiate, and their creditability. Moreover, they came to understand the workings of banking institutions and their confidence in interacting with them, a skill that was also found applicable when dealing with government officials on other matters. "When I first went to the bank, I did not have the courage to go inside, so I sat outside. Now I have the courage to go to a bank and also understand how people pay money to the bank and get money from there". -Rangamma

However, SHGs also had negative consequences. Though intended to increase women's income and promote social equality, groups still reflected the greater social structures and prejudices of the community and society at large. Despite attempts to form most groups with relatively similarly ranking members, there was still enough social diversity within SHGs for inequality to develop. This allowed higher-ranking caste members to precede others in the distribution of loans if conflict arose (though, interestingly, within the lower-ranking SHGs, practices were more equitable). While Sampark insisted on equal treatment of members regardless of class or caste, discriminatory practices continued outside the SHG forums, or when the NGO was not present for meetings.

"When we come out of the village, and we are in Sampark, we follow the rules set by Sampark, where everyone is equal, and we do not mind this. However, when we are in the village, we have to follow the rules set by our religious leaders. There is a priest who comes to the village and who gives a special status to me. We have to follow what he says. If people do not keep the rules of separation between the higher and lower castes, it is my duty to tell him, and then he will ostracise not only them but me as well. See, I wear a "thali'" (pendant) given by him. Every evening women come and touch my feet because he has given me the thali. We have to respect his wishes. So, in the village, we keep to our customs, when we come to Sampark, we follow your customs".

- Neelamma, leader of an SHG

Also, the autonomous nature of SHGs allowed women, many of whom were financially inexperienced, to make mistakes and lose capital. Some groups decided to loan to non-members at a slightly higher rate of interest (3-5%) to augment their capital base, despite warnings from the facilitating NGO against this. Though it was sometimes beneficial, some of the non-members did not repay their loans, causing a loss of group savings. Yet it was through these mistakes that learning took place, and decisions that carried negative financial consequences were not often repeated. Even unique solutions (from standard NGO practices) were generated to manage the problems that arose. To deal with members who did not repay loans, for example, SHGs recalled all loans, pooled and divided savings, and dissolved the SHG. Groups then re-formulated themselves without including the defaulting members, and started over. Though from a financial micro-finance institution perspective the loss of the capital associated was not beneficial, dissolving and re-forming solved the social problem of stigmatising the defaulters, and it gave women the chance to see how their individual savings had accumulated. Such adaptability among the women and flexibility in the SHG structure demonstrates the ability of women to empower themselves to solve their own problems in their own ways (see the article by Martina Locher in the present publication, and her findings with respect to Nepali women's management).

6.9 A focus on actor perspectives: values

An actor perspective further explains why the impacts of informal, formal, and SHG loans are different, stemming from the differences in the values that these actor networks embody. People internalised relationships according to the value base of the other groups with which they dealt, and according to the nature of the relationship with the lender. And as money is a symbol representing the relationship, an analysis of it provides information about how and why women accept loans, on what terms and for what purposes, and whether or not they will repay. This highlights why decisions that may not make sense from an economic perspective may in fact make perfect social sense.

The values of the SHG forum were heavily based on equality, reciprocity, trust and respect. Since members generally come from the same community, they must interact outside of the SHG, and there is thus no distinct separation between business and personal relationships. Meeting on a regular basis develops a familiarity and trust between the women that is important to maintain during group meetings and transactions, especially since they take responsibility for one another's savings through loans.

With formal loan sources in banks and associated with government officials, systems and political actors were either apathetic or corrupt. There was rampant corruption in the implementation of government programmes meant for the poor, and collusion between bank and government officers (a finding in line with other studies: Sinha, 2001, Satyamurti and Haokip, 2002). The system hands out "benefits", using government officials, local leaders and NGOs as intermediaries. Thus government support to the poor is not seen as a legitimate right, or entitlement of the poor (Sen, 1999), but as a "benefit"

that government "provides" to the poor. These characteristics of the prevailing system lead to a situation wherein the poor do not have the opportunity to be equal partners in development.

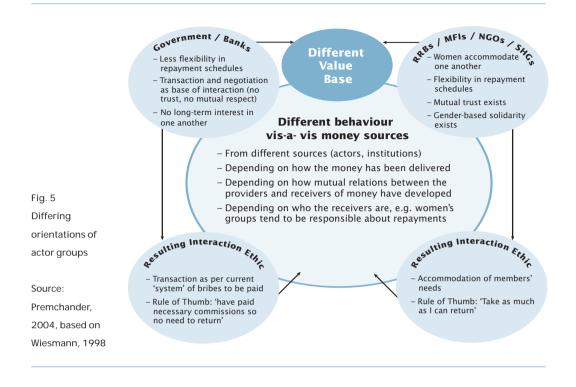
Thus the relationship that developed between the Micro-Finance Institution and poor people was one of inequality – "giver" and "receiver", or "benefactor" and "beneficiary" – creating a balance of power in favour of the "benefactor", as the decision about whom to benefit lay in the hands of the relevant government or development officer. This created a situation where the more powerful could exhibit rent-seeking behaviour in relation to the resources channelled through official channels.

Similarly, reciprocity was also missing in the relationship since, especially with government subsidies, loans were given out only once, and no relationship was established. Women had a limited understanding of the process, and some assumed the bribe they had paid to receive the loan was the equivalent of repayment. This relationship therefore lacked the trust – in both the individual and the system – that created higher repayment rates from other borrowers. Evidence of the importance of trust was observed in the way that some government officials took the time to explain terms and conditions, and in several rounds of repayment, to establish a relationship with the women. Despite working with government, this relationship overcame institutional mistrust and produced much higher repayment rates than otherwise.

When present, all of these values lead to an increase in the responsibility women take for repaying their debts. Since money is a symbol of the lender/ borrower relationship, abdication of repayment responsibilities may signal as much a difficulty in actually making the payment as it does a mistrust in the person or institution created by differing actor group values. This is evidenced by the much higher rates of repayment in the NGO/Micro- Finance Institution programmes and SHGs than with government-subsidised loans, and the admirably strong sense of commitment that many women expressed in clearing their debts.

"I always remind my children about a loan so they try to give their maximum earnings to me, otherwise they spend a lot and contribute less to the family. Even my children are concerned about a loan burden. So we take a loan only after a discussion in the family, so that everybody takes the responsibility to repay it".

- Rangamma, Hosagondabala village, Koppal district



6.10 Linking actor perspectives and livelihood strategies

The same syndrome of mismatched values between women and external actors may be witnessed when we consider resources other than finance. As Koppal is an agrarian-based district, many people's economic security is tied to local ecological resources. Loans facilitated the purchase of animals, relief from coolie work, and irrigation practices that increased production and income.

"Last year I borrowed from several places, like my relatives, my husband's friends and from the group, for house construction. The loan from the group helped me to buy seeds and fertilisers in time. The family income has increased, and since drilling a bore well we now grow 2-3 crops in a year. We don't have any difficulties in the family. If we were not to have this bore well, we would have had to go to other people's farms for work. Now we hire others to work in our field and we are able to work on our own land". – Mariyamma

Despite such positive economic impacts at the individual and family level, the same developments may have very negative ecological consequences at the community level.

One clear example is the drilling of bore wells. On one hand the increased irrigation capacity derived from bore wells increases crop yields, translating into larger incomes and the ability of families to purchase and work their own land. However, in the semi-arid region of Koppal where water is a very scarce resource, digging deeper wells serves to further deplete already low water tables and contribute to soil salinity. This poses an ecological risk to the entire community, as water tables are not unique by household but spread over the region. Drought and soil salinisation have already prevented people from earning enough income from crop yields to support their families, forcing migration out of the Koppal region to urban areas in search of more secure livelihood options.

However, within the local area there are no programmes by donors, governments, NGOs, or even people's forums to conserve and recharge water at the community level. Nor is there a community-level revolving loan fund to conserve natural resources. This therefore suggests that when micro-finance is targeted on an individual and family level, a major gap may develop in the sustainability of community level practices that in turn may pose a threat to any individual benefits accrued.

This pointed to an inherent weakness in the value base, whereby people did not move from household to community-based strategies of management of natural and common property resources. Nor did the administrative and political actors care about the community, but looked to increase their own earnings from the delivery of government services, while local actors acquiesced in the "system" of corruption rather than challenging it.

No set of actors considered sustainability of the natural resource base as important, nor did any government efforts help with poverty reduction. The value base of one set of actors was corruption-oriented, and therefore benefits meant for the poor were sidelined. The strategies of the local population, on the other hand, were based on household survival and therefore not oriented towards community-level solutions, which were critical for achieving sustainable livelihoods. This is especially true given the administrative, political, economic, ecological, and market conditions in this region.

6.11 Integration of the frameworks and recommendations

Such disharmony in the follow-through from one scale to the next or one context to the other brings to light the importance of looking at livelihoods in a holistic sense. As each aspect is vital to overall wellbeing and dependent on the others for even its own improvement, livelihood sustainability is not possible in a piecemeal, sector by sector manner. Income equality will never be achieved until the social underpinnings of caste discrimination and the devadasi system are eradicated. Agricultural workers and their families can never expect to make a decent living if the ecological base from which the income flows is eroded. And women can never achieve true gender equality if it does not extend beyond the family circle into the wider political and institutional context in which they live.

Therefore the SHG as a forum is not yet balanced from a livelihood perspective. Its heavy focus on economic improvement through income-generating activities takes little cognisance of macro and non-economic factors. If these aspects are not addressed, its impact is limited locally and to the short term.

Addressing such long-term needs requires an integration of these frameworks into one. They all derive from an orientation towards understanding people's perspectives. They are therefore not mutually exclusive, and their use in combination is justified as they deepen analysis and enrich understanding rather than having a cancelling effect. They allow for a focus on women and flexibility in methods to explore women's perspectives, permit analysis of strategies at a rational level, and also enable movement beyond rational economic thinking to in-depth analysis of the inner realities of women and their experiences.

The actor-oriented perspective helped to answer most directly the central issue of the research: the differences in perspective between women and external agencies, and how this translated into differences in impact. It por-trayed women as active individuals and agents of change and decisions in their own lives, rather than benign mediums through which to target families and improve micro-credit intervention outcomes. Since actors are central to development and change, it is imperative that their values and attitudes be incorporated. In this regard, the structure of the SHG gives maximum freedom to women to assert these values and learn new skills.

Women's perspectives, however, are not necessarily homogeneous. They exist within a system of inner and outer realities that guide their vision of the world. The nine square mandala reveals non-economic motivations, such as their relationships with other women and the importance of reciprocity. The meaning of money is therefore comprised of both the "outer" economic realities and the inner personal ones. By focusing solely on supply, microfinance institutions typically ignore the latter.

These gender-focused frameworks are then united under the sustainability banner with the introduction sustainable livelihoods framework, which places micro contexts within meso and macro ones. While finding that, at the individual and household scale, micro-finance is highly effective in increasing family income and assets (physical, human, social, etc.), it is not always transferred to issues at the community level. Over time, then, SHGs need to address the larger social and ecological constraints facing women so as to ensure that positive individual impacts are maintained.

Taken together, the three different frameworks offer recommendations for practice. To fully incorporate gender sensitivity, practitioners must work with the SHG forum. Despite its drawbacks, it engenders an understanding of women's reality from a vantage point that allows them to self-define this reality through ownership of the loan and savings process. It is not enough, however, for SHGs to focus only on individual and familial issues. If SHGs can link up with community ecological and social issues, or develop into new forums that specifically address them, they can create a balanced livelihood security that economics alone cannot.

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Endnotes

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7 Local Knowledge and Gender in Ghana

Christine Müller

The present article addresses research on local knowledge. It argues for integration of a gender-sensitive approach in research design and at the level of fieldwork. Research indicates that the use of a gender approach broadens perspectives on the various dynamics in the social organisation of knowledge, such as processes in knowledge generation, distribution, innovation, memorising and legitimation, and on discourse and struggle concerning the order of knowledge. Recognition of the gendered nature of local knowledge capacities – beyond romantics, homogenising, instrumentalising and mystification – is a condition for avoiding perception of men and women in southern countries as mere recipients of knowledge and target groups for development. Integration of knowledge about women and men into a transdisciplinary approach is, finally, a consequence of scientific recognition and a precondition for the practical search for societal solutions.

7.1 Shifting perspectives towards the local

In recent academic debates, cross-cultural discussions concerning the nature, location, and control of knowledge have focused on the insight that knowledge is not only the key to the secrets of nature and society, but also the key to development (Stehr, 2003). Empirical evidence from multiple subdisciplines of sociology indicates that knowledge is perhaps even the major factor in contemporary societal change. Despite all the differences in the dynamics of development within and between countries in the North and the South, one central common question is: what kind of relevant knowledge is needed to solve societal problems? And further: how is this knowledge produced, and who participates in its production? (see the article by Gertrude Hirsch Hadorn in this volume). The scientific focus adopted for the author's research in Southern Ghana¹, conducted from 1998-1999, corresponds with the end of grand theories in academia and rising awareness within the scientific community of research on the "situatedness" of knowledge. This reorientation of the research perspective, in acknowledgement of the relevance of local knowledge and cultural diversity, is now supported in various quarters:

- 1. Development agencies are gradually recognising the importance of valid local knowledge in such fields as health, technology, ecology and agriculture.
- 2. Actors in the South, such as women's organisations, are demanding participation.
- Post-colonial and feminist scholars are criticising hegemonic development and Western epistemic knowledge production (see Long/Long, 1992; Hobart, 1993; Shiva/Mies, 1995; Diawara, 2000).

The international status of research on local knowledge emerged from mutually influencing discussions between academics, development planners and politicians. The term "local" is theoretically difficult – if not impossible – to define. The production process of knowledge is local, while the structures of its reach can be boundless or global, as in processes of sharing and disembedding. This is in contrast to the term "indigenous knowledge," which is bound to language, tradition and the values of a particular community.

Local knowledge gradually became an objective of research not only for Northern researchers conducting studies in the South, but also for Southern researchers in countries and institutions of the South². Yet the author's personal interest as a Northern researcher emerged from academic and development debates on the relevance of local knowledge that took place in Germany in the 1990s (Honerla, 1995). Initial interest was based on pure ignorance concerning the question "what is local knowledge?;" this raised many further questions. After close observation of the UN World Conferences on Women and (partly empirical) observation of translocal/national networking between women's organisations world-wide, the question of how local knowledge changes insight into global networking between women's organisations was posed. How are new elements of knowledge discussed and negotiated? How is knowledge channelled along the local-to-global scale ? What are the boundaries of local knowledge? And finally, is the normative assumption of female empowerment realised at local level? Many research questions were used in approaching and entering the fieldwork. The gendered methodology was clear, the research area identified, and the process of "going native" in a small village of Southern Ghana was quite comfortable, with a stay of about ten months. In addition to the village, research involved frequent movement along the nodes and interlinkages of women's organisations at the regional and national levels. This "multi-sited" (Marcus, 1995) fieldwork made it possible to catch up on the dynamics of interwovenness between women's organisations and the flow of knowledge from urban to rural areas, and vice versa. Mobile research does not mean that a locality vanishes, but the extension of its boundaries are brought into a new frame of reference: the phenomena of glocalisation, (Robertson, 1995:26) defined as processes of linking localities, challenges our own spatial thinking. It is a methodological request to take the dynamics *within* and *across* a locality into consideration.

7.2 Analysing local knowledge

According to phenomenology and social constructivist thinking, the specific knowledge repertoire and social structure of a society are mutually intertwined (Berger/Luckmann, 1966). Individual agency and the social stock of knowledge exist in a structural relationship, encompassing other aspects for analysis such as history, identity and power relations. Two phenomenologists, Alfred Schütz and Thomas Luckmann, reminded us long ago that knowledge has spatial, social and temporal dimensions (1973). The empirical portion of this research involved qualitative methods such as interviews, participant observation, discourse analysis, group discussions, and oral history. It must also be noted that there were no restrictions on age or status in approaching either women or men. Sometimes interviews ended up in long and even personal discussions. Most of the fieldwork in the village involved working with a male assistant, who also gave the author lessons in the local language, Twi. He was involved by chance, as a younger male assistant had been chosen originally. It was only by accident that he assumed the role of "teacher" with the author as his "student". Empirical data were triangulated with the assistance of the author's landlady, to ensure that answers were not biased due to the presence of a man.

Oral history was employed to understand the transfer of knowledge over generations and grasp the change in societal institutions within a time span of about 100 years. Extensive discussion of the ongoing academic debate on oral history is beyond the scope of the present paper (see Finnegan, 1970; Vansina, 1985; Diawara, 1985). The narratives of women and men are only one source of information. Other sources to be distinguished by gender include poetry and proverbs. Interviews were conducted with representatives of women's organisations, with female and male members of traditional institutions, and women and men in different age groups. Group discussions were used when contradictions became apparent in answers given in individual interviews; issues were clarified by inviting both sides to participate. There were differing opinions about the participation of women in meetings among the members of traditional institutions. Discourse analysis was used to identify asymmetries in gender relations, contradictions, dilemmas, and struggles involving gender at institutional and societal levels (Fairclough, 1992:97). Since knowledge cannot always be made explicit by actors, but remains as "tacit" knowledge, the method of participant observation was used to observe the daily agencies of women and men in the village. The author participated in women's organisation meetings and observed men's meetings in the Chief's palace, which took place every two weeks. The ethnographic approach used combined an internal perspective with an external perspective. It follows the two steps of interpretative sociology: interpretations by actors (internal) and explanations of interpretation by a researcher (external).

7.3 Looking back into history: the marginalisation of women's spaces

Roughly up to the 1960s, knowledge was transmitted according to the principles of seniority and gender. Grandfathers were responsible for the education of the male grandchild, and grandmothers for the female grandchild. Knowledge about agriculture, the storage of goods, or herbal medicine was transmitted between the next-but-one generations, and adopted through daily interactions, copied, or transmitted orally, on the way to the farm or during farm work. "Men moved with men and women moved with women" an old man explained. Previous experiences and proven practices were transmitted in this way, embedded in the practical process of the presence. Although knowledge was exchanged among men and women, both retained strong contacts with their own sex during their lifetimes. Knowledge not only has a practical purpose for daily agency; in order to become an "objective fact" shared and accepted by other members of the community, it must be secured and legitimated. Different mechanisms of legitimation show con-

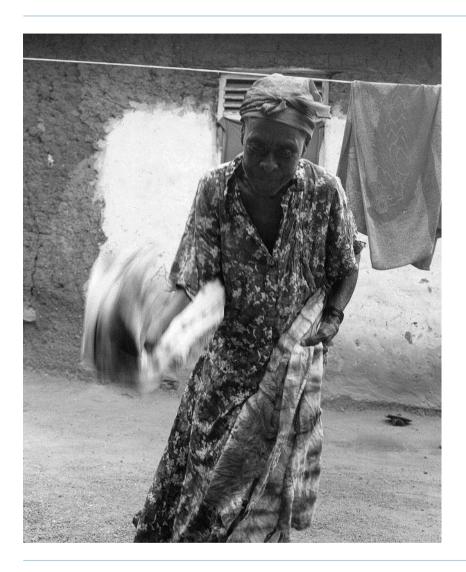


Fig. 1 Driving the sickness out of town

Photo by Christine Müller

nections in the duality of the social and the knowledge orders in the past – mainly through symbolic agencies. Old women in particular were responsible in the past for knowledge legitimation. As knowledge carriers, they also held a strong position with respect to regulation of family and political matters. During an interview situation with an old woman, her friend – another old woman – accidentally passed by and joined the interview. Suddenly they both started to dance, to demonstrate the way they once danced long before, aiming to "drive the sickness out of town" (Figure 1).

Driving the sickness out of town was a symbolic event in which all women gathered, swept the streets and houses, and kept the dust at the street entering the village to protect it from further disease. Through this form of symbolic action in public, women had the power to influence the world of consociates. Other forms of symbolic interaction among elderly women included worshipping at the riverside to communicate with the gods in the water, consulting the family gods in times of need for a solution to individual (infertility, alcohol, marriage) and social problems, or during rites to educate the young women. Women were able to transcend their settled experiences through symbolic and communicative "spaces-in-between,"³ i.e. between nature and society, disease and society, gods and society, and generations. Elderly women had a transformative effect on society - in defence, prevention, communication, education, and the solution of individual and social problems⁴. They were also consulted in the Chief's palace when no solution could be found in a case discussed between the elders. Through this form of consultation, old women were termed the aberewa nyansafo, which literally means preserving the wisdom and knowledge of old women. The exercise of political power was also extended beyond the family context through a direct link with the Queenmother of the town, the highest female representative, making old women indirectly able to integrate important discussion points into the Chief's palace for further negotiation between the Queenmother and the elders.

Nowadays, these old women complain of no longer being unable to transfer their knowledge to the younger generation, which hints at the changes that have occurred in the past decades. Symbolic public spaces gradually lost their meaning, due to the influences of Christianisation and state-enforced modernisation. Thus the social mediation of knowledge was no longer institutionalised. A change in the symbolic order had consequences in the social order of knowledge. The social de-legitimisation of knowledge of old women was accompanied by a gradual decline in political influence in the family context and in the Chief's palace. This was part of a general diminishing of traditional institutions in post-colonial Ghana, after political independence in 1957, influenced by the paradigm of modernisation and socialism. New "modern" bureaucratic structures and administrative bodies were set up to regulate public and development issues. With the establishment of the Regional Houses of Chiefs and one National House of Chiefs, the Ghanaian Government exercised control over the Chiefs. Traditional institutions regained formal power with a new constitution in 1984 which, however, formally excludes women from decision-making processes. Moreover, state allowances support only the Chiefs.

As they are excluded from formal political decision-making processes at all levels, women can hardly enter the development arena. Within the field of development, access to resources was and continues to be channelled through male-dominated connections and networks. The detrimental effect lies not so much in preventing women from having access to 'innovative' knowledge – questioning its sustainability – as in the continuing construction in development cooperation of women as receivers of knowledge, whose discursive power of negotiating between different forms of knowledge such as 'traditional' and 'modern' is eliminated.

Presence is a fact that makes mothers the primary source of informal education for their children, both daughters and sons. Fathers seldom take responsibility for the education of their children, regardless of being present in the village or absent due to migration. Knowledge is still transmitted orally and through daily practices. Formal education in school is of less importance in terms of mediating new elements of knowledge. Rather, young people critically reflect on the curricula and openly express their concerns, e.g.:

"I did agriculture. The school method is very difficult for you because they taught us that those people use irrigation systems or machines. But in Ghana here, we do not have those things".

In short, knowledge needed by the younger generation for daily survival is acquired outside school, not inside. Acquired knowledge is no longer socially secured, but depends on individual experiences, successes and failures.

7.4 Doing "reflexive modernisation"

A public discourse on gender relations – and in particular on the participation of women in traditional institutions – has emerged from the ambivalent situation of women as the main source of knowledge generation and transmission, excluded from the main political decision-making processes. In an informal gathering under a shady tree, which the author first observed from a distance, the six female heads of extended families, so-called Subqueenmothers,⁵ discussed village issues. Organisation within the traditional system of Akan society foresees that each extended family is represented by a female and a male head, the Subqueenmother and the corresponding Subchief. Each family within the village belongs to the kinship system through exogamous marriages and is thus represented⁶. A sharp distinction is made between these non-royal families and the royal family, which is headed by the town Chief and the Queenmother. Subqueenmothers are selected and elected within their extended families by all women and men. The criteria for nomination and selection are personal, such as the manner of talking to people, patience, behaviour in public, and even the manner of walking. Education and economic status are not important criteria for selection. Of the six Subqueenmothers, only one works as a teacher in a secondary school. All the others live from farming activities, going almost daily to their own farms. Their economic and financial status does not differ from that of many other women and men in town, nor does it change in terms of greater privileges after election. With their election, however, their hairstyle, clothing, behaviour and responsibilities change, as they are now in charge of settling cases within the family or between families. They are also in charge of advising the young people within their families, assisting people in town, or being present at funerals, together with the corresponding Subchief, who is the male head of the family. In contrast to the Subchiefs, who at the time of their election are more than 60 years old, all Subqueenmothers are elected at ages ranging from 29 to 40. The codifying of their position opens a new frame of activity within the family, but their agency was long restricted to the family context, while Subchiefs were allowed to join meetings at the Chief's palace, which became the most important financial, juridical, representational and political institution in the ongoing process of decentralisation. The six Subqueenmothers organise themselves in regular meetings – usually held on Sunday afternoons. At this level, they are loosely organised without any agenda, constitution, or programme. In a rotation system, one of them attends the formal meetings of Subqueenmothers' associations at district level, or thematic meetings at the district and regional levels.

Despite non-existent formal structures, their discussions follow a common thread. For quite some time, they have been observing and analysing social, political and environmental issues in town while searching for solutions. To realise their ideas, they had put pressure on the Chief and Queenmother to participate in meetings at the Chief's Palace. Their inquires failed for a long time, also due to a lack of support from the Queenmother. Up to that time the Chief's Palace had been – apart from some frequent visits of the Queenmother – exclusively a male space in which the Subchiefs and the Chief regularly meet.

In a group discussion the author had with the Subqueenmothers to inquire about their influence in local politics, they suddenly turned around the "subject-object" relationship, and asked for assistance in getting admission to the Chief's Palace. Instead of being an "honoured guest" (Golde, 1986:8), the author suddenly became a cross-cultural broker. The Subqueenmothers had observed the author for weeks and took the opportunity for self-empowerment by integrating her into their aims. This informal self-organisation of the Subqueenmothers as such has created a discussion space for strategies that aim to improve living conditions in the town. Their legitimisation in challenging the "doxa" (Bourdieu, 1991:242), the taken-for-granted world, is constructed by means of the link they can establish between people in town and the palace:

"We want to attend the meetings, to get information, to listen to what is being said, and to influence the decisions. We can pass the decisions made on to the people in town. We can also make suggestions, we can help the men, especially when it comes to women's matters".

In addition, they are referring to the *aberewa nyansafo* – the keeping of wisdom and knowledge of the old women. This became a common symbol of identity. Finally, Subqueenmothers received permission to participate in the meetings at the Chief's palace, with the sole admonition from the Subchiefs not to speak loudly. Subqueenmothers reacted by saying, "then we whisper into the ears of the specific Subchief". The political struggle over the definition of a symbol also challenges male-defined gender constructs of the "shyness of women," the main argument brought forward by the Subchiefs for keeping them out of the Chief's Palace. It is also a change in intra-gender relations, since Subqueenmothers who could not count on the support and solidarity of the Queenmother successfully entered the political space. Gaining admission to the Chief's palace was an important but nevertheless minor step. Subqueenmothers needed it to legitimise and realise their major aims, which are solutions to ongoing social and environmental problems. These problems are manifold:

- -A dried out river
- -An increase in teenage pregnancies and high "drop-out" rates
- -A lack of jobs for young women and men
- Poverty owing to expensive funerals

Although Subqueenmothers refer to being the keepers of the wisdom and knowledge of the old women, the content of their knowledge repertoire is also based on new elements, which they permanently integrate through being part of a translocal network, the regional Subqueenmothers' association. In this association, founded by a Subqueenmother in almost all parts of Ghana in 1994, Queenmothers and Subqueenmothers regularly meet, discuss pressing issues, reflect on past changes, and engage in creative income-generating activities. The Subqueenmothers' association is structured analogous to the newly created political bodies, in the process of decentralisation, used by Subqueenmothers and Queenmothers to influence policies and request loans. Formal internal organisation is based on democratic principles and does not replicate the hierarchical organisation of the traditional system.

The Subqueenmothers' association is formally organised at district and regional level. At district level, Queenmothers and Subqueenmothers meet regularly four times a year at the hall of the District Assembly. At regional level, they meet three times a year in the Regional Houses of Chiefs. The election procedure foresees one Sub- or Queenmother from each traditional area being elected to regional meetings. This procedure guarantees the permanent link between the smallest organisational unit and the regional level, and simultaneously prevents the exclusion of some traditional areas. The ten elected Queenmothers/ Subqueenmothers have specific functions: as President of the region, Vice-President, Organiser, Executive Member, Patron, Auditor, Assistant Secretary and Treasurer, while two of them have no specific function. Despite the formal organisation, the association does not yet have a permanent office or programme, nor has it yet finalised its constitution at national level. For thematic meetings such as those on health, environment, economics, politics, renewable energy or education, all Subqueenmothers and Queenmothers are allowed to join. These thematic meetings are often supported by other women's organisations that offer experience and expertise on the specific issue. One Subqueenmother from each village attends meetings (to save high travel expenses) and later on discusses the issues within the village or town meetings. Through this translocal network structure, new elements of knowledge are negotiated and distributed in the village. What Subqueenmothers do in their village is nothing other than what Scott Lash has defined as reflexive modernisation, which is "criticising existing processes and looking at the possibility of increasing their power" (1994:113). This is not empowerment as theory, but empowerment as practice. Subqueenmothers are bridging the past and the present, meanwhile reversing past social marginalisation. Practising the past is not replication. Integrating past elements into a new temporal and social context results in a completely new scenario. In the past, old women were not allowed to attend meetings at the palace. The logic of practice was that their day-to-day experiences and knowledge were used as a source of political decision-making processes in the palace in the form of frequent consultation. Now, the logic of practice is the other way round: continuing presence in the political decision-making process serves to legitimise knowledge and innovative everyday practices. "The negotiation of social memory is in fact history in the making" as Heike Schmidt (2002: 203) notes, pointing to the core of the issue. The instructed past and intended future mark the turning point in social marginalisation of female spaces and the social order of knowledge.

7.5 Building bridges

A further exchange of knowledge among women in traditional institutions and other women's organisations in the region is also taking place in the monthly Women's Forum organised by the National Council of Women and Development (NCWD). The number of participants attending the Women's Forum ranges from 60-100, coming from various women's organisations of the surrounding area. Every Women's Forum is dedicated to one topic such as health, education, environment, economy, violence against women, inheritance rights, or the Beijing Platform of Action. During lively discussions, women analyse social developments and the negative consequences of modernity. For example, they may discuss the increase in skin diseases caused by the misappropriate use of fertilisers, or the increase in deaths of women due to hypertension, which can be explained by severe economic conditions and the multiple burdens of women in coping with paying school fees for the children. Many other topics have been examined in connection with linking the risks imposed on individuals with underlying root causes. The Women's Forum turned into a social space for conducting "critical theory" (Habermas, 1981:549), using its potential for a critical examination of social institutions such as law, religion, the economy, education, and gender constructs.

The Women's Forum is a space for a common process of discovery, in which the participants are at the centre of sharing, analysing and reflecting. The principle of this form of participation is taken from Paolo Freire's concept of learning through sharing and education for social change (1972). The representative of the NCWD, who initiated the Forum, left the interaction process in the hands of the participants, who obtain the power to suggest initiatives for change, but leave the directions for action open. This covered a wide range of suggestions such as going into politics, changing laws, or individual strengthening through self-organisation. The underlying paradigm of the whole Forum is the initiation of processes of self-defined, open-ended forms of development, based on a critical examination and a politicisation of old and new elements of knowledge. Mutual support among women's organisations at national level has recently provided additional inputs on gender debates in the public sphere. One example is the NCWD, which organised a conference dedicated to the theme of "Women in Public Life," and invited an equal number of Queenmothers and Chiefs. The conference took place in 1998 in Kumasi. The background of the conference was the persistence of formal exclusion of Queenmothers from the Regional and National Houses of Chiefs. The media were also invited, to make the public aware of "what the Chiefs say about the Queenmothers" (Daily Graphic, 22.8.1998). The strong arguments of the NCWD for the need to deconstruct persistent gender constructs and change unequal gender relations referred to the results of a qualitative research project conducted at the University of Ghana (Legon) on the same topic. This is an example of how scientific knowledge becomes an asset in the new knowledge repertoire of the women's organisations and is integrated into ongoing discourse. This relationship with scientific knowledge is even stronger in the Women's Forum in Accra, which participants attend from various research institutes. This Forum is much more oriented towards the activities of women's organisations in a global perspective, but also addressed to local issues and politics.

Women's organisations are connected among and across the local, regional and national levels. They function as translation "nodes" between the different social levels. On an individual level, women engaged in these organisations are also active in the generation and circulation of new, innovative knowledge. One woman is experimenting with drying pepper in solar cookers. Her innovations in renewable energy are not only discussed in rural areas, but also in the Women's Forum in Accra. One Queenmother is active in the National Commission on AIDS, travels all over the world, and back home, is distributing the information in the Subqueenmothers' association. The representative of the National Council of Women and Development at the regional level is a member of Women in Law and Development Africa (WiLDAF), a pan-African organisation working in 28 African countries with its head office in Harare (Zimbabwe). Also, Akua Kuenehyia, Dean of the Faculty of Law of the University of Ghana, initiator of WiLDAF, Ghana, is active in research on land rights in West Africa. WiLDAF is only one of many other glocal organisations (others are: Development Alternatives with Women for a new Era (DAWN), ISIS-International, Women, Environment and Development Organisation (WEDO), and Women in Development Europe (WIDE)), which have built up their own research capacities and/or are connected to universities or research institutes. The variety of themes reflects the need of women to articulate their local experience by transcending it at the global level and by hybridising and homogenising it to formulate global strategies for alternative forms of development, of which the most prominent is the "empowerment" approach of DAWN. Focusing on the global level, women use the Internet to pass information, distribute emergency letters, lobby, or even produce their own virtual agenda, as women in South America did to avoid expensive travel costs. In a similar way, Russian women created a common virtual platform already in 1993 (www.owl.ru), the "Open Women Line," for the sharing of information. Many other virtual organised forms of enabling actions, such as www.womenaction.org, www.femmeafric.org, www.flamme.org, and their implications for women, are well documented in the book Women@Internet (Harcourt, 1999), which draws attention to the growing importance of virtuality as a new condition for defending localities and local knowledge in a global arena. Gilian Youngs termed this power of transcendence focusing on the global level "shared politics" (2002). The Internet is now used as a medium for communication and as a strategic tool for development by many women's organisations, groups, and movements world-wide. Unreliable electricity, as well as a lack of financial resources to buy hardware and software, means the Internet is still an exclusive medium of communication; individuals rarely have the chance to establish private networks. The global "digital divide" (Hamelink, 2002:6) is reproduced at national level. Only the offices of women's organisations in the capital, Accra, are equipped with computers, financed by external donors. As new political subjects, the representatives of women's organisations are brokers and mediators in channelling information along and between the local-to-global scales. Their situation as knowledge and information intermediaries is peculiar, and it should be a subject of further research in terms of determining whether they help to reduce social inequalities or, on the contrary, enhance them. Although this discussion on the impact of new media in countries in the South is not yet finished, Savio (2002:21) attributes positive aspects to new media connections, through dissolving the monopolisation of news and information by means of state enforcement and control. Democratising means dissolving monopolies of information-steering and simultaneous access by civil society to alternative national and international agenda-setting, through building alliances and networking as well as mobilising resources.

It is a new feature of glocalisation that women belong to multiple spaces of knowledge production, sustained by their overlapping, which supports the continuity of short- and long-distance social ties. Building up one's own capacities for knowledge strengthens trust and enforces growing independence from external or externalised knowledge in the long run.

7.6 Some implications for research on local knowledge

Local knowledge is often designed by development agencies and think tanks as a resource that can easily be tapped to induce development. Despite living in the same social setting, women and men can have different knowledge repertoires, depending on their daily responsibilities or on the division of labour, but also on their membership in networks and organisations. Women have built up a new social structure that guarantees permanent knowledge innovation and that underlies the dynamics of politicising knowledge by linking knowledge with power relations. Local knowledge is thus embedded in a discourse on the transformation of gender relations and gender constructs.

A participatory approach in the research process forms a "social context of discovery" (Knorr-Cetina, 1991:19) and calls for reflexivity in the research context on one hand, and a critical examination of Western epistemic culture, especially re-evaluation of central sociological and social anthropological categories and concepts, on the other hand. From a methodological perspective, the popular rhetoric of participation focuses on the local, cutoff, artificially bounded place, pretending seclusion of social relations across distances and cementing "the myths of a village community" (Albrow, 1998). This critical tendency is manifested in many case studies that often describe knowledge as static, homogenous, indigenised or mystified (Lachenmann, 1995; Geschiere, 1995). Knowledge analysed from such a perspective remains in a box. The perspective of uncoupling knowledge from the dynamics of globalisation does not, in its further theoretical consequences, lead towards problematisation and politicisation of the global knowledge order, as Henrietta Moore (1996) has argued. Implementing or adding women's knowledge to mainstream development concepts and agendas is therefore not enough. The structures of organisations and institutions need to be changed in order to transform social relations. "What is progressive about organising heroic campaigns to "add women and gender" to the social structure and the subject matters of the sciences without questioning the legitimacy of science's social hierarchy and politically regressive agendas?" (Harding, 1991: 47).

The dimensions of knowledge innovation extend beyond local boundaries and are yet closely connected with multiple translocal channels. It is a predicament for research on the dynamics of localities to design mobile fieldwork, following up translocal relations and interactions. By opening the box, interactions, continuities and discontinuities along the "interface" (Long/Long, 1992) of local and global relations can be analysed. To incorporate a gender perspective into research on knowledge means to differentiate interfaces into analytical "intrafaces" (Padmanabhan, 2002). Therefore, the question of "what" is in the box should be enlarged by a methodological perspective on "how". How knowledge becomes reality is therefore the central question underlying research on knowledge: it sheds light on the changing realities of women and men and their abilities to change the social and knowledge order. Gender and Sustainable Development: Case Studies from NCCR North-South

Endnotes

¹For a complete and detailed analysis, see Mueller (2005).

- ²The experiences of Southern researchers conducting research in their own localities varies. The Malian social-anthropologist Mamadou Diawara, who wanted to conduct interviews on the history of his home town, faced the problem that interviewed persons refused to answer his questions, arguing that he would doubt their competencies. To avoid such mistrust, Diawara proposed a cross-cultural collaboration (1985:16).
- ³As a "space-in-between" I conceptualise the structural relationship between the presented world and the "appresented" world (Schütz, 1962). This relationship is important, since it regulates the symbolic and social orders of society.
- ⁴This picture is common in other parts of Africa elderly women have had a transformative effect on society. Power also has destructive effects, however. In many countries, women are accused of witchcraft and causing disease, which in some cases results in a burning down of huts (Auslander, 1993:147).
- ⁵Subqueenmothers are a recent phenomenon in Ghana. Since it could not be ascertained how this institution came into existence, it suffices to say that these women are around the age of 30-45, are elected within their family, and are the institutionalised counterpart of the male head, the Subchief. It can be assumed that they replace the old women in the family.
- ^oThis structure is also called a "parallel" or "dual-sex" system, and is not peculiar to Akan society, but also exists in variations in at least twenty other patri- or matrilinear societies in different parts of Africa.

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8 Gender Relevance in Environmental Conflicts: A Gender Analysis of the Cauvery Dispute in South India*

Susanne Fleischli

The present study attempts to determine the significance of gender in environmental conflicts and to trace how considerations of gender may contribute to the management of environmental conflicts. These issues are examined by applying gender analysis to the specific case of the Cauvery River dispute in South India. The results show that gender does determine the way people are affected by an environmental conflict, and the way they are involved in the conflict management process. Consideration of gender may contribute to improved management of environmental conflicts by promoting the involvement of all stakeholders, including women, who are often marginalized in conflict management.

Introduction

Gender and conflict are closely intertwined. Scholars have been examining the relationship between conflict and gender for several years (see Byrne, 1995; Hinterhuber, 2003; Rehn, Johnson Sirleaf, 2002). However, the gender dimension specific to environmental conflicts has received little attention. The present study attempts to bridge this research gap, to determine the significance of gender in environmental conflicts, and to trace how considerations of gender contribute to the management of environmental conflicts. These issues are investigated by means of gender analysis applied to the specific case of the Cauvery River dispute in South India. The underlying assumption is that a gender-sensitive approach may shed light on the obscure gender-relevant dimensions of the conflict, offering new possibilities to enhance conflict management. First, definitions, theoretical concepts, and the method of investigation are presented. Second, the conflict over Cauvery water is described, highlighting the gender dimension as a next step. Finally, the results are discussed, and a conclusion is drawn about the relevance of gender in environmental conflicts.

8.1 Definitions, concepts and methods

The following key terms are used in this study: environmental conflicts are defined as "conflicts over the use of natural, renewable resources"¹ where at least one of the actors is negatively affected by the divergence of positions between the parties involved in the conflict" (Mason, Hagmann, 2001: 2; quoted from Hagmann, 2002: 2). A conflict arises when 1) "at least two parties interact in an incompatible way; 2) at least one of the involved parties intends or ignores the negative impacts on the other party stemming from the interaction; and 3) at least one of the involved parties experiences damage from the interaction" (Mason, 2004: IXX). Conflict management involves all ways of dealing with a conflict, with the aim of solving problems, transforming relations, and changing structures, including those inherently related to gender relations and structures (Mason, 2003: 42). Finally, according to Harding (1991), gender is defined as a socially constructed category that shapes the agency and thinking of people, and is not understood as a natural consequence of the biological sex differences between women and men. This category, besides others such as religion and ethnicity, gives meaning and value to all entities in the world, while structuring social relations.

Carius, Baechler, Pfahl and March (1999; quoted from Hagmann, 2002: 1) distinguish three phases in environmental conflict research:

Phase 1: Broadening of the classical security concept by including issues such as the environment.

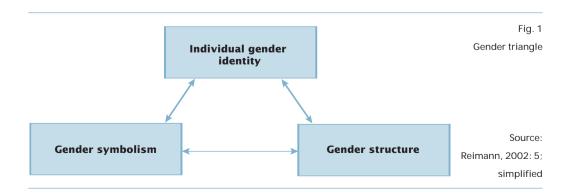
Phase 2: Focus on the causal links between environmental scarcity, degradation and violent conflict.

Phase 3: Enlarging empirical evidence and diversifying methodological approaches to include cases where scarcity of resources did not lead to violent conflict, and thus attempting to trace certain mechanisms of conflict management that could lead to a positive outcome.

This study is positioned in the third phase.

According to Harding (1991), gender encompasses and structures every sphere of society. Various feminist approaches² aim to explain the interaction of gender and violent conflict.³ The essentialist feminist approach, for example, is based on the assumption that men and women have a common nature (Strikland and Duvvury, 2003: 8). War is seen as "man's business", peace as inherently feminine (Klein, 2003: 10). The current debate on conflict and gender focuses on finding methodological answers to how to study the relation between gender and violent conflict. For this purpose, Reimann (2002) proposes "gender as an analytical category" as a tool. Following Harding (1991: 14), she outlines three dimensions of gender to be mapped in conflict:

- 1. *Individual gender identity* refers to socially constructed identity, influenced by fictions of masculinity and femininity (the symbolism of gender) and by social norms. Individual experiences of conflict also shape the identity. Changes in an individual's identity, role and needs are of interest within this dimension. The central question is: "How do I define myself as a man or woman in the society I live in?"
- 2. Symbolism of gender captures stereotypical gender dualisms classified by different dichotomies, which have little in common with actual sexual differences. The emphasis here lies on theorising about social change and historical variability. The central question is: "How is/are masculinity/ies and femininity/ties defined in the given society?"
- 3. *Structure of gender* refers to the organisation and institutionalisation of social action in the public and private spheres. The analytical focus is on theorising about hierarchical power structures and taken-for-granted power distribution.



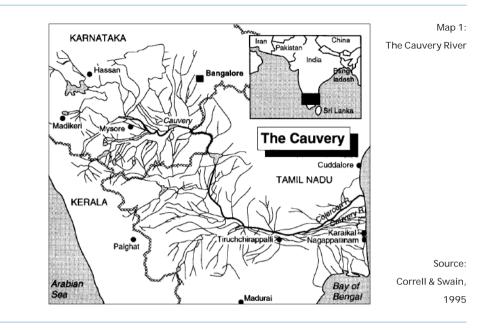
The three dimensions are highly interdependent. Changes in one dimension may lead to changes in the entire triangle (Fig. 1).

A modification of the structure of gender, for example, may alter stereotypical understandings at the level of gender symbolism, thus affecting the socially expected behaviour of a man or a woman in a given society (Reimann, 2002: 5). Taking individual traits into account, the gender triangle complements the theoretical concepts of environmental conflict and their management that fail to capture phenomena at a micro-level.

In what follows, "gender as an analytical category" is applied to the dispute over the water of the Cauvery River in South India, in order to reveal the significance of gender in environmental conflict. Seven interviews with experts were conducted in English and analysed through a qualitative content analysis proposed by Mayring (2003). The semi-standardised interviews took place between September and November of 2003 in Bangalore and Chennai (Madras), in southern India. They lasted from 45 minutes up to two hours and were recorded. From the state of Karnataka, two women and two men were interviewed. In the state of Tamil Nadu the experts were three men; unfortunately, no women could be found.⁴ The experts were contacted through snowballing (Mason, 2003: 6). Communication with one expert in a key position facilitated access to the other experts. The different cultural origins of the interviewees and the researcher did not hinder access in a significant way. Most of the experts were accustomed to contacts with Europeans, such that the risks of cultural misunderstanding could be minimised. The fact that the researcher was a woman enquiring about gender probably did highlight the relevance of gender in the context of the Cauvery dispute for most experts. Systematic analysis of the data helped prevent interpretation biases. Gender-specific interaction effects were not noticed in the concrete interview situations. Both male and female interviewees were very helpful and willing to provide information.

8.2 Description of the conflict over the water of the Cauvery

The Cauvery (Map 1) is the fourth longest river in southern India. Its water is used mainly for agricultural purposes. The Cauvery dispute is an intrastate conflict between the two Indian states of Karnataka, an upper riparian state, and Tamil Nadu, a lower riparian state. The conflict revolves around the



diverging positions of the two states regarding the distribution and use of water (Chauhan, 1992: 155). However, Richards and Singh (1996: 13) state that the issue is not the distribution of unused water, but the redistribution of quantities of water that are already being fully utilised.

The Cauvery dispute contains elements of an ethno-political conflict.⁵ The conflict is perpetuated by two different ethnic groups. On the one hand, there is the large farming population settled in the Cauvery delta in Tamil Nadu. While the water of the Cauvery is necessary for the labour-intensive cultivation of rice, it is also used for daily household chores. This group consists of Tamils representing the ethnic majority in Tamil Nadu. On the other hand, the people using the Cauvery across the state border in Karnataka are farmers from the Mandya District and the growing population of Bangalore, the capital of Karnataka. These users are Kannadigas who are the ethnic majority of Karnataka. Each party is represented by its government, perpetuating the conflict at an official level (see Corell and Swain, 1995: 146f.; Iyer, 2003b: 1998).

The underlying environmental problem in the Cauvery dispute is that demand is greater than supply. The excess use of water is primarily the result of the agricultural demand for irrigation, but also the demands of urbanisation, industrialisation and population growth, fuelling the increased need for drinking water (see Corell and Swain, 1995: 146; Janakarajan, 2003: 13). Percival and Homer-Dixon (2001: 14) refer to this phenomenon as "demand-induced scarcity". A cause for "supply-induced scarcity" (ibid.) can be found in the decrease as well as the increasing irregularity of rainfall in the Western Ghats, the source of the Cauvery (Veerappa, n.y.).⁶ When monsoons do not bring heavy showers, Karnataka cannot meet its demand and therefore releases little or no water from its reservoirs to Tamil Nadu. This triggers tensions between the two riparian states, making the outbreak of violence more probable (see Economic and Political Weekly, 2002; Janakarajan, 2003: 1).

The history of the Cauvery dispute can be traced back to the year 1807, when the former states of Mysore (now Karnataka) and Madras (now Tamil Nadu) discussed the use of the water (Chauhan, 1992: 155). From that time until today, various agreements have been made, but always to the discontent of one or the other party. In 1990, the Supreme Court of India directed the Central Government to form the Cauvery Waters Disputes Tribunal. This Tribunal has the task of issuing orders on the use and distribution of the water. In the following year, the Tribunal gave an interim order to which Karnataka objected because of instructions to release water on a weekly basis from June to May. This led to the most violent riots between Tamils and Kannadigas in the conflict's history. It was mainly the border regions of the two states and the slums of Bangalore that were affected by this violence. Houses were set on fire, and people attacked and expelled (Swain, 1998: 173). Until today, no final order has been given.

On an unofficial level, the Madras Institute of Development Studies (MIDS) is making some efforts to promote understanding between the populations of both states and to find a sustainable solution for the Cauvery dispute. This initiative is called the "multi-stakeholder dialogue", which, according to Janakarajan (2003: 3), presents a common platform for all stakeholders to exchange ideas and clarify misunderstandings and prejudices. In fact, the two meetings in the year 2003 were mainly attended by farmers from Tamil Nadu and Karnataka. As a result of these meetings, a committee consisting of farmers was set up to encourage understanding of the problems of the two states, by facilitating visits in different regions of Karnataka and Tamil Nadu. The ultimate aim of the committee is to formulate a water-sharing formula and to present it to the Tribunal and the governments of the states (Iyer, 2003a).

8.3 Gender in the Cauvery dispute

The interviews reveal that in regard to *individual gender* identity, both women and men are affected by the conflict. According to the interviewees, women do see themselves as stakeholders, although they rarely draw attention to their position in the conflict and its management.

The interviewees emphasise that the water has more relevance for women than for men. Water is central to the daily tasks of women. The scarcity of water, aggravated by the dispute, represents the loss of a basis for their cultural, religious and day-to-day life.

In the domestic sphere, the woman is responsible for providing for the family and fulfils all the domestic tasks in the household. Because many of these tasks, such as fetching water, cooking, doing the washing, and cleaning, are related to water, the dispute affects women more than men.

Women from middle-class households and middle-size farms rarely perform paid work or field work, but mainly go about their tasks in their own household. Among agricultural workers (without land) and smallholders, women and men work in the fields.⁷ The direct effects of the conflict are reflected in the decrease in agricultural productivity affecting both male and female farmers. Farmers are active in protests, opposing the plans of the government. One expert reports the case of a man committing suicide as a form of protest. Many agricultural workers, both male and female, are seriously affected by unemployment due to water scarcity and the dispute.

During the riots in 1991/1992 between Tamils and Kannadigas, it was mainly the men who perpetrated violence, whereas both women and men were victims. Women were affected by gender-specific violence, such as rape and sexual harassment.⁸ The refugee population consisted of both men and women.

In more "peaceful" times, it is the men who leave the areas affected by water scarcity to search for new ways to earn income in other regions, states, and big cities such as Bangalore or Mumbai (Bombay). Women stay behinde and find themselves in the role of head of the household, taking on increased workloads. Thus migration is specifically structured according to gender.⁹

Regarding the symbolism of gender, water in general, and the Cauvery River in particular, have a specific cultural and religious meaning for the people. Women perceive the river as a refuge from danger. They believe that the Cauvery will protect and save them. Various rituals are carried out on the banks of the river. The scarcity of water limits these rites. A peculiarity of the Cauvery dispute is the attribution of gender-specific and personified characteristics to the resource. The Cauvery is worshipped as a mother and a goddess. These labels tell us something about the idea of femininity in southern Indian society. Women are often compared to pure water, insinuating that they must be pure. The honour of a woman is central here. Insulting a woman is considered an offence against her and her husband's honour, because the wife is seen as the husband's property. Rape is used to destroy the women's honour and to insult her husband. The loss of a wife's honour is often considered (also by the women concerned) to be more serious than death. Female stereotypes also mean that women make concessions, trying to find alternative ways when there are obstacles, silently caring for their families, whose welfare they often rate higher than their own, whereas men look out for themselves first and then attend to family welfare. A greater readiness for peace among women was not mentioned in the interviews, contrary to what the essentialist feminist approach predicts. The interviewees said that women as well as men are able to project images of the enemy that may contribute to an increasing potential for violence. Only one expert attributed higher intelligence, sensitivity and intuition to women. He hoped that these qualities would influence conflict management positively.

Many answers to the interview questions are related to *the structure of gender*. In particular, the gender-specific division of labour in the private sphere of the household and in the public sphere of agriculture was mentioned. The effects of the Cauvery dispute on men and women differ to a large extent, due to the gender-specific allocation of tasks in the respective spheres. Women as well as men are affected in the fulfilment of their assigned work. Within the domestic sector, it is mainly women who are affected, while in agriculture it is men and women to the same extent. The dispute's toll on health is related to the gender-specific division of labour, too. According to the interviewees, women's tasks are greatly hampered by the scarcity of water, and the migration of their husbands increases their workload, leading to physical and psychological problems. Therefore, women suffer more often than men from disease, hunger, depression, etc.

Men dominate water management organisations and conflict management initiatives.¹⁰ Women are for the most part excluded from power structures. In grassroots organisations such as farmers' associations, women are represented in greater proportions than at other levels; however, they often remain

passive members and are not represented at higher levels. One expert related the common assumption that women would not speak up in public and would not want to have an active role. This construct, relating to the symbolism of gender, serves to exclude women from the public sphere and from power structures encompassing decision-making bodies and conflict management approaches. It is argued that the inclusion of women would not be beneficial to the initiative, as they would not participate. The low representation of women at higher levels of management is also due to structural discrimination against women throughout their lives (in education, family, and religious practices). Policies and initiatives that aim to abolish this discrimination and to promote the involvement of women in public life barely exist in Tamil Nadu, while in Karnataka, such initiatives are to be found at different levels. Therefore, women in Karnataka are quantitatively better represented, but still fighting against sexist behaviour and for their voices to be heard. The minimal representation of women in important positions in conflict management could be one of the reasons that women's specific interests in conflict management are overridden. Although Tamil Nadu's Chief Minister Jayalalithaa is the sole woman in a high office, there is no mention of greater consideration of women's plight in the view of the experts. Thus the presence of a woman in a powerful position does not automatically lead to fundamental changes.¹¹ The same problem is revealed at the level of the "multi-stakeholder dialogue". Although a few women hold relatively important positions in farmers' organisations, they represent mainly the interests of the farmers, not pursuit of women's specific needs. In view of this, the suggestion of an expert to introduce quotas for women in conflict management meetings merits critical reflection; it may be one step, but is not sufficient on its own.

According to one expert, an argument by male participants not to consider gender issues in conflict management initiatives in the Cauvery dispute arose from the claim that their efforts include women and men equally.¹² Actually, such initiatives are "gender-blind", as they ignore gender-specific interests and needs. The claim of equality of men and women in conflict management commonly refers to changes within the "structure of gender" dimension. In this regard, one expert takes the liberal feminist approach: He favours equal representation of women and men, while changes in the other two gender dimensions are not the aim. One interviewee suggests increasing the focus on the scarcity of potable water to sensitise political processes as well as irrigation and agriculture policy affecting gender. Because fetching potable water is a women's responsibility, this approach could heighten consideration of women's interests in conflict management.

8.4 Discussion and conclusion: gender relevance in environmental conflicts

This study demonstrates that the ways people are affected by an environmental conflict, and the ways they are involved in conflict management, are differentiated by gender. The "structure of gender" dimension seems to be of primary importance in environmental conflicts. Gender-specific division of labour unevenly distributes tasks related to the disputed resource according to gender, determining the effects of the conflict during performance of the respective tasks. In the Cauvery dispute, the women do most of the work related to water, and are therefore more seriously hindered in their daily work than men. In the case of the Cauvery dispute, analysis of "gender as an analytical category" revealed, at the level of structure of gender, that it is mainly men who are represented in conflict management. Women rarely hold important positions and hardly participate in discussions. The notion of symbolism of gender seems to determine the kind of violence used in a specific cultural setting during a conflict. In the Cauvery dispute, rape was used as a means to destroy the honour of women and to insult the husbands. The notion of femininity emphasising the honour and the purity of women was central to the gruesome intentions of the perpetrators. Further studies would be necessary to determine more accurately the significance of the symbolism of gender in environmental conflicts, for example its importance in the politicisation of the dispute, and its resolution and transformation. In environmental conflicts gender may play a role in relation to the cultural and religious meaning of the renewable natural resource. The Cauvery is personified as a woman, and women have a stronger rapport with the river than men, according to the interviewees. Therefore, the dispute over a culturally and religiously meaningful resource may have a differential impact on gender.

Individual gender identity is of relevance with regard to the stakeholders.¹³ Analysis of the Cauvery dispute illustrated that gender plays an important role in the extent to which an individual is affected by environmental conflict. The individual consequences of conflict are connected with the structure of gender, among other things. In the Cauvery dispute, the influence of gender is also visible at the level of conflict management. The symbolism and the structure of gender increases discrimination against women in conflict management, because the so-called "passivity of women" serves as an argument for excluding them.

Consideration of gender may contribute to the management of environmental conflicts by promoting the involvement of all stakeholders in conflict management. It helps to shed light on inequalities and discrimination in environmental conflicts and their management. A gender analysis focuses primarily on gender-specific differences, but also takes account of socioeconomic inequalities within gender categories. Thus different marginalised groups are taken into account.¹⁴ If the involvement of all stakeholders is a goal in the management of environmental conflicts,15 then consideration of gender is an imperative. A stakeholder analysis must include gender because men and women are usually affected differently by environmental conflicts. Consideration of gender in the management of environmental conflicts therefore may help to counter gender-specific discrimination and discrimination against particular groups, and also may help to reduce inequality. Consideration of gender-relevant topics completes a comprehensive conflict analysis and supports sustainable conflict management. A gender-sensitive approach can identify topics relevant to marginalised stakeholders that represent a potential for future conflict, as actors holding power ignore them. A gender-sensitive analysis gives closer attention to the private sphere than currently common, gender-blind conflict analysis.¹⁶ In the case study, the problem of the availability of potable water, and the cultural and religious attributes attached to this disputed resource, were identified as extremely meaningful, especially for women. The problem of potable water, especially in cities, creates great potential for conflict. Cultural and religious meaning plays an important emotional role in the conflict, which is misused by particular groups in their own interest, thus hindering conflict management.

Gender should be considered in all studies of the Cauvery dispute and its management. Further gender-sensitive studies of the Cauvery dispute could more accurately examine the significance of gender in different social classes, the influence of gender on the conflict, and how individual gender identity and the symbolism of gender interplay in the complex setting of environmental conflict. An investigation of the direct stakeholders would certainly yield important findings.

In conflict management of the Cauvery dispute, greater involvement by women and other marginalised groups would be desirable. There must be assurance that the needs and grievances of these groups are considered in conflict management, and that their involvement is not only visible in terms of numbers but also in composition of the agenda, including their own needs and agreements. In this way, conflict management could approximate its goals of sustainability and justice. Strategies have to be designed to include gender at all levels of conflict management, and to facilitate access to forums of conflict management for women and other marginalised groups. One expert's suggestion for this purpose is to bring the issue of scarcity of potable water into focus.

These recommendations are aimed at research on and management of environmental conflicts in general. The benefits of considering gender in the context of management of other environmental conflicts need to be discussed. A comparative study of various case studies in this context could provide valuable information on the general findings about the Cauvery dispute in this particular study. Consideration of other parameters, such as renewable natural resources, environmental conditions, and the type of state involved, will enhance understanding of the complexities of environmental conflict.

Endnotes

- *This article is based on the author's master's thesis: Gender in Umweltkonflikten irrelevant? Eine Genderanalyse von Umweltkonflikten und ihrer Bearbeitung illustriert anhand einer qualitativen Untersuchung des Cauvery-Disputs in Südindien. Unpublished master's thesis, Department of Social Work and Social Policy, University of Fribourg 2004. The supervisors of the study were Eva Ludi (Swisspeace, Bern), Cordula Reimann (Swisspeace, Bern) and Hiltrud Lugt (University of Fribourg). The study arose from a proposition of Individual Project 7 (IP 7) "Environmental Change and Conflict Transformation". The goal of IP 7 is to improve scientific knowledge about the prevention of violent conflicts related to global change and to promote practical valorisation of its results (National Centre of Competence in Research North-South, 2002: 140). For more information about IP 7 and the NCCR North-South, see www.nccr-north-south.unibe.ch.
- ¹The term renewable resources is difficult to define, e.g. in terms of the time frame of renewal. According to Libiszewski (1992), water, soil, forest, air, the atmosphere, the climate, oceans and biodiversity represent natural renewable resources. They are renewable because they are "ecologically integrated in a feedback circle system which guarantees their replacement or the preservation of their quality".

²See Burguieres (1990), Hinterhuber (2003) and Steans (1998) for theoretical overviews.

- ³Violence refers, if not otherwise indicated, to personal as opposed to structural violence. Structural violence involves constraints due to unequal socio-economic and political conditions (see Hillmann, 1994: 293ff.).
- ⁴The following persons served as experts: From Karnataka: one representative of a women's Non-Governmental Organisation (NGO); an employee of the administration in the domain of irrigation; a professor in agricultural science, co-organiser of the "multi-stakeholder dialogue"; a water resource engineer; and a representative of an NGO concerned about the management of natural resources. From Tamil Nadu: One representative of a farmers' organisation and a politician; a professor in development studies, organiser of the "multi-stakeholder dialogue;" a director of a research institute of development studies, a co-organizer of the "multi-stakeholder dialogue".
- ⁵Baechler (2002: 532) mentions ethno-political conflicts as one type within his typology of environmental conflicts: "In ethno-political conflicts the fault lines are between ethnic groups which either share one ecozone with degraded and thus scarce resources or which settle in neighboring ecozones of highly distinct support capacities and thus different degrees of productivity".
- 6 This reason was also mentioned by four interviewees.

⁷The specific division of labour depends on the plant cultivated.

⁸Men as victims of sexual violence were not mentioned in the interviews.

- ⁹In the interviews, only the negative aspects of this increased responsibility were mentioned, in contrast to the literature (see e.g. Byrne, 1995: 36ff.), where often emancipating effects are also described.
- ¹⁰There is a women's organisation in Karnataka, Vimochana, that started to work on the Cauvery dispute after the riots in 1991/1992. It organised meetings between farmers inKarnataka and Tamil Nadu, but mainly men participated.
- ¹¹This corresponds to the criticism of the liberal feminist approach (Steans, 1998: 17) and the remarks of Rehn and Johnson Sirleaf (2002: 79ff.).
- ¹²Anderlini (2003: 19) sees in this so-called "gender neutrality" of conflict management a reason for the minimal consideration of gender.
- ¹³IP 7 (Hagmann, 2002: 2) emphasises the significance of stakeholders in environmental conflicts.
- ¹⁴For instance, one interviewee criticises the lack of consideration of women's interests and also the lack of involvement of landless, lower castes, poor people, and inhabitants of particular regions in the MIDS initiatives.
- 15See e.g. Hagmann (2002: 2f), Mason and Spillmann (2002: 13), Janakarajan (2003: 4).
- ¹⁶Concerning conflict management, Reimann (2001: 31) discusses gender in terms of the dichotomy between "private" and "public". Conflict management generally applies to matters in the public sphere and therefore neglects the plight of women in conflict-stricken areas. The tool "gender as an analytical category" aims to dissolve this dichotomy by taking into account all three gender dimensions.

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9

Gender and Family Planning in Urban Underprivileged Areas: An Analysis of Contraceptive Practices in Precarious Slums of Yopougon (Abidjan, Côte D'Ivoire)

Mohamed Doumbia

Despite the existence of family planning programmes, the rate of use of contraceptives in Côte d'Ivoire is Iow (21% for all methods). Although married couples practise more modern contraception, the methods of adoption are very complex because women and men do not always agree on contraception. The present paper seeks to identify and analyse men's and women's contraceptive practices in precarious slums and the possible influence of gender relations on these practices. A survey was carried out with 307 households in 6 precarious slums in Abidjan, using a quantitative and gualitative research approach with guestionnaires and focused group discussions. The results showed that more than 90% of men and women are aware of contraceptive methods, and that they are most familiar with modern methods. But in terms of practice, only one of every two men and women admitted using a contraceptive method. Some of the women practised contraception secretly. Concrete recommendations are made here for changing these disparities between men and women, which seem to be the main reason for avoiding contraceptive methods.

Introduction

After achieving independence in 1960, Côte d'Ivoire adopted economic liberalism as its development strategy, with fundamental openness towards the outside world. This policy was responsible for spectacular economic performance, with a growth rate between 6% and 7% until the end of the 1970s (Fassassi, 2004). This "economic miracle" confirmed the position of the authorities with regard to demographic growth and fertility. Indeed, early in the era of independence, the level of fertility ranged between 6 and 7 chil-

dren per woman. This was even reinforced in the period 1970-1980, not only by the country's economic performance, but also especially through the political determination of the authorities to increase the level of fertility. The promotion of ideals of high fertility and the construction of health centres to sustain this policy were responsible for a rise in the level of fertility.

Since the effects of the economic crisis of the 1980s, and the actions of the Ivorian Association for Family Well-Being (AIBEF), the ideal of high fertility has been less popular, as contraceptives have been promoted and disseminated. Thus, from 7.2 children per woman, the average decreased to 6.3 in 1988 and 5.7 in 1994 (INS et ORC Macro International Inc, 2001). Moreover, under the influence of the International Conference on Population and Development (ICPD), which took place in Cairo in September 1994, Côte d'Ivoire implemented a National Programme on Reproductive Health and Family Planning (PNSR/PF)¹. On the one hand, this programme made it possible to reduce the rate of fertility to 5.2 children/woman in 1998 as against 5.7 children/women in 1994. On the other hand, it increased the prevalence of contraception, especially the use of modern contraceptive methods, to 17% in 1994 and 21% in 1998, according to national statistics of the Demographic and Health Survey (EDS) (INS et ORC Macro International Inc, 2001). This increase in the rate of modern contraceptive use has also been influenced by the debate on HIV/AIDS.

Although these figures seem to represent increasingly significant adherence to practices of controlling fertility, particularly in the city (Touré et al, 1997; Guillaume, 1999), it is still true that in Côte d'Ivoire, as everywhere else in Africa, women are subordinate to decisions made by men, who tend to be against contraception.

On the basis of these trends, the objective of the present study was to explore the underlying mechanisms that influence the options open to women and men, as well as their decisions. Two main factors were identified and will be discussed in this article: education and economic status. Both seem to be important in the choice and practice of contraception among couples. Adopting a gender perspective on knowledge about contraception and actual practice reveals how gender relations are shaped and how they further influence the decisions of men and women individually and as couples.

9.1 Theories of fertility and decision-making

Several studies showed that men have most if not all of the decision-making power and influence concerning a couple's contraceptive practices. A study by Isiugo and Uche (1994) revealed that in Nigeria men play a dominant role in making such decisions. This dominance is accepted by women, only 2% of whom consider that a woman must have some influence in a couple's decision about the size of the family. According to Andoh and Kouassi (1997), this tendency is confirmed in Côte d'Ivoire. In general, women grant husbands "the right to decide about contraceptive practice" (Diakanda and Kassegne, 2001; translation by author). These authors believe this explains why women whose husbands approve of family planning use contraceptives more frequently. On the other hand, the refusal of their husbands led some women to practise contraception in a clandestine way. According to Ezeh et al. (1996) the level of acceptance of family planning depends on the educational level of the man. With regard to the educational level of women, EDS data for 1998 reveal that on the whole women were favourable to family planning, independent of their educational status. Acceptance, however, increased with their level of education (INS et ORC Macro International Inc, 2001).

In Côte d'Ivoire men not only favour high fertility, with an ideal family size of 6 children on average; the choice and use of a contraceptive method generally also depends on them (Andoh and Kouassi, 1997). Thus when men approve the choice, there is a 40% chance that the couple will practise contraception, whereas this drops to 30% when the demand for contraception comes from women, and succeeds then only after both have reached an agreement. According to EDS-CI data for 1998, when men are less favourable to family planning, it affects the rate of use of contraception by couples, with the result that "among married women, only 15% used an unspecified method at the time of the survey: 7% used a modern method and 8% a traditional method" (INS et ORC Macro International Inc, 2001). It is due to the important role of men that many authors recommended the participation (Touré, 1996) and/or the involvment (Green et al., 1995) of men in family planning programmes. For the first author, participation "lightens the responsibilities of women regarding decision-making in family planning", but also helps "to accelerate the knowledge and the practice of family planning in general". For the second author, recognition means taking account of men's preoccupations by making them active, responsible actors. According to both authors, excluding men increases the risk of refusal, especially as some of them perceive questions of reproductive health as "a weapon for minimising their authority within the households". Finally, participation and/or recognition allows men to reflect on their role in perpetuating existing gender relations.

Despite public awareness campaigns to motivate women, "decisions are not made if their husbands are against it" (Bankolé and Sing, 1998). Women's options are so limited that gender relations become an important factor, as they define the modalities of decision-making between men and women regarding fertility on the one hand, and the processes that surround procreation on the other hand (Locoh, 1997). Insight into such modalities is necessary to analyse the nature of underlying gender disparities. It is necessary to include the education of women in analysis, which, by comparison with men, is generally at a lower level, although an increase in the rate of literate women has been noted since the early 1980s. The rate increased from 5% in 1970 to 14% in 1980, reaching 30% in 1995 (Anoh, 2001).

Economic factors and the specific standard of living of people old enough to have children are other factors taken into account in studying decision-making on family planning. Several studies linked to the theory of demographic transition (Boserup, 1985; Lestaeghe, 1989; Cosio-Zavala, 1995, 1997; Vimard, 1997; Agbamadjo, 1997) showed that under the impact of economic and social change, a decline in fertility began in the most unprivileged social groups in countries of the South. Social change and economic change are the two mechanisms of the "crisis model"², (Becker, 1960; Coal, 1973; Easterlin, 1976; Becker and Nigel, 1976; Cadwell, 1976). On the one hand, modernisation is seen as enabling the dissemination of contraceptive methods through family planning programmes. On the other hand, economic crisis involves household impoverishment, which is seen as increasing with the costs of raising children and forcing couples to have recourse to modern contraceptive methods to reduce the number of offspring. The logic of the "crisis model" seems to indicate that contraception should be practised particularly by some groups of women, i.e. the poor. In reality, however, even when they use contraception, which is difficult for them, a certain number of women remain at the margins of the programmes and the health system. The present analysis of the contraceptive practices of women and men as couples presents an updated view of the assumptions of the crisis model for Côte d'Ivoire.

Three central questions guided the present study:

1. How do women and men individually, as well as couples, control fertility?

- 2. Which types of methods do they use, and what is the potential influence of gender relations on the adoption of these methods?
- 3. Does the socio-economic status of couples have any real influence, as assumed by the "crisis model"?

9.2 Methodology

Study area

With an area of 85 km², the district of Yopougon is the largest in Côte d'Ivoire. In 1998 there were 688,235 residents, according to the general census of population and households (RGPH), but today the population is estimated at more than one million residents. Most of the precarious slums of Abidjan are in Yopougon. The study was carried out in six precarious slums: Doukouré, Gbinta, Mamie Faitai, Niangon Continu, Yamoussoukro and Yaoséhi. Situated to the south and slightly to the middle of the district, these slums are crossed by a reservoir called "Basin Uniwax" that drains the water from households and the industrial zone. With a population of 40,649 residents (INS, RGHP, 1998) for an area of 82 ha, these slums are characterised by insalubrity, difficult housing conditions, and unemployment (Figure 1). 78.5% of housing consists of studios with 5 to 6 persons living in an area of



Fig. 1 Housing in Yaoséhi

Source: NCCR/IP4-Team in Abidjan, 2004



Fig. 2 A pump for running water

Fig. 3

A primary school in Doukouré

Source: NCCR/IP4-Team in Abidjan, 2004

approximately 16 m². All members of a family live together in these accommodations. There are different types of families: (1) families with father, mother and children; (2) single-parent families; (3) polygamous families; (4) families of sisters and brothers; and (5) families with foster children.

Structures are generally built with bricks. Practically all households have electricity (96.4%) and running water, but the majority get water from vendors (81.1%). In terms of social infrastructure, there are many clinics and sick-rooms, and some kindergarten, primary and secondary schools nearby (Figures 2 and 3). Except for the "small trades" and so-called liberal activities³, the slums are affected by unemployment, mainly among the young, who lived in other accommodations in Abidjan before moving to the slums due to impoverishment. Very few NGOs work on family planning issues in the slums.

Data collection

The study focused on a sample of 307 households. Fieldwork took place through the Swiss Centre for Scientific Research (CSRS), which has signed a scientific partnership with the district of Yopougon. A total of 5 PhDs work on related topics within the district. At the outset, the Swiss Centre for Scientific Research organised a workshop with the responsible authorities⁴ and inhabitants living in the slums. We explained the objectives of the research, the form of collaboration, and identified together all relevant priorities. Then, every PhD candidate established his/her individual contacts and begun their own studies. The survey was preceded by contacts with responsible people in the slums and some exploratory studies. Three Master's candidates in sociology (two female and one male) supported our scientific investigation.

To understand the stakes of having children, the process of decision-making, and family planning in action between husband and wife, we identified couples as units of analysis. We therefore focused on married women, and have not yet interacted with single women or prostitutes. The fertile life of a woman begins generally at 15 years and ends at 49. This age category determined our sample. Accounting for refusals as well as the presence of second spouses in 2 households, we interviewed 305 men and 309 women. Only one woman did not reply to all questions.

Two approaches to data collection were used in the framework of this study: a quantitative and a qualitative approach.

Quantitative approach

We carried out the survey using a standardised questionnaire with open and closed questions. The purpose of using a questionnaire was to obtain information about the household. In order to obtain this information, we interviewed wives and husbands individually. Due to the very sensitive character of the subject, we requested the interviewers to interview the wife and the husband separately in order to avoid influencing the responses, but also to avoid causing possible quarrels inside the household after the survey. The interviewers asked husbands and wives the same questions. In response to a request from the authorities in the slums, we asked guides to accompany the interviewers to introduce them in households. Interviewers had to promise the participants to keep data confidential. This allowed the participants to speak freely and confidentially (Berthier, 1998) during face-to-face meetings. No one else was authorised to be present during the interviews. The questionnaire was divided into 7 sections: basic information, individual characteristics of the couple (including schooling), fertility and social norms (perceptions of fertility and gender), fertility and birth control (knowledge and contraceptive practices, continuity of contraceptive methods, abortion as a contraceptive practice), ideals and preferences related to fertility, brief history of birth, and household socio-economics. A differentiation was made between men and women in the section on fertility and birth control, in which men were not involved in the categories of continuity of contraceptive methods and brief history of births.

Qualitative approach

Qualitative data were obtained during focused group discussions with men as well as women. The interviews took place in groups that were separate or mixed, depending on the aims of the study. In order to complete the qualitative analysis, individual interviews were carried out with NGOs and agencies in charge of family planning. In general, discussions were carried out on 7 topics: the value of procreation and children, decision-making by the couple, size of the family, contraception and family planning, abortion, sterility and infertility, and motherhood and health of the mother and the child. The key actors were men's and women's associations within the slum, and men and women chosen according to socio-economic, demographic and geographical criteria (place of household in the slum). Interviews with the men's and women's associations were carried out with the main leaders in order to determine how their opinions influence life in the slums in terms of family planning. We proceeded by topic, and each participant was free to give his/her point of view. Regarding the mixed interviews with men and women, situations were arranged allowing them to speak freely and openly. Each participant (man and woman) was allowed to state his or her point of view freely. Discussions took place in the morning at the main meeting places in the slums.

The data were analysed with two software programmes. SPSS 11.0 software allowed us to make descriptive analyses, tabulations and correlations. MAXQDA software was used to structure interviews and to categorise key issued related to the replies. To get a closer analysis, we used content analysis (UNFPA, 1998). Parts of the analysis are still in progress.

9.3 Results

Disparities between men and women

Two gender disparities are analysed in what follows: level of education and socio-professional situation.

Level of education

The survey showed that men and women know how to read and write, but with significant differences: 62.4% of women versus 88.2% of men. With reference to the specific levels of education, we noticed that women who have no education (108/309) represent nearly triple the number of men in this category (Table1). In other words, there was one man without education for every three women without education.

This observation is practically valid for all the other levels of education, apart from the primary level, with 119 women as against 69 men. At the

	Men		Women		Distribution c
Level of education	AV*	RV* (%)	AV	RV (%)	participant
None	37	12.2	108	35.0	according to leve
Kindergarten	0	0.0	2	0.6	ofeducatio
Primary	69	22.6	119	38.5	
Secondary	159	52.1	74	24.0	
Superior	39	12.8	5	1.6	
Non-formal programme	1	0.3	1	0.3	
TOTAL	305	100	309	100	

Table 1

* AV = Absolute Value

* VR = Relative Value

secondary level there were 74 women as against 159 men, and at superior⁵ level only 5 women as against 39 men. These gaps can be explained by the fact that the higher the level of education, the smaller the percentage of girls by comparison with boys. This picture is confirmed at national level, where women represent 42.3% at the primary level, 34% in the first cycle of secondary level, 30% in the second cycle of secondary level, and 25.4% at the superior level (Yao Annan, 2002)⁶.

Table 2 shows that in 60.6% of all couples, both the man and the woman were educated, while in nearly one-third of the couples men were educated and women uneducated. On the other hand, only 1.9% of couples were non-educated men and educated women. Non-educated couples constituted slightly more than 10% of the couples surveyed. As a comparative analysis of data shows (Doumbia, 2004), these different levels of education between couples in general, and between men and women especially, constitute an important

Table 2

			Distribution of
Difference	AV	R V (%)	
Woman and man are educated	186	60.6	couples according
Man educated, woman uneducated	84	27.4	to level of
Woman and man both uneducated	31	10.1	education
Woman educated, man uneducated	6	1.9	
Total	307	100	

element in the gender structure among couples, in particular with regard to decision-making.

Indeed, analysis of the interviews showed that the level of education constitutes a determining element in power relations: the more educated a woman is, the less her husband can exercise authority over her. « Quand la femme est allée loin à l'école, elle croit qu'elle et l'homme sont même chose » and « Quand femme connaît papier, elle ne respecte pas son mari. Quand il dit un, elle dit deux » ("When a women has gone far away to school, she believes she and a man are the same thing" and "When woman knows paper, she doesn't respect her husband. When he says one, she says two"). Education allows women to be more independent: « Une femme, quand elle sait lire et écrire, elle ne suit pas aveuglement ce que dit son mari. Parce que quand tu es analphabète, tout ce que ton mari dit tu crois que c'est vrai puisque c'est lui qui est allé à l'école. » ("A woman – when she can read and write – she doesn't blindly follow what her husband says. Because when you're illiterate, everything your husband says you believe it's true because he's the one who went to school").

The socio-economic situation

In socio-economic terms, differences between men and women can be observed according to their respective professional status. From the perspective of persons interviewed, men were generally more economically active than women. Of course, most of the women (55.7%) were involved in

Distribution of		Men		Women	
men and women	Professional status	AV*	RV* (%)	AV	RV (%)
according to	Employed	267	87.5	172	55.7
professional status	Employed/housewives	-	-	20	6.5
	Housewives	-	-	109	35.3
	Unemployed	23	7.5	-	-
	Looking for a job	1	0.3	1	0.3
	Students	6	2.0	6	1.9
	Pensioners	6	2.0	0	0.0
	Inactive	0	0.0	1	0.3
	Others	2	0.7	0	0.0
	Total	305	100	309	100

* AV = Absolute Value

* VR = Relative Value

activities that provided some income, as against 35.3% of housewives and 6.5% of women who shared their time between economic and domestic activities. By comparison, there were two economically active men for every woman. Indeed, the number of employed⁷ men was more significant. 87.5% as against 7.5% unemployed and 1.9% pensioners.

With regard to income-producing occupation, most men are involved in liberal activities and/or are wage earners, whereas women's activities can be summarised as "small trades," especially selling condiments and foodstuffs (29.1%), selling drinking water or ice (12.5%), sewing (10.4%), selling clothes (8.8%) and restaurant management (7.8%). Only 3.6% are wage earners. If we take into account these marked differences, it can be stated that contributions to expenses give a relevant indicator of the nature of gender relations within households.

Income from these activities is so minimal for the majority of women that they cannot contribute effectively to household expenses. Knowledge of the crisis situation in the country reveals that "small trades" engaged in by women allow them to earn only a small income and contribute to "minor expenses" that don't require their husband's help. By contrast with cooking, rent and electricity are considered "important expenses" and are covered by men.

Table 4 shows that, independent of professional status, 96.1% of men contribute to household expenses, while 45.3 % women do. Women's contributions vary according to whether they are involved in economic activity or not.

Table 4

	Contribution to expenses ⁸				Professional
Professional status	Men		Women		status of women
	Yes	No	Yes	No	and men and
Employed	87.2	0.3	38.8	16.8	contribution to
Employed/housewife	-	-	5.2	1.3	household
Housewife	-	-	1.3	34.0	expenses
Unemployed	4.6	2.9	0.0	0.0	
Looking for a job	0.3	0.0	0.0	0.6	(percentage)
Students	2.0	0.0	0.0	1.9	
Pensioner	1.3	0.7	0.0	0.0	
Others	0.7	0.0	0.0	0.0	
Total	96.1	3.9	45.3	54.6	-

At this level, employed women were those who, in the majority, contributed to household expenses. Of 172 employed women, 120 (38.8%) contributed to household expenses.

In total, 140 women contributed to household expenses. The small proportion of women reflects their professional status, which is characterised by non-remunerated domestic activities and "small trades" (with very tiny incomes). Moreover, in more than half of all households (57%), it was the man who covered all household expenses.

9.4 Knowledge and opinions about contraception: correlation with other factors

Knowledge of contraceptive methods

In general, we believe that the practice of contraception is equivalent to knowledge of at least one contraceptive method (INS et ORC Macro International Inc, 2001). Empirically, we observed that more than 90% of the people interviewed were aware of at least one contraceptive method. Moreover, knowledge among men and women was roughly equal, with a slightly higher average among women: 91.3% of women as against 90.8% of men. The link between knowledge of contraceptive methods and socio-economic and educational variables reveals that these variables do not significantly affect knowledge of methods. However, in absolute terms, average knowledge among both sexes is greater.

Education

Practically all men and women who have gone to school are aware of at least one contraceptive method. Even uneducated women are aware of at least one method. Most of the women have received information on contraception through the health centres. Another source of knowledge is women's discussion groups. Table 5 shows that there is a high level of correlation between the number of men and women aware of at least one contraceptive method and their level of education (above 70%). Among men, we observed that the higher the level of education, the greater the proportion of men at each specific level. For women, on the other hand, there was a break at the superior level, where the proportion of those unfamiliar with any method was 20.0% (1 woman) against 13.2% (14 women) for those with no education, 7.6% (9 women) for those with a primary education, and 0.0% for those with a secondary education. Although at other levels the proportion of women unfamiliar with any method was 33.4%, this does not have the same explanatory value, as they were classified in the non-formal educational system.

Professional status

We also observed that professional status does not significantly influence the degree of knowledge of contraceptive methods among men and women. The level of knowledge was high whatever the professional category; the proportion was above 80% regardless of sex. The fact that knowledge of methods is not necessarily linked to socio-professional status was also verified by housewives, who are generally considered "ignorant". Indeed, housewives were aware of contraceptive methods to the same extent as employed women: 97 of 119, or 89%.

Traditional and modern methods: knowledge and preferences

Modern methods are generally well known. The distribution of contraceptive methods according to the level of knowledge among actors shows that women are more familiar with the pill (94.3%) than men (87.7%). This is followed by the condom (75.8% of men and 53% of women), the injectable

	Knowle	Knowledge of contraceptive methods					
	Men			Women			
Socio-economic							
characteristics	Yes	No	Total	Yes	No	Total	
Level of education							
None	78.4	21.6	100	86.8	13.2	100	
Primary	91.3	8.7	100	92.4	7.6	100	
Secondary	91.8	8.2	100	100.0	0.0	100	
Superior	97.4	2.6	100	80.0	20,0	100	
Other	100	0.0	100	66.6	33.4	100	
Professional status							
Employed	91.4	8.6	100	94.2	5.8	100	
Unemployed	82.6	17.4	100	0.0	0.0	100	
Looking for a job	100.0	0.0	100	100.0	0.0	100	
Housewife	_	_	100	89.0	11.0	100	
Employed/housewife	_	_	100	85.0	15.0	100	
Student	100.0	0.0	100	100.0	0.0	100	
Pensioner	83.3	16.7	100	0.0	0.0	100	
nactive	0.0	0.0	100	100.0	0.0	100	
Other	100.0	0.0	100	0.0	0.0	100	

Table 5

Comparison of the degree of knowledge of contraceptive methods and socio-economic characteristics of men and women proportional to the categories in which they belong (percentage)

Men N = 305

Women N = 308

Table 6

nowledge of		Men		Women		All	
nethods and		AV	RV (%)	AV	RV (%)	AV	RV (%)
nethods known	Knowledge of methods						
	Yes	277	90.8	283	91.9	560	91.3
	No	28	9.2	25	8.1	53	8.7
	Methods known						
	Pill	243	87.7	267	94.3	510	91.1
	Injectable	145	52.3	179	63.2	324	57.8
	Condom	210	75.8	150	53.0	360	64.3
	Coil	30	10.8	47	16.6	77	13.7
	Coitus interruptus	15	5.4	6	2.1	21	3.7
	Cycle/periodic continence	141	50.9	121	42.7	262	46.8
	Traditional methods	10	3.6	25	8.3	35	6.2
	Vaginal shower	1	0.3	3	1.1	4	0.7
	Implant/Norplant	1	0.3	2	0.7	3	0.5
	Other	5	1.8	3	1.1	8	1.4

(52.3% of men and 63.2% of women) and periodic continence (50.9% of men and 42.7% of women).

The pill, the injectable, and the condom are the best-known methods, as they are promoted in health centres. Although the coil is one of the methods available in health centres, it has certainly been less used by comparison with the other methods (table 7). Traditional methods are becoming less and less known. They were not significantly mentioned and only represented 6.2% of the methods known. Analysis of knowledge about contraceptives shows that it is partially linked to gender. Indeed, if we categorise methods according to sex, we observe that methods known to men and women are linked to either their biological differences or their practices. Thus, among men, these are the condom (75.8% and 53.0%), coitus interruptus (5.4% and 2.1%) and periodic continence (50.9% and 42.7%). On the other hand, among women, these are the pill (94.3% and 87.7%), the injectable (63.2% and 52.3%), and the coil (16.6% and 10.8%).

Opinions about contraception

Men's and women's opinions about family planning in general and contraceptive methods in particular have some influence on their practices. This study revealed that all actors approve of contraception, with the highest percentage among women (80.3%, as against 73.8% for men). Nevertheless, these favourable opinions depend on the circumstances in which contraception is tolerated. Indeed, different interviews among men on this subject showed that some of them are favourable to contraception when the woman is supposed to have finished "having her children" or if the man is obliged to use contraceptives for other medical reasons. Comparison of couples' declarations of their opinions about contraception also shows that there is a lack of communication and/or divergence of opinion. We observed that in 14.4% of couples, when the wife approves of contraception, her husband opposes it. In this category of men, it is not normal that a man or a woman uses means to avoid a pregnancy. They state, for instance: « C'est Dieu qui donne les enfants, pourquoi refuser ? », « Si nos parents avaient fait comme nous, est ce qu'on serait aujourd'hui en vie ?», « Dieu t'a donné la chance d'avoir des enfants, il faut faire » etc. ("It's God who gives us children, why refuse [them]?", "If our parents had done the same as us, would we be alive today?", "God gave you the opportunity to have children, so you've got to make [them]", etc.).

9.5 Contraceptive practices[°]

Use of contraceptive methods

Knowledge about contraceptives is not always expressed in terms of systematic use. Different statements made by men and women revealed that of 560 men and women who declared that they were aware of at least one contraceptive method, only 333 currently used at least one of the methods indicated. It is important to know that men and women were questioned separately concerning their practices as a couple. The aim was to compare the opinions of couples on the question, notably among women who secretly practiced contraception.

Table 7 shows that 63.2% of men and 55.8% of women declared that they practiced contraception. The ratio of the total number of men (N = 305) to women (N = 308) was 57.4% to 51.1%. Answers by a spouse indicated that the pill was the best-known method; however periodic continence was the method most used by couples. This was followed by the pill, which is the most used modern method. Some couples used the pill in association with other methods. This was also the case with periodic continence. Of the modern methods generally promoted in health services, the coil was the method that was practically unused. Only one woman of the total number of users stated that she used it. The interviews showed that low level of interest among couples (mainly the women) resulted from the flow of blood caused

by this method. According to women, the coil is also a barrier to good sexual relations and causes "stomach ache", fibroma and "white losses".

The high rate of use of contraceptive methods nevertheless hides the huge risk of non-desired pregnancies. Since periodic continence is a major birth control strategy, there is a risk in relation to variation in the menstrual cycle of some women, as well as lack of knowledge about the means of determining the fertile period. Only 37.2% of women were able to determine the woman's fertile period, as against 23.3% of men.

Continuity in contraceptive practices

Some women who stated that they used a contraceptive method during the survey had changed or ceased to use temporary methods for various reasons. The main reasons for these changes and pauses were secondary effects (53.8% and 50%), health problems (23.1% and 7.7%), and the opposition of a spouse (15.4% and 11.5%). Except for these frequently evoked reasons, the desire to have children also influences a fair proportion of women: 23% stopped using contraceptives because they wanted to have a child. But as we observed regarding the reasons mentioned, secondary effects seem to be the main reason for changing or ceasing to use contraceptive methods. In Côte d'Ivoire, secondary effects constitute one of the main reasons for stopping the use of contraceptives (Guillaume, 1999).

	Men		Women		All	
		D 14 (04)				
	AV	RV (%)	AV	RV (%)	AV	RV (%)
Use of methods						
Yes	175	63.2	158	55.8	333	59.5
No	102	36.8	125	44.2	227	40.5
Method used						
Pill	47*	26.9	48	30.4	96	28.7
Injectable	6*	3.4	12	7.6	18	5.4
Condom	28	16.0	13*	8.3	41	12.3
Coil	-		1	0.6	1	0.3
Cycle/periodic continence	84	48.0	79	50.0	163	48.8
Traditional methods	1	0.6	2	1.3	3	0.9
Pill + condom	3	1.7	1	0.6	4	1.2
Condom + periodic continence	6	3.4	1	0.6	7	2.1
Others	0	0.0	1	0.6	1	0.3
Total	175	100	158	100	333	100

Table 7

Use of methods

Reasons for avoiding contraceptive methods

Men (36.8%) and women (44.2%) who stated that they did not use contraceptive methods mentioned several reasons. The main reason given by both – 46.5% of men and 36.8% of women – was the desire to have children. This great desire for children can be explained by the persistence of traditional perceptions of children. For the majority of men and women, children are still considered a heritage, a form of wealth, and a source of support in old age. « Pour moi, l'enfant représente tout. Les vieux disent que quand tu fais un enfant, tu lui donnes à manger ; quand tu vieillis, c'est lui qui te donne à manger » (Mr. Kouadio, driver) ("For me, the child represents everything. Our elders say: when you have a child, you feed him; when you get older, the child feeds you").

Current use and Current use of contraception change and/or AV RV (%) temporary Change of method 13 8.2 Yes pause in use of 91.8 No 145 contraceptive Frequency of change methods among Once 12 92.3 women Twice 1 7.7 Reasons for change 7 Secondary effects 53.8 Health problems 3 23.1 2 Opposition of spouse 15.4 Interruption of supply 1 7.7 Temporary pause 26 16.5 Yes 132 83.5 No Frequency of temporary pause Once 50 13 Twice 23.1 6 3 times 3 11.5 More than 3 times 4 15.4 Reasons for temporary pause Secondary effects 13 50 Health problems 2 7.7 Opposition of spouse 3 11.5 Wanted a child 6 23.1 Interruption of supply 1 3.8 Advice of midwife 1 3.8

Table 8

For women, other reasons for avoiding contraception were related to health problems (12 %) and secondary effects (12.8 %). Concerning secondary effects, interviews with women indicated that the main secondary effects were an increase in weight and dizziness (Doumbia, 2004). Others also explained that the use of contraceptives gave them skin irritations. The pill was the main method mentioned in this respect. Some women indicated that the use of the pill caused a disturbance in their menstrual cycle so that they have problems having children when desired. « Moi j'ai arrêté de prendre les pilules parce que ca m'a créé beaucoup de problèmes quand je voulais avoir mon deuxième enfant. Non seulement j'ai grossi et puis j'ai été obligé d'attendre deux mois avant de voir mes règles. » (Mrs Koffi Y, fruit vendor) ("I stopped taking the pill because it caused lots of problems when I wanted to have my second child"). Health problems were essentially linked to obstetrical and gynaecological antecedents for some women. « J'étais sous pilule quand je suis tombée malade. Je n'arrivais pas à suivre correctement les jours et le docteur m'a dit d'arrêter les pilules et de les reprendre quand je serai totalement guérie. » (Mrs Traoré, housewife) ("I was taking the pill

Tab	le 9
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	Men		Wome	en	All	
Reasons for non-use	AV	RV (%)	AV	RV (%)	AV	RV (%)
Opposition of spouse	3	2.9	8	6.4	11	4.8
Want children	47	46.5	46	36.8	93	41.1
Health problems	5*	4.9	15	12	20	8.8
Secondary effects	1*	0.9	16	12.8	17	7.5
Inefficacy of methods	1	0.9	4	3.2	5	2.2
Pregnancy	12*	11.8	17	13.6	29	12.8
Opposition of family	1	0.9	1	0.8	2	0.8
Opposed to contraception	23	22.7	0	0	23	10.1
Wet nurse	12*	11,8	18	14.4	30	13.2
Menopause	6*	5.9	8	6.4	14	6.1
Andropause	3	2.9	-	-	3	1.3
Lack of/poor information	2	1.9	5	4	7	3.1
Lack of financial means	0	0.0	2	1.6	2	0.8
Religion	1	0.9	2	1.6	3	1.3
Don't know	3	2.9	4	3.2	7	3.1
Other	4	3.9	4	3.2	8	3.5

Use of methods

Men N = 102

Women N = 125

*All the reasons are linked to the responses of men concerning their wives. Percentages are not linked to total number because double and even triple answers were possible

when I fell ill. I wasn't able to take it correctly every day and the doctor told me to stop taking it and start again only when I'd be healthy again). Other women have stated that they did not use contraceptives because they were either pregnant (13.6%) or wet nurses (14.4%). Beyond these reasons, it was especially the practice of using contraception "secretly" which revealed that gender relations are not always harmonious, especially since women conceal this practice to avoid negotiations with their husbands.

The "secret" practice

Indeed, 13.9% of women used contraception without their husband's agreement (Doumbia). The reasons for this choice varied from woman to woman. For some, it was linked to the opposition of the spouse to contraceptive methods, but especially to the fear of divorce and of shame for herself, as the household is perceived as a form of "social security". Other women were "free" and more "radiant": they evoked their freedom of choice for their own purposes: « Mais pourquoi je dois lui dire ça? Est-ce que c'est lui qui va prendre ventre la? », « Je n'ai pas besoin de lui dire », « Souvent il ne contrôle pas les bonnes ou les mauvaises périodes, il peut avoir des rapports quand il veut ». Secret use of contraception could be explained by the opposition of some men to contraception: 22.7% of men were opposed. This opposition is mainly related to their perceptions of children. Contraception doesn't allow people to have children. In the view of others, contraceptives cause women to become unfaithful.

We also asked men who stated that they did not use contraceptives what their reaction would be if they found out that their wives secretly used contraceptives. Most men (44.6%) expressed no particular emotions, for instance: « je sais pas encore, j'attend », « C'est quand je vais l'attraper que je verrai ce qu'il faut faire (...), mais je suis pas sûr qu'elle prenne des choses comme ça » ("I don't know, I'm waiting", "When I catch her I'll see what I have to do ... but I'm not sure that she'd take things like that"). On the other hand, those who had an opinion (one-fifth) said that they would forbid their wives to use contraceptives, as against 11.8% who expected to reprimand their wives for not consulting them. When discussion is impossible, the situation results in a repudiation of women (10.8%). Only 1.9% of men expected to engage in negotiation as a basis of relationship with their wives.

9.6 Conclusion

Our analysis has remained largely descriptive to better allow the differences between men and women concerning contraceptive practices to emerge. These differences permit an understanding of the dynamics of interaction between men and women. Given the fact that the difficult economic situation does not produce the expected effect according to the "crisis model," we looked at gender disparities. The results show that, in terms of education and economic status, significant differences between the sexes exist, ultimately influencing decisions made by couples. Women are less educated than men and are economically dependent on their husbands, even when they engage in economic activity. However, interviews during the survey made us realise that many women are coping with the situation after all. Although we were in an urban context, most perceptions reflected a traditional patriarchal family system: the working male in a dominant position with a wife at home. According to 88.9% of the men and women surveyed, the primary role of the man is to provide for the family's needs. The importance of the man in terms of decision-making has repercussions for decisions about procreation. Nevertheless, these disadvantages do not limit women in terms of knowledge about contraceptive methods. Our study of contraceptive practices shows that men and women overall have a good knowledge of contraceptive methods, especially modern methods. Indeed, our results have shown that 9 out of 10 women were familiar with at least one contraceptive method, independent of economic or educational status. This is due to the efforts of the authorities since the International Conference on Population and Development in 1994, but also to implementation of the national programme on reproductive health and family planning in 1998. Despite this high level of knowledge, women (or couples) do not sufficiently practice modern contraceptive methods that are efficient and reliable. Focus on the menstrual cycle as a birth control strategy implies the risk of unwanted procreation, as it is known that both men and women are not well informed about the fertile period. The fact that women receive systematic advice and information on contraceptive methods and their use during sessions of the IEC (Information Communication Education), in the arranged rooms of the health centres, could explain why the number of women familiar with contraceptive methods is slightly greater than the number of men: 283 women as against 277 men on the whole.

Periodic continence is still practised. Knowing that this method is unreliable, it can be maintained that couples practice "risky contraception", but also run the risk of unwanted procreation. The fact that a relatively significant proportion of women secretly practice contraception shows the difficulties they have deciding for themselves. Complementary surveys carried out in three health centres have confirmed the importance of the secret practice of contraception. As Mrs Bodou (midwife) argued, "these are poor women under stress who are fighting for survival, locked up women who want to be independent. The Family Planning service has practically become an advisory office".

The fact that a significant number of women use contraceptive methods secretly without their husband's agreement shows not only that they are subordinate to the decisions of men, but also that it is impossible for them to openly make decisions on their own. In order to change this situation, policies and agencies should focus on strengthening the reproductive rights of women, as proposed by the programme of action of the UN International Conference on Population and Development (ICPD) in 1994 in Cairo. This programme defines reproductive health as a "state of complete physical, mental and social well-being," and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes. "Reproductive rights" therefore implies that people are able to have a satisfying and safe sex life, and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the rights of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as to other birth control methods that are not against the law. In addition, they should have the right to childbirth and the best chances of having a healthy infant.

According to the plan of action, strengthening the reproductive rights of women implies the following selected aspects:

- The empowerment and autonomy of women and the improvement of their political, economic and health status is a highly important end in itself. The full participation and partnership of both women and men is required in productive and reproductive life, including shared responsibility for the care and nurturing of children and maintenance of the household. (...). In addition, improving the status of women also enhances their decisionmaking capacity at all levels in all spheres of life, especially in the area of sexuality and reproduction (4.1 Plan of Action). At national level, international recommendations have been taken up in various programmes:

- The National Plan of Action for Women (PNAF, 2003-2007) that aims to help institute necessary changes to reduce disparities between men and women, and to promote greater equity and equality, while improving their conditions of life;
- The National Plan of Action for the Population (PNP, 2002-2006) that aims to promote empowerment of women;
- The Document on Strategies for Reduction of Poverty (September 2002, DSRP) that aims to promote actions for unprivileged populations through best targeting of investments and intervention measures.

This implies that agencies should reinforce promotion of contraceptives for women – and more especially for men. Men must be seriously involved in the programmes so that they can be the engines of modern contraceptive use, since the status of women and men in Côte d'Ivoire and elsewhere in Africa clearly indicates that men are in a position to play the role of primary decision-makers. But the challenge of enhancing the decision-making power of women remains. These objectives are important in their own right.

Endnotes

- ¹This programme is part of a national policy on reproductive health and family planning and is included in a large national policy on population. One of the main objectives of the national policy on population is to control population growth (3.3% annually) through family planning programmes and to increase the rate of contraceptive use from 5.7% to 30% by 2015. The strategies include:
 - a) support for health care for mothers and children by preventing the risk of pregnancy and spacing pregnancies;
 - b) preventing sterility by tracking and treating sexually transmitted diseases and infertility;c) contributing to economic and social development through birth control.
- ²The crisis model was developed in the 1980s with the economic and social crisis that struck most African countries. A crisis model questions previous traditional theories and accounts for the emergence of a new paradigm in research in the social sciences: that of crisis, i.e. the impact of the economic crisis on the various demographic and family modes. Even if there is no consensus about its explanatory features, it is still a relevant tool for explaining socio-structural transformation.
- ³Liberal activity is defined as a form of self-employment, rather than work for a monthly salary. Examples include carpenters, mechanics, plumbers, shoemakers, etc.
- ⁴Responsible authorities are the "leaders" in slum communities, for instance "traditional" chiefs, presidents of youth associations, presidents of women's associations, presidents of slum development committees, chiefs of ethnic communities, or presidents of ethnic community associations.
- ⁵The presence of highly educated people living in slums is due to poverty. In general, accommodations are not expensive and are occupied by students looking for a stable job.
- ^oFor a larger comparative analysis of the level of education due to gender-specific socialisation, see Doumbia, 2004, a study which shows that of 116 women who stated that they not know how to read and write, 60 came from rural areas.

⁷Employed means receiving a monthly salary.

- *Analysis of contributions to expenses is linked to the professional situation to indicate the proportion of men and women who participate in the economic life of the household. In view of the importance of economic factors in the life of households, we expect to deepen this analysis by including the monetary contribution of each professional category or each sex in order to evaluate the actual level of contribution.
- ⁹Contraceptives are easy to buy. Condoms are sold everywhere (stores, drugstores, health centres, etc.); pills are sold in drugstores and health centres, but injectables, coils and other modern contraceptives are sold only in health centres. Contraceptives are cheap in public and private health centres: pills cost CHF 0.37 in public centres and CHF 0.50 in private centres. Injectables for 3 months cost CHF 1.25 in public centres and CHF 3 in private centres; coils cost CHF 3.75 in public centres and CHF 6.25 in public centres. National condoms (4 condoms) cost CHF 0.06 per package.

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10 Women in Organisations for Poor, Unemployed Working People: Reshaping Female Roles through Political Commitment

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> "estar y participar en el movimiento, estar en la calle, en la lucha, comenzó a sacarnos del hogar, de la casa, de la olla..." – from a neighbourhood speaker in a PUW organisation

Introduction

This article presents some preliminary results from the project entitled "Gender issues in Unemployed Workers' Organisations: A Public or Domestic Problem?"². The guidelines for this investigation arose from the initial outcomes of a previous project, "The Challenges to the Individualized Management of Poverty and Unemployment: The Cases of Poor Unemployed Workers' Organisations and Recovered Factories". This investigation led us to adopt a gender perspective to analyse the relationships among the members of poor unemployed working people's (PUW³) organisations, given the fact that they are directed by men, although most of the individuals involved are women.

Therefore, the main objectives of the new project are to analyse work, political commitment, and concepts of male and female roles in PUW organisations, taking into account how they are incorporated into demands and political action in the organisations examined. Besides, we explore how the organisations' demands are reflected in and considered by public policies implemented to address poor unemployed people.

We shall present some preliminary results related to women's participation in the PUW organisations, and the impact of their experience in their representations of female roles. We are going to introduce some distinctive characteristics of PUW organisations and the processes of their constitution. Secondly, we are going to discuss the guidelines of the methodology used. The core of the article deals with the tensions involved in the creation of women's spaces, and finally with continuities and changes in traditional feminine models of women's social and political commitment.

10.1 PUW organisations in Argentina

The PUW organisations – popularly known as *piqueteros* –spread all over the country at the end of the 1990s. However, their presence is especially strong around Buenos Aires. They adopted their name from their principal form of protest: blocking streets and routes. This tactic ("piquete" in Spanish) is not new in the history of workers' struggles in Argentina. It was used during trade union strikes to prevent them from failing owing to resistance from syndicate opponents, and when working people were temporarily recruited with company assistance. During the 1990s, however, this method was used by the ex-employees of privatised public companies in the provinces (accompanied by members of the Catholic Church, teachers, small merchants, and civil society in general) to protest the lack of employment in the places they lived.

As a way of containing social conflict in the provinces, the neo-liberal government of former president Carlos Menem designed a public policy focusing on poor and unemployed people known as *Planes Trabajar* (Work Plans) that basically consisted of a subsidy in exchange for the rendering of community services.

Gradually, the increase in social conflict in Buenos Aires led to a shift in the concentration of road-blocking organisations from their original location to the province of Buenos Aires. This geographical displacement was accompanied by a social-demographic shift: the organisations located in Buenos Aires are more stable, better organised, and made up primarily of poor unemployed people. Thus, the road-blocking strategy became a way of making visible the unemployed and informal impoverished segments of the population living in the principal Argentinean province, which not only represents 38% of the country's population and more that 40% of its poor, but more than 50% of its gross national product as well (Source: NISC).

The public presence of these organisations was one of the principal signs of inequality in Argentina, which had been growing for several decades (see figures 1 and 2). In effect, during the last thirty years, as a product of neo-liberal programs (starting with last dictatorial government, 1976-1983, considered the most damaging in South America), there has been unprecedented growth in unemployment, informal employment, and labour instability, as well as a major deterioration in living conditions. Some social-demographic reports illustrate the depth of these transformations. The unemployment rate went from 2.6% in the 1980s to 7.5% in the early 1990s, climbing to 17.5% in 1996 and 18.3% in 2001. In the meantime, poverty levels grew from 29.8% to 52.3% in the same period⁴. The revenue distribution and wealth concentration data are equally shocking. Wealth concentration has risen in the last ten years from 34.8 % to 42.1% (ECLAC, 2002).

These socio-economic conditions, together with the crisis of popular confidence in traditional political institutions (political parties and trade unions) were the main cause of riots in 2001, whose principal slogan was: "¡Qué se vayan todos!" (All of you, go away!), signifying the absolute disappointment of Argentinean people in all political and trade union leaders. Popular anger was mainly provoked by the exasperating levels of poverty and unemployment, the blocking of bank deposits, and the inability of the State to manage foreign debt, which had increased spectacularly during the 1990s.

In this turbulent context, the organisations we studied acquired a central role. As a matter of fact, though the majority of social organisations that would turn into PUWs were forged in struggles that took place before and during the institutional crisis of 2001, their demands for employment and the autonomy of traditional groups acquired a political potential, appealing to deeply rooted feelings in all social sectors (Tarrow, 1994).





Figs. 1 and 2 Inauguracion

Photo by Gabriela Bacin These organisations saw enormous growth at the beginning of 2002, thanks to a huge welfare program⁵ (called "Jefas y Jefes de Hogar Desocupados" [Female/Male Unemployed Household Heads]) implemented by the national government to halt social conflict, which had previously led to the resignation of four presidents in less than two weeks. Even though only a small percentage of the subsidies (8%) were managed by PUW organisations, this program meant a growth in the resources they administered. This situation fostered existing organisations and facilitated the appearance of new ones. Thus the "plans" implied not only a way of facing up to the most serious effects of the economic crisis⁶, but also a reinforcement tool for PUW organisations. Nevertheless, this fact posed a great dilemma for these organisations: the "plans" allowed them to become stronger, but also created bonds of dependency with the State that limited their autonomy (Freytes y Cross, 2005).

At the same time, the constitution of these organisations represents another contradiction, in that a majority of their members (proximately 75%) are women while most of their main leaders are men. This can be explained by the existence of a type of strategic division of labour in poor unemployed families: the women fight for the "plans", the men look for temporary or informal jobs (the only ones they can aspire to). In the case of single women with children, the plan is usually the only stable income they can obtain. At the same time the social services it requires do not demand that they leave the neighbourhood and require only a few hours of work (usually four), so that they do not have to leave their children unattended⁷.

Although these factors can help to explain the massive feminine presence in PUW organisations, they cannot explain the low feminine presence in leading positions. This contradiction is analysed below, in terms of women's participation in the PUW organisations. While the search to satisfy material needs can be seen in terms of traditional feminine stereotypes, for many members of these organisations political participation seems to continue to be a "male issue". Thus the tension between satisfaction of needs and political action in the organisations studied acquires a particular form when we adopt a gender perspective.

10.2 Methodology

Our methodological perspective is qualitative, since we consider this the proper way to capture actors' sense construction about the topics mentioned. This approach also allows us to generate the necessary original information to extend the base of knowledge about the impact of female participation in private and community relationships from a gender perspective.

This approach seeks to recover the subjects' perspective, especially constructed senses concerning their living conditions and daily practices. Data analysis was based on the programme of "grounded theory" (Glaser and Strauss, 1967), which contains the basis for the process of theory creation through a progressive elaboration of concepts, properties and relations (Demaziere y Dubar, 1997). This kind of theory develops sociological concepts in order to comprehend the meanings that actors build in social interactions and processes, in a constant feedback between theoretical material and the information gathered in the field. In consequence, our work is principally based on research techniques such as in-depth interviews with leaders and neighbourhood residents (we suggest men and women, although the focus is on female perspective in this article) in the PUW organisations. We did the interviews using an open question guide, elaborated according to project objectives, seeking to recover spontaneous material from interaction with the interviewees, including their own perceptions and evaluations.

The in-depth interviews were complemented by observations of different spaces of social interaction (with and without participation), situations of collective action (assemblies, mobilisations, etc.), and events in daily life, by using an observation guide and field records. We have also done content analysis on some internal documents. The information collected was analysed using the "ATLAS Ti" framework. Finally we used, as secondary sources, quantitative information to describe the economic and social context in which the PUW organisations develop their practices.

At this point, it is clear that we have adopted a research perspective that does not exclude participation in public manifestations, internal seminars, or neighbourhood assemblies. However, our involvement in these scenarios was not motivated by a political goal, but by investigative objectives. As previously stated, our epistemological approach implies an attempt to grasp the subjects' meanings. These "native" categories are, nevertheless, first-grade constructions. Our task as social scientists is to build second-grade concepts (Schutz, 1962) that allow more comprehensive understanding of the social processes involved in the creation of actors' meanings.

In relation to the cases we worked with, we have chosen four PUW organisations, each of which corresponds to different political orientations⁸. The first two are the result of land occupation processes that took place in the 1980s, when housing problems acquired social dimensions, due to the lack of affordable rental and home construction costs in the public sector (Jelín, 1985). We call these PUW1 and PUW2. The two other PUW organisations we studied (PUW3 and PUW4) consisted of activist groups (with no political party affiliation) that "went to neighbourhoods to organise them", due to "the increasing State abandonment of social containment functions" (Colectivo Situaciones, 2001).

Though we found that each organisation had different ways of assigning tasks and roles, there were two positions among the four organisations: the "leaders"⁹ and the "neighbourhood¹⁰ referentes". The leaders are those in charge of political orientation and strategic positions relating to other political actors. The others are those who have responsibility for a small zone (one or two blocks at most) and who dedicate almost all of their working time to the organisation¹¹ and to meeting the daily needs of the "adherents". We worked in a comparative manner, finding similarities and differences among organisations and neighbourhood referentes and leaders.

We interviewed both regular members and leaders. We found two different profiles. One was made up of people who had inhabited the neighbourhood for a long time. Most of them had already developed some type of political and social activities in the 1980s and 1990s, oriented towards meeting social needs in their neighbourhood. A second group consisted of those who had formerly been feminist activists. This group corresponds, in general, to middle class women who try help build a new feminine conscience among female members of PUW organisations.

10.3 Tensions involved in the construction of women's roles in PUW organisations

As previously stated, there is massive female participation in PUW organisations. Women assume different roles in social work spaces that support the material reproduction of the organisation, i.e. serving lunch to children whose parents cannot afford to provide it (in "collective diners"), management of social care, collecting and distributing clothes to neighbourhood families, etc. This participation can also be observed in the public sphere, through women's involvement in road-blocking actions, mobilisations, "camping" in streets or public buildings, etc. Women were overrepresented among neighbourhood *referentes* in the organisation's structure, but only very few of them achieve leading positions.

In general these organisation members and leaders constituted the base of women involved in particular spaces, which exist in three of the four organisations studied (PUW1, PUW2 and PUW4). Their principal objective is to generate the conscience mentioned above. Women come from both backgrounds, together with others who are making their first appearance in the public space through participation in PUW organisations.

The women's space started as a place for women to reflect about their participation as organisation members. The first topic to discuss was related to women's participation in assemblies or in meetings where they have to interact with men. The nature of these problems led the women to decide to meet first *on their own*, to be able to think better about the causes that were preventing them from speaking openly in these settings. Later on, the debate moved to other topics that were not approached (at least as central topics) by the organisation and were not part of the demands they supported. Here a sort of gender agenda was drawn up, which gave new impulse to the women's space. The new issues dealt with were related especially to health, family planning, domestic and gender violence and "non-penalisation" of abortion, with different emphasis depending on the political tradition of the organisation¹². At the same time, the question of women's chances of having directive charge in the organisation still remains a central topic.

In all cases, as stated, the shaping of women's spaces was the result of the joint operation of some feminists – as individuals (PUW2 and PUW4) or as members of NGOs (PUW1) – along with local women. However, since these spaces were an attempt to re-shape women's participation in the organisa-

tion, they had to overcome two kinds of obstacles: on the one hand, male suspicion and opposition and, on the other, women's own tensions related to their different vital roles: as mothers and wives, as political partners, and as members of political organisations.

In the first place, women's spaces appeared as a threat to men's leadership. As one interviewee said: "they think that we join to defame them, but we are not only working for women... now I can explain to my daughter what a contraceptive method is, at another time I would have felt very ashamed of doing so". Nevertheless, resistance to participation also came from home. In the context of a "macho" culture, when women started working out of the house their husbands expressed their suspicions about women's activities as a way of limiting their independence: "To go out to fight for work, and for our children's meals, has its displeasures, because sometimes our husbands say "you must be dating someone" and then your children ask you to share more time with them, they hate the organisation because it steals their mum and dad away".

On the other hand, the women are not indifferent to these complaints. They express the feeling that when they meet on their own they are "betraying the male partners", who are also partners in struggle, and sometimes their husbands and sons: "sometimes they [men in the organisation] said to me that it was a betrayal to create a women's area, and my heart is with the organisation, but I felt we needed a specific place for women's problems". Nevertheless, what turns out to be more complex is the question of how to raise the need to discuss "feminine" problems when there is so much to do. This is what we call a "hierarchical structuring of demands" (Cross and Partenio, 2004), which is one of the most difficult aspects to overcome for women, as it is sometimes a dilemma for them: "Sometimes we are pursuing the urgency of children's meals, but if one of our mates is beaten by her partner, that is also urgent, isn't it?"

Nevertheless, when the participation of these women is consolidated, they finally win their partners' (men's and women's) respect and consideration. Simultaneously, the construction of such spaces made political matters of issues such as gender and domestic violence, contraception, the need to acquire a leading role in the organisation, etc.

As mentioned, there was no women's space in PUW3. At the very beginning, women made up part of the same group with another organisation (PUW4),

but certain differences in the present government *"political characterisa-tion"* caused a rupture in November, 2003.

The women in PUW3 had been working together with female colleagues in PUW4 to shape a women's space for the entire movement. After the break, the feminist group that had stimulated the women's discussion group decided to stay in PUW4. Besides, the main opponent of feminist action was the most important leader of PUW3. Thus, the problem of a women's space in PUW3 seems to be conditioned on three principal factors: the absence of an activist group initiating its creation, the low level of motivation of the women in the organisation to stimulate it, and the lack of political will among its male leaders. As we have seen, the first two points are more important in explaining the absence of a women's space than the last one, since men had not supported women's efforts to organise themselves in the other cases either.

In spite of this, it is very interesting to consider that the conflicts we have pointed out in the other organisations are also present in PUW3. Although what we call the "gender agenda" comes from this organisation's political platform, one (female) leader explained that it constitutes a dilemma for them because they need *"to find a moment to talk about what happens to women"* but *"the daily fight against poverty does not leave us enough time"*. Once again we see how women's preoccupations are relegated to second place, generating a false opposition between demands related to their poverty (pretended as more general) and those relating to their position as women.

So far we have seen how female participation in women's spaces leads to questioning of gender relations in the organisations and at home. When women participate in family income generation and political activities, gender division of labour in the heart, but also in the community, is challenged. This process not only involves conflict with male partners but also a reshaping of women's subjectivity. In what follows, we analyse the course and the depth of feminine role transformation due to this experience

10.4 Women's representation of female roles after experience with political commitment

Which female roles do leaders and organisation members represent? Have there been changes in these images following involvement in the PUW organisations?

As gender studies have shown extensively, there is a historical and social gender division of labour. Urbanisation and industrialisation processes brought about the construction of two differentiated spheres: the world of production and labour, and the house and family environment. Men traditionally dealt with activities in the public space while women typically dealt with household tasks (Jelín, 1994). On the basis of this family division of labour, stereotyped feminine roles were constructed. Maternity, support for husbands and children, care of the elderly, and daily domestic duties are all features of this "ideal" representation of what a woman ought to be.

Most of our interviewees acknowledged the fact that they had been socialised by their families on this traditional model. We found that after participation in the organisation, some of these classical feminine roles are still vindicated by women and even acquire new implications. However, other aspects of this stereotype are rejected due to political experience and the emergence of gender conscience.

Let us first address the continuity and reshaping of traditional feminine roles. Motherhood is the most obvious among them. Childcare and nourishing appear to be natural responsibilities for these women. But in the circumstances of extreme crisis in which they live, this responsibility becomes the reason that motivates and legitimates their involvement in the organisation. Thus, this ancient role permits them to make sense of the new ones they develop.

Another role that women also have is that of the wife or partner of a man. Women are meant to support men at difficult moments. For leaders' wives this implies dealing with certain tasks in order to allow their husbands to exercise their leadership. Neighbourhood *referentes* had to deal with men's depression in the face of unemployment, and try to rescue them from abandonment, self-incrimination, alcoholism and violence. In these circumstances *"women put themselves ahead"* and play an active role in meeting their families' needs. At the same time, aspects of feminine stereotypes linked to confinement in domestic space are questioned, since they do not fit with commitment to the organisation. In the interviews, both members and leaders separated themselves from the image of a woman they received during their socialisation process: an image defined by passivity and obedience to men, care and attention to members of the family, and household duties. For instance, one PUW1 neighbourhood interviewee stated that her grandmother "taught" her: "you have to marry, to raise your children, to do the laundry, to cook for your family".

This kind of subordination is challenged by the practices in which women engage in the organisation, through different processes that are mutually reinforced. One is going beyond domestic space, which is initially motivated by daily basic needs. This fact stimulates gestation of a community network of solidarity and political bonds.

In the second place, participation in political struggle and in neighbourhood work generates consciousness of their own capacity to face social problems and manage potential solutions to more immediate needs. This helps to create a new gender and political vision, which permits the development of self-perception as political subjects. Thus participation creates political competence (Bourdieu, 1990): the political issues also happen to be "women's matters": *"because women had to participate in the road-blocking actions [piquetes]...it was a great help for a woman to take this decision... To feel that she is somebody, that she is important, too,... that she can do things...that it is not the same as when you are locked among four walls where you believe everything you hear: that you are good for nothing... how are you going to talk in an assembly if you do not have teeth ?".*

Finally, women's spaces help to create a new feminine conscience about gender inequalities and women rights. They also help to redefine the familiar concepts of what a women is expected to be like:

It is clear from what has been discussed so far that transformation in the roles assumed by women is the result of new responsibilities undertaken in the political sphere: community work, participation in street mobilisation, and attainment of leading positions (or at least aspiration). On the contrary, due to the context of long-term-unemployment in which they live, women's presence in the formal labour market is still marginal. However, as beneficiaries of the "plans", they have often become the most important family income providers, replacing men in this traditional male role. This situation, nevertheless, is not enough to assure long-term change in female roles, since for both men and women, feminine work is a complementary, transitory activity, to help to overcome the family crisis. Women want their male partners to find a job. On the other hand, new tasks and responsibilities add to traditional ones, given the fact that women are still in charge of children and family care. In consequence, we cannot speak of real transformation in the familiar division of reproductive work. That is why leaders in the women's space insist on the necessity of working on women's consciences and subjectivity.

10.5 Some final reflections

As previously stated, the main focus of this investigation is the impact of women's participation in the organisations on their own representations of feminine roles. We have reported how, according to our research, the political commitment and gender discussions generated in women's spaces have questioned some aspects of the classical feminine stereotypes in which these women had been socialised. In particular, the latter became a place for debating women's problems as well as a space for developing solidarity and bonds of self-defence.

However, we want to emphasise that the challenge to traditional gender models has not only affected women but also men (political partners and husbands) in the neighbourhoods who grew up in the same context of "macho culture". In consequence, we believe that the tensions reported must not be interpreted only as a struggle between two factions (oppressors and oppressed), considering that male inability to fulfil their traditional task as providers puzzles both men and women.

On the other hand, we have observed that other features of traditional feminine patterns remain, some of which constitute motives for women's participation. This continuity has permitted massive female incorporation into the PUW organisations, which had been impossible in a scenario of a complete break with their former experiences.

The balance between change and continuity varies among the members and leaders we interviewed, according their different backgrounds. Those who were formerly feminist activists fostered deeper transformations in the female "conscience". In consequence, inside women's spaces, we found symbolic conflicts related to the definition of the ideal female image.

We have also pointed out the limits to role transformation regarding women's involvement in the leadership of PUW organisations. In spite of the appearance of claims of a change in this pattern, for many men and women leadership roles – and sometimes "political" issues –are clearly conceived as a masculine activity. According to one of the interviewees, "many people believe that the role of a woman is to obey and that politics is a male affair". This is another point of struggle for women with an awareness of gender inequalities.

These initial outcomes suggest new questions that require further examination. We think that it is necessary to study the symbolic conflicts around feminine roles in greater depth. In order to achieve this goal, it would be interesting to identify the different positions sustained by the organisation members (men and women), and to relate them to their diverse backgrounds (in terms of political trajectories, ages and social origins). Another important issue that we have only mentioned here is the struggle for women's participation in the leadership of PUW organisations. Gender and Sustainable Development: Case Studies from NCCR North-South

Endnotes

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²This project is directed by Osvaldo Battisttini from CEIL-Piette, CONICET, Argentina, and Alvaro San Sebastián from MOST UNESCO, Argentina. The project is financially and academically supported by IP8 of the NCCR North-South Programme.

³ As we could not find a proper translation for "piqueteros", which is the name of this organisation in Argentina, we have decided to use this expression.

⁴Source: National Institute of Statistics and Censuses (NISC), 2005.

⁵This program reached approximately 1,700,000 beneficiaries.

- ⁶However, these "plans" were not enough to reverse the situation of extreme poverty in which their beneficiaries live. In effect, the payment is equal to \$51 American dollars, and the basic food basket (BFB) -providing every household member with the minimum daily energy and protein dietary requirements- for a family of four (two adults, a teenager and a child) was set by NISC at \$121 American Dollars in March, 2005). In the same period the "poverty line" (based on the BFB, extended to include non-dietary goods and services such as clothing, transportation, education, health, etc.) was set at \$263 American dollars.
- 'Nevertheless, we must not forget that pay received is not enough to cover their families' basic needs.
- ^sWe do not specify the organisations' names for two principal reasons: first, in order to respect the confidentiality commitment made to people interviewed and, second, because as will become apparent, this information is not important in light of the topic as it is developed here.
- ⁹In some cases they have the name "persons in charge", in others "spokesmen" or "spokeswomen", but we prefer using the same category for all of them since their roles do not vary much from one organisation to another.
- ¹⁰The neighbourhood is the space (not only geographical) in which the organisations develop their activities. It does not always correspond to the formal tracing, but also involves other aspects that permit "social space" demarcation, constructed through symbolic references to "selves" and "others" (Delfini and Picchetti, 2004).
- ¹¹This feature separates them from the "adherents", who are only responsible for a few hours' time for social tasks demanded by the organisation.
- ¹²In those spaces where feminist activists are more represented, the claims against penalisation of abortion and gender violence are more strongly supported. In PUW2, where Catholic values are more prevalent, these demands are relegated to second place, while domestic violence becomes the central issue.

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11 Development Interventions, Gender Dynamics and Fertility in Rural Nepal

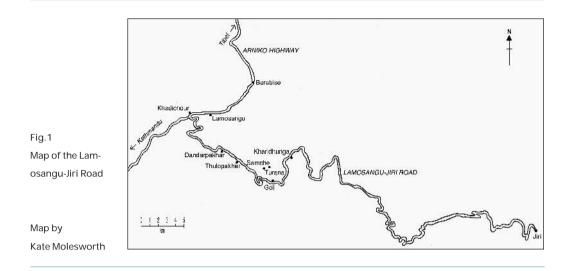
Kate Molesworth

Introduction

It is often assumed that those of us working in the field of gender research and development do so from a feminist perspective. In the course of this chapter, using my own research path as an example, I present the case that within research and development implementation, consideration given to gender can provide a key component of both sound scientific research and intergrative and effective development practice.

To ground this chapter within its context, I use an example of research I conducted on the impact of a road development intervention on a community in rural north-east Nepal. It was in the course of this work that I first experienced the importance of disaggregating research data by gender and the pivotal significance of gender issues in development planning and implementation.

During the late 1980s and early 1990s, while working on a health, nutrition and livelihoods project in rural Sindhupalchowk District of Nepal (Figure 3), I travelled part of the journey to field sites along a well-constructed allweather road. My research and enquiries revealed that the road had been built with the financial and technical inputs of the Swiss Agency for Development and Co-operation (SDC). As earlier development projects in the Jiri area had been hampered by poor transport and communications, SDC made the decision to invest in constructing a road as a development strategy (INFRAS, 1995a: 1). Figure 1 illustrates how the road provided a motorable east-west link between Jiri and Lamosangu, where it connected with the Arniko Highway, a major north-south route between the border with Tibet and the capital city of Kathmandu.



My developing interest in the Lamosangu-Jiri road and its effects upon local people was to shape my own research interests and career path. As I read reports and evaluations of the road's effects, I came to appreciate that impacts that had been described at the area level were quite different from those I observed at the village level. While the majority of research and evaluations conducted within the region of the Lamosangu-Jiri road assessed socio-economic change on an area level and were sensitive to impacts upon the different castes and ethnicities, the differential effects of this substantial development intervention upon women and men were less clearly determined (INFRAS, 1988, 1991, 1995a, 1995b).

One conclusion reached by evaluators of the road's impact stated that, "...on average each inhabitant of the project area would travel outside the project area once per year" (INFRAS, 1991:128) which was at odds with my own perceptions at the village-level. Throughout the seasons of the year I observed a great deal of movement along the road, however, this did not represent *all* inhabitants of the area travelling by road. I therefore developed a micro-level study to determine whether, within a single ethnic group, all people travelled equally by road or whether road travel and the effects of this development intervention impacted differently on men and women, boys and girls. Overall, I wanted to gain an impression of how such a development intervention impacted upon gender dynamics.

11.1 Nepal's development situation and the perceived role of transport

In a highly diverse country such as Nepal, development impacts are mediated by prevailing social, cultural and economic factors. The Himalayan kingdom is characterised by broad topographical, climatic, ethnic, linguistic and cultural diversity. It exhibits a low degree of development and has had very high population growth for decades (Human Development Report, 2004: 154). As one of south-east Asia's' poorest countries, Nepal has a low Gross Domestic Product (GDP) of US \$ 230 per capita per annum (Human Development Report, 2004: 186). Poverty is widespread with more than 82% of the population estimated to live on less than US \$ 2 per day (Human Development Report, 2004:148). Although its Human Development Index (HDI) has recently shifted from the top of the "low" to bottom of the "medium" HDI-ranked countries, compared with neighbouring countries in south-east Asia, Nepal ranks poorly at 140th out of a total of 177 countries world-wide.² In addition to its low degree of development, Nepal's population of 24.6 million people is characterised by a chronically high annual population growth rate that averaged 2.3 between 1975 and 2002 (Human Development Report, 2004:154).

High population growth and poor transport and communications infrastructure have long been regarded to be key factors hampering local development in rural areas of Nepal. In recent decades, His Majesty's Government (HMG), with assistance from national and international Non-Governmental Organisations (I/NGOs), multilateral and bilateral agencies, has endeavoured to develop the country's infrastructure and public health services, and to address high fertility. Although rising insecurity since the Maoist insurgency began in 1996 has pushed many people to shift from rural to urban areas in recent years, urbanisation remains low and has only recently risen from under 10% to 15% (Human Development Report, 2004: 154). Consequently, transport and communications have, since the 1970s, been considered to be essential to the process of development throughout the nation (UNICEF, 1992: 6) and as a strategy to reduce inequalities between urban and rural areas (Blaikie, Cameron, Seddon, 1977: 1). Indeed, economic and social development strategies were central to the Lamosangu-Jiri Road Project (LJRP) and the accompanying Integrated Hill Development Project (IHDP), the primary objectives of which were:

"... to promote economic and social development and to slow down the ecological degradation through improved utilisation of natural resources, generation of off-farm employment opportunities and reduction of the population growth" (INFRAS, 1995a: 1-2).

11.2 Transport theory and development

According to transport development theory, a poorly evolved transport infrastructure severely hinders the potential for economic and social development (Edmonds, 1997: 1; Dawson, Barwell, 1993: 1-6). In low-income settings, mobility interventions, particularly road and motorised transport, are considered to have the potential to improve a wide range of components of human development. As a consequence, in many countries, transport formed a significant component of development planning throughout the second half of the twentieth century. The theoretical basis for this development strategy is the assumption that reduced physical isolation from urban and foreign centres of innovation and commerce stimulates economic development and desirable social change in rural areas (Edmonds, 1997: 1; Dawson, Barwell, 1993: 1-6). The broadening of rural livelihood options enabled by transport and communications is in turn believed to raise the value of education and stimulate literacy and skills development, which in the absence of non-agricultural alternatives are regarded to be irrelevant to rural life (Dove, 1983; Acharaya and Bennett, 1981). Although scientific evidence of the causal mechanisms eludes capture, it is recognised that there is a link between the inclusion of women in non-agricultural labour and the desire for fewer children (Cleland, Phillips, Amin, Kamal, 1994: 69; Bernhardt, 1993: 94).

Travel and improved mobility have long been thought to stimulate the rural economy and to enable the diffusion of services and infrastructure, especially those required to support health, contraception and education, to previously remote regions. In very general terms, improved transport communications do appear to impact positively on certain components of social and economic development in low-income countries, and this has been the general case for the Lamosangu-Jiri road at the macro-level (INFRAS, 1995a; INFRAS, 1991; Adhikary et al, 1990: 43-49). However, as I will show in this chapter, the impacts of development interventions can be mixed and very different on men and women, which can act to maintain and even aggravate key areas of development concern, including social inequity and high fertility.

Choice of location and community

As previous evaluations commissioned by the SDC drew their conclusions from macro-level studies, I decided to approach my study of the gender-based impacts of the road from the micro-level. Given the unique national situation of high ethnic diversity, to form the basis of this study I selected a single ethnic group, the Tamang, with whom I had previously lived and worked.

The Tamang were a particularly interesting choice of community for a study on development and gender dynamics, as they traditionally have a very high degree of gender equality, when viewed within the Nepalese context. This is reflected in the greater level of sexual permissiveness in Tamang society, unlike the situation in mainstream Hindu Nepal, where female sexuality and reproduction are traditionally controlled by men and senior kin and contained within marriage. Unlike the dominant Hindu order, Tamang males and females associate freely throughout all stages in their life course and their culture does not require females to defer to males in many aspects of life. While there are certain culturally defined gender roles and domains, such as ploughing (male) and brewing and distillation of alcohol (female), many household decisions are made jointly between married couples and cash is traditionally handled by women. Deference and subordination, rather than being determined by gender, tend to be generational.



Fig. 2 A Tamang woman who participated in this study

> Photo by Kate Molesworth

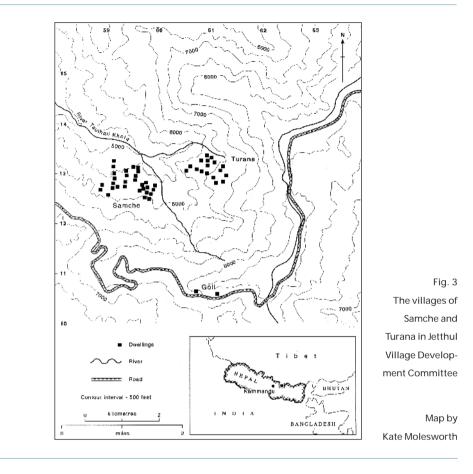
The Tamang have their own language and their spiritual paradigm is a combination of Buddhism and shamanism, although they also celebrate some Hindu festivals. One factor that sets them apart from mainstream Nepali society, however, is their dietary practices. Of particular importance within the Hindu context of Nepal is that the Tamang eat beef and carrion, which are anathema to most other groups. They are also known for their enthusiastic consumption of alcohol, which associates them with low caste customs within the Hindu hegemony. The Tamang are proud people and are reputed to have "hot" tempers. Their customs and ways of life, however, set them apart from other Nepali groups and mainstream society tends to consider them to be drunken, dirty, immoral and dangerous.

The study villages of Samche and Turana in Jetthul VDC

In Jetthul VDC,³ the exclusively Tamang village of Turana (Figure 3) comprised 30 households situated at an altitude of between 1,800 and 2,000 metres along a north-west facing slope. In October 1991 the population of Turana was 162, with a mean household size of 5.4 members. Samche's dwellings on the north-facing slope of the hill range from 1,600 to 1,800 metres in altitude. Thirty-five of Samche's households were home to 152 Tamang people with an average of 6.1 people per household. Unlike Turana, Samche was not exclusively Tamang, but was also home to nine families of the higher caste Chetri ethnic group and one young Kami blacksmith (low caste) family.

Households in Jetthul typically comprise a man and wife, their unmarried daughters and sons, and married sons, their wives and offspring. Tamang society is patrilocal and at marriage, daughters leave their natal households to live in and contribute economically to those of their husbands. Some years after marriage, married younger sons may set up their own homes. Parents usually live with their eldest married sons who support them as their own productive capacity declines with age. In the absence of a developed welfare system, survival in old age is dependent upon younger family members' productivity and it is therefore crucial that the family line is secured through sons and grandsons.

Until the local section of the Lamosangu-Jiri road became motorable in 1980,⁴ the only means of transport in the north-east of the country was by foot, which rendered Turana and Samche many days' journey from urban centres. Since provision of the road, however, the journey to Kathmandu has



been reduced to approximately five hours, preceded by a 1.5 - 2 hour climb up a steep slope to the road-head, where for payment, public buses and private lorries provide a ride to the city. In the early 1990s the cost of travel to Kathmandu by bus was 50 rupees each way (equivalent to approximately 0.5 of one pound sterling). In October 1991 the return fare was equivalent to the pay for almost two weeks' agricultural labour.

11.3 Methods

The research outcomes presented in this chapter are based upon fieldwork, the main body of which was conducted between July 1989 and December 1991. It focuses on the Tamang people from 75 households in the villages of

Samche and Turana⁵ in Jetthul VDC, Sindhupalchowk District, east-central Nepal, but also draws upon broader ethnographic material obtained from living in the community and previous work in the region.

The methodology took a combined approach, using long-term ethnographic enquiry, quantitative surveying, and micro-demographic techniques. The main quantitative survey was adapted from that used by the earlier Tamang Family Research Project.^{6,7} Following piloting, the survey was conducted during an intensive three-week period leading up to the festival of Dasain, which fell in October of 1991. This period was chosen as it is a celebration of major importance for many Nepalese people, including the Tamang, and as a consequence, people go to great lengths to ensure that they are home with their families at this time. The survey was therefore scheduled to coincide with the one time of the year when the maximum number of people would be present in their households.

11.4 Responses to the changing rural economy and impacts upon gender dynamics

Subsistence agriculture and labour migration

The Tamang in Jetthul, like the majority of rural Nepalese people, are traditionally subsistence agro-pastoralists, and the core economy is based at the household and extended family level. In the past the majority of households' needs were met by local production and exchange of agricultural goods and services. Additional cash was generated through female handcrafts and seasonal male labour migration. Although some households are better off than others in terms of their livestock, landholdings and labour resources, very few meet their consumption requirements each year. Male seasonal migration has, for several generations formed an important livelihood strategy as rural populations have grown beyond the capacity of the land to support them. Driven by the rapidly changing economy and increasing requirement for cash, provision of the road has encouraged and enabled this livelihood strategy. As a consequence, both the number of men who migrate to urban and more productive lowland areas of Nepal and the amount of time they remain away from their home villages has increased markedly over time. In Samche and Turana, the majority of Tamang men, particularly those who are young and unmarried, live and work most of the year in Kathmandu, returning home only for festivals such as Dasain and sometimes for harvesting.

As family-based subsistence agriculture continues to form the mainstay of Tamang households' economy, the gap in the household labour force caused by male absence has resulted in a heavier work burden falling on women, children and the elderly, who have to combine agricultural production with domestic labour requirements. The Tamang in Jetthul VDC, being extremely poor, do not have the resources to hire in help, and all labour must be sourced from family members and through labour exchange with other households.

11.5 Scope of experience and opportunities to contribute to the household economy

Travel and spheres of action

For women of reproductive age, pregnancy, lactation and their roles as primary child carers render them less mobile and available for work outside their villages than their male counterparts. This together with their domestic and agricultural responsibilities severely constrains their opportunities and sphere of action. Rising labour demands mean that women and girls have less time to travel locally (on foot along tracks) to neighbouring villages to maintain their local networks and take up local opportunities such as education and enterprise. Whereas most men, from boys to married and mature men, spend substantial parts of their lives exposed to urban life, very few women do. While the road has enabled and encouraged male economic migration, women and girls travel far less than their male counterparts. My

Fig. 4: Motorised travel along the road is dominated by men. Women tend to travel along the road on foot.

Photos by Kate Molesworth





quantitative survey showed that between October 1990 and 1991, fewer than 30% of women and girls made any kind of journey by road. In all cases, these journeys were relatively short visits (less than a month in duration) to male relatives, usually husbands and fathers, who lived and worked in Kathmandu. Only 10% of girls and women made more than a single journey by road in a year, and only 15% of women aged 14-45 years had ever stayed in an urban area for a month or more.

The differential in male and female travel, urban exposure and spheres of action impacts upon gender dynamics as it creates gaps in access to resources and information. It also brings about different changes in the life experiences and values of men and women.

While displaced from their families, migrant men in Kathmandu seek entertainment and regularly and cheaply access satellite television and videos. The rising popularity of western action films and music videos exposes them to alternative and foreign images of women and female conduct, which is evident in its most extreme form in the unregulated stream of pornography broadcast via satellite television. The concept of female commoditisation is reinforced by the recent growth in "dance restaurants" where girls perform for a largely male audience and commercial sex is available (see Liechty 2001 for a detailed description).

It is important to recognise that in becoming bound to the village and familybased subsistence production, women have much less access to information and mass media than men. Women are therefore less familiar with the behaviour, attitudes and values of their urban counterparts than men. For the girls and women of Turana and Samche, who do not access the city to the degree or duration of their male peers, the only accessible mass medium in the village is national radio. Consequently, the differential exposure of males and females to audio-visual media and the concepts they offer, gives rise to very different gendered worldviews. This is particularly apparent among younger men and women at Dasain when the men return to the villages to celebrate the festival. Whereas women and girls wear traditional loongis (long brightly printed lengths of cloth, worn like a sarong), blouses called cholo with perhaps the modern addition of a manufactured knitted cardigan, their male counterparts adopt a totally different form of attire from traditional wear. Based upon the style of the Hindi movie star, young men arrive in Turana and Samche sporting blue jeans, black leather/vinyl jackets, dark sunglasses and a sophisticated demeanour.

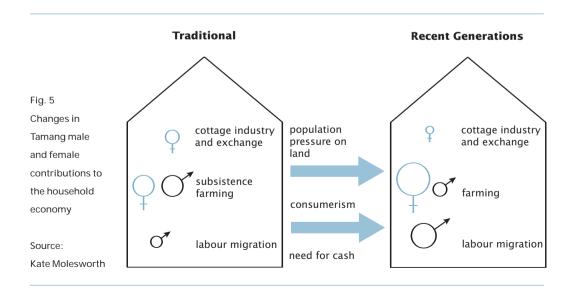
The gender differential in urban and mass media exposure not only means that women are excluded from these rapidly developing areas of society, but there is also a danger that their knowledge and experience may, with time, be regarded to be inferior to that of men. If the economy and livelihood strategies of the Tamang in Jetthul continue on their current path, there is a danger that the female sphere of action will remain constrained, while that of their male counterparts expands. The social and psychological impacts of this may lead to the perception that men are more worldly and sophisticated than women, whose worldview might be expected to remain more firmly centred upon traditional values and within family and village life. This in turn might be expected to compromise power relations between men and women.

Schooling

The additional work burden falling on women as a consequence of male migration acts in a number of ways to reduce female opportunities and inclusion in the development process compared to males. Apart from decreased opportunities for women to travel and engage in recreation, there is also less time for young people to attend school, as all family members' labour is needed to fill the gap left by migrating men. In the arena of school, there is an impact on gender that is mediated by Tamang poverty and mechanisms relating to marriage and economic security. Because women at marriage become part of the work force of their husbands' households, they do not contribute to their parents' livelihoods in old age. Consequently, when domestic and production labour resources become strained, girls rather than boys are intermittently or terminally withdrawn from school to contribute their labour. Given the economic tradition of males supporting parents and senior kin in old age, in their marginal situation, it makes economic sense to Tamang parents to invest more in their sons than daughters. Because of this, even though there are no cultural values precluding female education, girls are less likely to go to the village school than boys and those who do enrol are more likely to be withdrawn before their brothers in times of peak agricultural activity. Furthermore, it is girls rather than their brothers who take care of domestic duties and younger siblings in order to release their mothers and grandparents to work in the fields. The gender gap in school attendance, education and literacy is a factor that can only continue to hamper women's employment options, constrain female spheres of action and jeopardise Tamang gender dynamics.

11.6 Changing access to cash

The shifting livelihood strategies and patterns of labour in response to the changing economic climate and land availability impacts not only on gender roles within Tamang household economies, but also on power relations. Central to this are changes in male and female access to cash. Among earlier generations in Samche and Turana, both sexes had more equitable inputs into family farm production and means of generating cash. It was customary for women to handle their households' cash, as they were regarded to be more financially level-headed and men were deemed to be less prudent in financial matters. Increasingly, however, men are now living and handling their earnings more remotely from their households and women have to contend with reduced opportunities for earning cash. In the past, Tamang women were able to generate cash at the village level through the exclusive female domains of brewing, distilling and weaving. The advent of the road, however, has led to an influx of cheap and more desirable manufactured goods from China and India that compete with the local cottage industry. As a consequence, the market for female enterprise and local cash income has shrunk. Unlike their menfolk, the women of Samche and Turana, in becoming anchored to the village by their increased workloads, are less able than men to take up new livelihood opportunities and generate cash through new niches further afield.



The imbalance in women's and men's access to cash has the potential to affect power relations that might have profound consequences upon gender dynamics. The shift to males having control of most of the cash resources of their households, while living apart from them, is also a factor that keeps many Tamang families in poverty. Despite having one or more male members earning in Kathmandu, many households have not experienced a marked improvement in their livelihoods and abilities to withstand economic shocks such as medical emergencies. Because the Tamang are regarded by mainstream society to be uneducated and lowly, the work they are able to gain in the city continues to be unskilled and low-waged. Once high urban living costs have been met, many men spend substantial proportions of their meagre earnings on entertainment, gambling, drinking, and on readily available commercial sex workers.

The persistence of Tamang poverty, together with the narrowing of local opportunities for female cash generation, places women in an extremely vulnerable position. Road developments and the increasing traffic of outsiders through rural areas are associated with a rising demand for commercial sex in Nepal and other low-income countries (Seddon, 1998). Tamang women, who are regarded by mainstream society to be sexually "hot" and highly available, are often lured into casual and organised sex work. Given the constellation of factors aggravating female poverty, Tamang avoidance of condoms (see Molesworth, 2005; 2001: 246-248) and the instrumental role of road traffic on the diffusion of sexually transmitted infections such as HIV in Nepal (Malla, 1997; Pande, 1997), the road intervention actually introduces elements of risk to the women of Jetthul.

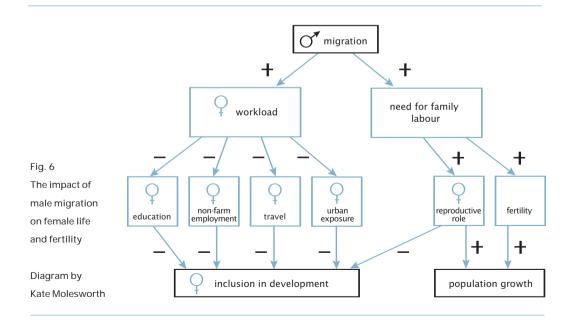
11.7 Implications of the changing economy on fertility

The subsistence labour shortage at the village level resulting from male migration acts to maintain the need for high fertility. Because of the persistence of poverty, Tamang farmers do not have the resources to hire in labour, and households can only renew their labour force through new family members. Children in Samche and Turana become economically active by the age of five years and they play an important role as caretakers of infants and carry out domestic duties that free their mothers and grandparents for agricultural work. The economic situation of Tamang households in Jetthul is such that the essential economic value of children is maintained, which in turn emphasises the reproductive role of women in ensuring continuance of the household labour force and provision for family members in old age. This not only reduces the development potential of overall lowering of population growth, but also emphasises the traditional, biological role of women.

11.8 Conclusions: the value of gender-sensitive research and approaches to development planning

Figure 6 illustrates the dynamic constellation of factors that contribute to the exclusion of Tamang women from the benefits of the road development, traditionalise their economic roles and act to maintain high fertility.

Although previous studies at the area and community levels showed the Lamosangu-Jiri road to have had positive effects upon development by making a detailed gender analysis at the micro-level, I have shown that the impacts of road provision have very different consequences upon males and females. This is true for both direct and indirect effects of the road intervention and has consequences for wider development concerns such as addressing high fertility.



While travel and mobility increased markedly in the region following completion of the entire road in 1985, my research revealed wide gender disparity in travel and use of the road. By disaggregating quantitative data of the Tamang villagers' use of the road over a year, it became apparent that longdistance travel to urban areas using motorised transport was markedly more frequent among males than females.

The gender differential in the impact of the road intervention can been seen to have a "ripple effect" that creates and widens the gender gap in a number of aspects of Tamang life, such as access to information, scope of experience, livelihood opportunities and access to cash. Although a reduction in geographical isolation facilitated by improved transport and mobility can improve women's options for income generation (Doran, 1996:10-11), the dynamics of the Tamang livelihood strategy in Jetthul mediate women's use of motorised transport along the Lamosangu-Jiri road, which in turn constrains their participation in the wider economy and traditionalises their productive role. This has the potential to reinforce gender power relations more common to the hegemonic Hindu culture, rather than the relative equity customary in Tamang life.

Presentation of the case study in this chapter has shown that in the absence of a gender-sensitive project approach, development interventions, especially in their early stages, can create inequalities that are likely to have a profound impact on gender dynamics, especially for a traditionally gender egalitarian community such as the Tamang of Jetthul VDC. In order to reduce the risk introducing negative social change with development interventions, it is important that projects be designed to take into account existing gender dynamics and the potential direction of change. In the absence of planning for gender-based impacts, interventions can exclude women from project benefits and compromise female contributions to the development process.

Gender considerations do not belong exclusively within the domain of feminist theory, but in the context of low-income settings, bring added value to research and project implementation. A gender-considerate approach forms the heart of intergrative research, scientific vigour and optimal development planning. In this way research and development might contribute to ensuring that men and women, and boys and girls are equally included in and contribute to the development process.

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Endnotes

- 'The GDP per capital of most other countries in South-East Asia is higher than that of Nepal (e.g. India US \$ 487, Bhutan, US \$ 695, Bangladesh US \$ 351, Thailand US \$ 2060, Pakistan US \$ 408 per capita per annum) and serves to place that of Nepal within the regional context (see Human Development Report, 2004: 185-186).
- ²India 127th , Bhutan 134th , Bangladesh 138th , Thailand 76th. Only Pakistan ranks lower than Nepal in the Human Development Index, at 142nd (Human Development Report, 2004:247-8)
- ³After the establishment of the new constitution following the king's concession to democracy in 1990, administrative areas of Nepal were renamed *Gaon Bikas Samiti* ("Village Development Committees" or VDCs). Most Nepali people use the English acronym "VDC".
- ⁴The entire road from Jiri was not completed until 1985 (INFRAS, 1995a: 3).
- ⁵In order to protect the privacy of individuals, pseudonyms have been used in place of actual names of people and their villages. True names are used for administrative areas, nearby towns, and other locations.
- ⁶For a brief overview of the Tamang Family Research Project, see Molesworth 2001:71-74. Primary sources of material concerning this project are set out in: Dahal and Fricke, 1998; Fricke, Axinn, Thornton 1993; Fricke et al., 1991.
- ⁷An adapted form of the Tamang Family Research Project survey was used to broaden the scope of my research by enabling close comparison with data from Tamang communities in different socio-economic circumstances. See Molesworth 2001 for further details.

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12 "We could show the men that we are able to do it". A Women's-Development Approach in the Kanchenjunga Conservation Area Project, East Nepal

Martina Locher

The Kanchenjunga Conservation Area Project (KCAP) provides a remarkable example of a gender-sensitive nature conservation project. The KCAP is an Integrated Conservation and Development Project (ICDP) in the mountainous area of East Nepal, jointly managed by the WWF Nepal Program and the Nepalese Department of National Parks and Wildlife Conservation. The project includes a specific women's-development approach¹. It not only aims at direct integration of women into nature conservation, but also applies a broad strategy and a combination of activities for women's-development. Questions arise in the context of both participatory nature conservation and gender issues. The present article provides first a short overview of women's integration into nature conservation projects and development efforts. Subsequently, the research questions and methodological procedure will be described. The findings and conclusions are presented in the main section, following a brief introduction to the case study area.²

12.1 Women, nature conservation and development

A shift has been taking place since the 1980s in global nature conservation efforts. Participatory community-based processes are increasingly being promoted in place of the earlier, strictly enforced, top-down approaches in which people were partly resettled for the establishment of classical National Parks. Integrated Conservation and Development Projects (ICDPs) can be seen as part of the "New Conservation". They pursue the primary aim of biodiversity conservation through community development, i.e. they seek to enhance livelihood options for rural communities as a means of facilitating

more sustainable use of natural resources (Brechin et al., 2002). The first example of this approach in Nepal was the Annapurna Conservation Area and its Project (ACAP), which was established in 1986. This example was copied by other conservation areas in Nepal and attracted much international attention (Mehta/Heinen, 2001; Kollmair et al., 2003). Recently, a debate has arisen about the efficiency of such projects in terms of nature conservation on the one hand, and issues of social justice in implementation processes on the other (Ghimire/Pimbert, 1997; Brechin et al., 2002). The lack of meaningful community participation in decision-making has been identified as a major weakness of ICDPs to date. Generally, it is found that local support for nature conservation is greater if the actors affected are given more responsibility. Integration of local actors in the formulation of new rules for natural resource management provides a better guarantee that these rules take local basic needs into account. It was found that as a consequence, the rules are broken less often. Also, through their involvement, local stakeholders perceive the process as fairer than when it is imposed by others (Ghimire/Pimbert, 1997; Agarwal, 2001).

The pivotal role of women in development processes and natural resource management has been appreciably acknowledged since the increasing recognition of feminist studies in the 1970s and 1980s. A number of studies have revealed that women can contribute significantly to successful nature conservation efforts (e.g. Byers/Sainju, 1994; Agarwal, 1997). The relevance of integrating women can be illustrated by an example of forest management in Gujarat, India: "When only men protected, women would not listen to them. They would say it is our forest so you can't stop us. But women can persuade other women" (woman from Gujarat, cited in Agarwal, 2001:1637). Women are addressed in many different ways in development projects (see e.g. Tinker 1990; Moser 1993). The particular project the author observed, i.e. the KCAP, concentrates its activities on the formation of women's groups, microfinance, and women's non-formal education. Concerned feminists argue that some of the development and nature conservation projects do not lead to actual benefits for women, but in fact primarily pursue the aim of efficient project implementation, which may increase women's work burdens (e.g. Byers/Sainju, 1994; Tinker, 1994). However, the author's research results show that there need not be tension between an efficiency paradigm and an empowerment approach; the work burden, though, may be a critical issue.

12.2 Aims and methods

During preparation of the field research on the KCAP, it became clear that this project raises several questions about changing gender relations, which attracted the author's interest and partial concern, when considering the above-mentioned critics. Thus, by taking up issues from both feminist and nature conservation debates, this article investigates the question of whether an ICDP, by applying a women's-development approach, provides a just and efficient way to implement nature conservation goals, as claimed by Wilshusen et al. (2002). The following research questions are analysed:

- What is the intention behind the women's-development approach within the KCAP? What are the implications of this approach for project outcomes?
- What is the impact of the KCAP women's-development approach on the status of women? How do women themselves perceive the project and its impact on their workload?

For analysis of the impact on women's status, the concept of practical and strategic gender needs is employed (Moser, 1993). Practical gender needs are those that can be addressed in the context of existing gender relations, whereas strategic gender needs require changes in unequal gender relations. Addressing strategic gender needs leads to an increase in the status of women, e.g. by enhancing women's control over resources or their participation in decision-making. Furthermore, this study focuses on women's empowerment, in other words their increased self-esteem and ability to address their own needs, be they practical or strategic ones.

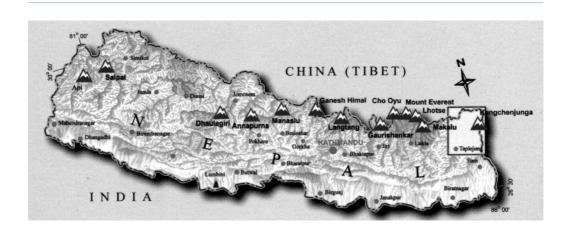
The study was conducted at the Department of Geography, University of Zurich, and is embedded within the framework of the Swiss National Centre of Competence in Research North-South (NCCR North-South). The case study is based on around 50 semi-structured interviews with KCA inhabitants and on participatory observation. The interviews were conducted in several settlements during a trek in March and April 2003, with the help of a female Nepali-English translator from Kathmandu. Around two-thirds of the interviews were held with women. To some extent the author benefited from the fact that both she and the translator are women, and therefore earned considerable trust from the women interviewed when speaking about gender relations. But this played a role only in a close interview setting in the exclusive presence of women, which was not always the case. Interviews

included many key informants, such as chairwomen of the newly established women's groups. The sample roughly reflects the economic stratification of the KCA population, but its validity may be limited by ethnic representation. In addition to these data, ten expert interviews with KCAP and WWF Nepal Program staff and a former Senior Conservation Officer in the precursor Annapurna Conservation Area Project (ACAP) were conducted. The latter shared her experience related to the women's-development approach as applied in the ACAP, which was subsequently adapted for the KCAP. The data collected were classified according to the characteristics of interviewees such as sex, ethnicity, education level, and economic status, and codified and categorised according to qualitative research principles after Strauss and Corbin (1996). Further, internal project reports of the WWF Nepal Program and other studies on the KCAP were analysed (e.g. Müller-Böker/Kollmair, 2000; WWF NP, 2001b; Mountain Spirit, 2003). In particular, the broadly based gender-sensitive socio-economic survey of the KCA, conducted by the WWF Nepal Program (WWF NP, 2001a), provided a valuable background for field research and data analysis.

12.3 The Kanchenjunga Conservation Area and its project (KCAP)

The KCAP accompanies the implementation of the Kanchenjunga Conservation Area (KCA), which was established by the Nepalese government in 1997. The KCA lies in the Eastern Himalaya (see map) and is accessible only on foot .

Around 5000 residents from different ethnic groups inhabit an area of 2035 km². As shown by the WWF survey, gender relations vary partly with ethnic affiliation, but can be considered clearly unequal in all groups. They feature a strict gender division of labour, resulting in a greater workload for women who work two to three hours more per day than their male partners. Moreover, men significantly under-value women's voluntary community labour. While 50% of the male adult population indicated that they attended school, only 20% of the women indicated school attendance. Meanwhile, the rate of attendance for girls in the early classes in primary schools is nearly the same as that of boys, but girls from poorer families are more often forced to discontinue their education in advanced classes. Women are largely under-represented in political institutions and local community leadership (WWF NP, 2001a). Part II: Women's-Development Approach

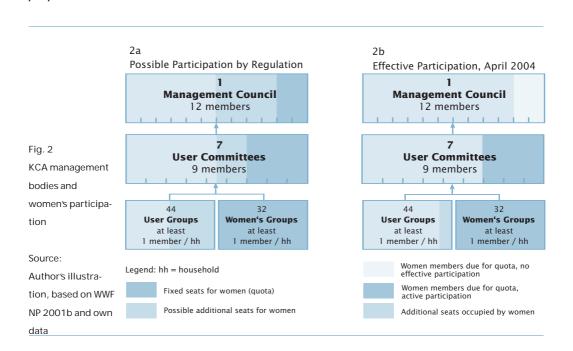


The KCAP is mainly financed by the WWF network. Most of the field staff consists of local inhabitants. The project implements a broad spectrum of activities to reach the two declared overall goals of conservation and community development. On the one hand it promotes nature conservation awareness, e.g. through information tours and implementation of tree nurseries and wildlife monitoring. On the other hand it carries out diverse community development activities, such as installation of water schemes and toilets and repair of trails, bridges and schools. An important step is the establishment of new bodies at different political levels for the management of natural resources, in order to hand over the management of the entire KCA after phase-out of the project. Women's development activities - as an important part of the community development activities - include amongst others the formation of women's groups, the establishment of microfinance schemes within these groups, and the provision of non-formal literacy classes. The KCAP further determines quotas for women's participation in the above-mentioned bodies for the KCA management. Women's potential share of seats in these bodies is illustrated in Figure 2a.

To begin with, the study findings focus on the question: Why does a nature conservation organisation employ a women's-development approach? Analysis of internal project documentation and interviews with KCAP managing staff point out a mixture of different aims and attitudes. Women's empowerment is an important issue among some of the KCAP staff, but priority is clearly given to WWF conservation aims. It is basically argued that it is necessary to empower disadvantaged actors – who in this case are women –

Fig. 1 Map of the Kanchenjunga Conservation Area (KCA) in Nepal

Source: Gondoni w.y.



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in order to facilitate participatory nature conservation. Besides these pragmatic considerations, the KCAP women's-development approach is also partly based on the efficiency paradigm. The managing staff indicated that planned development activities could be better implemented with women's participation, as women were more easily motivated for community work than men. The following statement of the Director of Mountain Programs, WWF Nepal illustrates this attitude: "It is the best strategy to begin with women. They are more disciplined, less cynical, and more interested in development than men".

The KCAP benefits significantly from the women's-development approach. Women mainly appreciate the KCAP, as a consequence of the various activities for women (see also next chapter). Men's reaction to the women's-development approach is mixed and includes acceptance, envy and partial opposition. However, a majority of the men generally agree with the KCAP strategy, and appreciate the fact that they themselves benefit from the women's activities as well. Thus all in all, as an outcome of the village development activities, KCA inhabitants show a mainly positive attitude towards the project. This is crucial for the success of the KCAP, which as a participatory ICDP relies on villagers' cooperation. It must be noted that these development activities are mainly carried out by the women and would not be as efficient without their active engagement.

Considering the importance of meaningful community participation in natural resource management, women's involvement and increased empowerment can be regarded as a promising process. As elsewhere in Nepal (e.g. Metha/Heinen, 2001), women in the KCA play a significant role in the use and management of natural resources. Moreover, they are generally eager to gain knowledge and receive training (see also Byers/Sainju, 1994). Thus, they are amenable to information on conservation awareness. Many of them seem to incorporate very well the respective knowledge provided in diverse KCAP activities. With their increased conservation awareness, women contribute to the main aims of the WWF. They give advice on sustainable use of forests, advocate a halt to slash-and-burn practices, promote restrictions on collection of certain medicinal plants, and work in tree nurseries (Mountain Spirit, 2003). In sum, the women's-development approach can be seen as essential for KCAP outcomes, but also of benefit to the involved women, as outlined below.

12.4 The KCAP activities and women'sdevelopment

Women's groups and microfinance schemes

The mainly positive outcomes of the KCAP's women's-development approach to women's lives are presented in this section, while critical issues are described in the following section. As a core activity of the project, 32 women's groups were established in the KCA up to 2004. The members of these groups represent a large majority of the households in the area. Group composition varies by age and social class; but not all women attend the meetings regularly (see "Critical issues" below). By regulation, men are only allowed at women's group meetings in exceptional situations, i.e. when they need to substitute for their wives or mothers. Each women's group was provided with a fund to start its own microfinance scheme, which is managed by the women themselves. The women's groups gather once a month and decide on the provision of loans to their members, and control the interest and loan repayments. While the KCAP provided some guidelines and support to establish the microfinance scheme, the women's groups have adapted the regulations to local conditions. The fund is additionally enhanced by collective savings, whereby each women's group member has to pay a small monthly fee. Women invest the loan money in income generation activities such as poultry and goat raising or carpentry, or sometimes hand it

over to their husbands for trading activities. The fund not only provides the basis for the loan scheme but is also used for girls' scholarships and other village development activities. All the women's groups regularly clean their villages. The women normally gather once a month to collect rubbish and allocate it to specific facilities for rubbish, established by the KCAP. Women's groups also organise the repair of damaged village trails by calling all the villagers on one specific date. Men and women usually carry out this heavy work jointly and are provided with tea and snacks by the women's group members during these working days.

The formation of women's groups brought about a significant increase in the members' self-esteem. Many women learned for the first time to speak out in a group and lost their earlier timidity. They enjoy the opportunity to gather, exchange information and learn from occasional KCAP training sessions, e.g. on income generation activities or health. They feel very proud about what they can effect as a group, be it a visibly clean village, the installation of a new tree nursery, the provision of girls' scholarships, or the management of their fund. The chance to get loans is greatly appreciated by both female and male interviewees. The microfinance schemes thereby also guarantee that women's participation in the groups is generally tolerated and often supported by their husbands. As the result of several village development



Fig. 3 Women's Group meeting in the Kanchenjunga Conservation Area, East Nepal

Photo by Martina Locher activities, women's status within the community has increased; as one interviewee stated: "We did a lot of work, we could show the men that we are able to do it" (see Figure 3).

Men's influence in the women's groups varies greatly in the different settlements, but is largely reduced to occasional passive attendance and payment of interest on loans. However, in two smaller settlements where the KCAP has a rather low profile and gender relations are likely to be particularly hierarchical due to the ethnic affiliation, the groups are transformed into permanently mixed groups of men and women, whereby men have at least an equal share in decision-making with women. However, other villages with the same ethnic affiliation have women's groups that function well. This stresses the importance of support by the project staff in the process of forming women's groups.

Non-formal education

An additional important KCAP activity is the non-formal education programme for illiterate women and some men. Many villagers greatly appreciate this offer, yet the participation rate is much lower than in the women's groups (see "Critical issues" below). In six-month courses with daily lessons, participants learn how to read, write and keep a book of accounts. They also get information on community development and conservation. The KCAP thereby roughly follows the Reflect approach, as described by Cottingham et al. (1998) and Burchfield et al. (2000). The Reflect approach sees non-formal education as part of an awareness process that will ultimately lead to social action, in order to change unequal power structures. The approach is mainly based on discussions on topics relevant to the learners' lives and uses keywords to introduce literacy and numeracy skills. In the approximately 40 basic courses in the KCA to date, textbooks including pictures were provided to introduce such key issues. In two villages, advanced classes were conducted, where the learning material was prepared by the participants themselves with the help of the teacher, using tools from Participatory Rural Appraisal (PRA).

With their newly acquired skills, women are able to keep their account books for the microfinance scheme, and read letters from relatives who have migrated. However, the author found that for many women the ability to sign their name is the most important change. This is obviously crucial to their self-confidence and is expressed in their vivid pride in using their signature in the women's group meetings instead of fingerprints. Women also mention decreased shyness towards educated (male) villagers and foreigners.

Besides these activities, the KCAP has also met pivotal practical needs of women and girls by providing water supply schemes and repairing trails and bridges, as it is mainly the female household members who are in charge of fetching water and collecting fodder and firewood, which are very time-consuming duties. Other work alleviation is provided through the distribution of back-boilers (water heating systems), which reduce the amount of fuelwood needed, thereby also contributing to the conservation aims of the KCAP.

In summary, the KCAP meets practical needs and clearly contributes to the empowerment and increased status of many local women, i.e. it also addresses women's strategic needs.

12.5 Critical issues

Beside the above-mentioned positive findings, there are some additional critical points. These relate to women's (non-) participation in KCAP activities in general, to women's engagement in the KCA management bodies, to the gender division of labour, and the valuation of women's work, respectively. In analysing women's participation in women's groups and non-formal education classes, it emerged that women from geographically and economically marginalised households are partly disadvantaged and may thus benefit less from the KCAP than those from better-off families. In general, many women are willing to invest their time in women's group meetings and community activities, as they consider the additional workload as low or appropriate in comparison to the outcome, which they believe to be highly beneficial for both themselves and their villages. Yet, due to their existing heavy workload, women from poorer and geographically marginalised households can often not afford to invest time in additional duties and long walking distances. Hence they do not participate at all or only irregularly at the women's group meetings, and are therefore also excluded from influential positions in the groups, such as chairwoman and secretary. Workload is not only related to economic status, but also to the gender division of labour. Men substitute for their wives or mothers in women's group meetings, because "the women are too busy". As it requires daily presence, attending literacy classes is even more related to workload issues. One interviewee expressed her situation in the following words: "The

old man said: 'Why do you study, you should work!' Sometimes I slept in the classes, because I had too much work. I had to leave the class earlier to do the household work" (see Figure 4). Equally important, there are strong sociocultural values besides the gender division of labour that prevent women from participating. The often prevalent perception that women, particularly the elderly, are not able and not supposed to study, leads many women to be discouraged. They express this by saying that they are too shy or too old to attend the classes, even though they would be interested in participating.

Another critical issue is the under-representation and low influence of women in some of the KCA management bodies, as illustrated in Figure 2b. This situation can be explained by several reasons. The establishment of women's groups is generally seen as an important tool for increasing the political participation of women, as the groups strengthen women's abilities to express their concerns in front of others. However, as also experienced in the precursor ACAP, women's groups do not automatically lead to greater participation of women in mixed groups. As pointed out by Agarwal (1997; 2001), it is beneficial for women's participation if quotas are fixed right from the beginning when new bodies are formed. The KCAP took this important step and fixed the quotas in the KCA regulations. This strategy seems to be successful in the case of the User Committees, whereas in the Management Council the low quota of one-sixth of the seats does not count



Fig. 4 Non-formal literacy classes provided through the Kanchenjunga Conservation Area Project

> Photo by Martina Locher

for much (see also Dahlerup, 1988, in: Agarwal, 2001). As illustrated by the experience of the ACAP, in addition to the quota, it is crucial to supervise and support women by informing, motivating and coaching them (see also Byers/Sainju, 1994). Again, socio-cultural values and perceptions are influential, as political issues such as the management of common natural resources are traditionally associated with male responsibility and women are partly considered less able than men. Furthermore, in some cases a lack of clear communication on the part of the project staff can be an additional causal factor in women's low participation. For example, the User Groups³, according to the regulations, are open to both women and men. However, due to the institutional structure, they are often seen as a counterpart to the women's groups and are even referred to as "Fathers' Groups" by the villagers. Therefore, many women are not even aware that they are allowed to participate. Yet compared to other local political bodies, female participation in the KCA bodies is significant. By both implementing the quotas and strengthening women's capacity for political participation through other activities, the KCAP clearly addresses strategic gender needs, although the process may take more time.

The gender division of labour, a pivotal part of unequal gender relations, as shown above, has so far not been significantly loosened by the KCAP. Considering the former point regarding women's participation in the KCA bodies, this harbours the risk of reinforcing unequal power structures by having women do most of the community development work while men have hegemonic say over natural resources. The WWF survey (WWF NP, 2001a) clearly showed that men significantly undervalue women's voluntary community labour. The KCAP, on the one hand, contributes to a change in these socio-cultural perceptions by making women's work and abilities visible, as illustrated above (see pages 18-19). In fact, many men now mention the women's achievements. On the other hand, the project partly harbours the risk of drawing on and thus strengthening the unequal valuation of work. Both the monthly village cleaning and the occasional repair of trails are appreciated by all villagers, for instance. Yet, it is often emphasised by men and women that cleaning is "not hard work". Although time-consuming for the women, cleaning is valued less than the repair work, which is carried out mainly by men. In one village this attitude is strengthened by the fact that the men are paid a salary for trail repair out of the women's fund, while the women never take a salary for themselves when cleaning the village. In order to achieve the aim of balancing unequal gender relations, it is therefore important to ensure that men support the women in time-consuming community development activities (without being paid), while women should be further encouraged to participate in the KCA bodies.

Some of the critical issues presented could be tackled by further increasing gender awareness among the project staff and strengthening the Community Mobilizers. These are two local women hired by the KCAP whose duties are, among others, to support the women's groups, to encourage women to participate in the KCAP activities and – where necessary – to help persuade male household members to tolerate the women's engagement. However, criticism must be weighed against the fact that many of the above-mentioned concerns have their roots in the economic and social stratification of the population and the physical conditions of the area (remoteness, long walking distances). It must be considered that a relatively small project like the KCAP has limited options to change these general circumstances.

12.6 Discussion of the KCAP's women's development strategy

Considering several constraints on such processes, the KCAP must be rated as a rather successful project in increasing women's status, even in comparison to Nepal's general policy on women's development (CWD, 1994; Bhadra, 2001; Tamang, 2002) and findings of other studies from South Asia (e.g. Wickramasinghe, 1993; Goetz/Sen Gupta, 1996; Rozario, 1997). However, from a feminist point of view, it is obvious that strategic gender needs could be addressed more emphatically, e.g. by raising the quota for women's participation in the KCA management bodies, or by challenging gender division of labour more directly. From the KCAP's perspective, on the other hand, it is understandable that women's development is not advocated in more radical ways. Such a procedure would be likely to provoke major resentment among men, which could lead to negative attitudes towards the project and hamper men's cooperation in participatory nature conservation, the main aim of the project.

The KCAP is applying a well-balanced women's development strategy⁴, which is based on the following three interlinked principles. First of all, the overall strategy integrates more recent approaches, which means it comprises elements of gender mainstreaming by providing gender sensitisation training to the entire staff and has conducted a gender-disaggregated socio-

economic survey. It addresses both practical and strategic gender needs, and strongly focuses on women's empowerment. Secondly, this overall strategy results in the implementation of a broad combination of activities. The activities are complementary and strengthen the women's development process in different spheres. As an example, the integration of microfinance schemes in the women's groups plays a pivotal role, as they provide a socially acceptable rationale for women to meet (see also Agarwal, 1997). Thirdly, the KCAP addresses women both separately and in an integrative way, by providing women-only membership in the women's groups, but integrating women in the KCA management bodies and men in the non-formal education classes, respectively. The KCAP thereby learned its lessons from the precursor ACAP, which in the beginning focused on women only and had less positive experiences.

The author assumes that the basic principles of the KCAP approach set out above provide a basis for promising women's development efforts elsewhere. It may not be possible to transfer the KCAP activities as they stand to any other part of the world, but the approach may be adapted to local conditions in other areas by conducting a preliminary gender-sensitive survey and providing training for local staff.

12.7 Conclusions

From a pragmatic point of view, and with the reservations mentioned above, the KCAP women's-development approach can be seen as beneficial for both women's status and overall project outcomes. This, therefore, illustrates Agarwal's (1997) point that there is no immanent contradiction between the efficiency paradigm and women's development. It can be concluded that the KCAP, with its women's-development approach as a significant component of the programme, serves as a positive example of the "pragmatically feasible and socially just" way (Wilshusen et al., 2002:18) to implement ICDPs.

Yet the present article reveals the importance of a critical focus on gender issues, even where project activities are exclusively meant to benefit women. The delicate process of changing unequal gender relations has various obstacles, which requires a very close look at both women and men (see the contribution by Kate Molesworth in this publication). The process is even more complex when considering other interests such as nature conservation at the same time. This is the challenge of implementing and also examining the KCAP – and it is also where the author's specific interest lies. An attempt was made to strike a balance between feminist and conservationist views, applying some pragmatism, while not losing sight of the clear aim of gender equality.

For future research in the case of the KCAP, among other issues, a detailed focus on the KCAP's impact on women's status within their households is recommended. In particular more detailed analysis of the impact of the microfinance schemes might provide further valuable findings, as the implications of micro credit programmes on women's status in the household are strongly debated in other studies (e.g. Goetz/Sen Gupta, 1996; Rozario, 1997). Whereas the positive impacts on women as a social group in their community are not challenged in this article, further research is required to point out in more detail the implications for women at the household and individual level. Questions concerning intra-household conflicts and social pressure by the women's groups, as well as the risk of indebtedness and increased workload, must be addressed (see the article by Smita Premchander in this publication). Furthermore, it is worthwhile to examine the livelihood conditions of the most marginalised households in the KCA in depth, as well as the influence of social stratification within the villages on the empowerment process of women from different social groups. Considering research methodologies, it was found that Moser's concept of practical and strategic gender needs (1993) was somewhat difficult to apply, as the distinction between these two categories is not always easy to make. Nevertheless, this concept was helpful in sharpening the view of differing implications of project activities on women. The central social category of gender differentiation was essential to obtain a intergrative research perspective, but also to see differences among women (e.g. due to economic and geographical marginalisation or ethnic affiliation), which must be analysed in the same careful way.

Endnotes

- ¹In this article the term "women's development" is used to refer to unspecified approaches to women's development or empowerment.
- ²This article is based on Locher, 2004. Special thanks for support go to Dr. Michael Kollmair, Prof. Dr. Ulrike Müller-Böker, Dr. Kate Molesworth, and Heidi Kaspar.
- ³Formerly called "Forest User Groups", the village-based User Groups are responsible for sustainable resource use at the local level, e.g. they elaborate and control rules for the cutting of timber and collection of firewood.
- ⁴For general conclusions on women's-development strategies, see Tinker, 1990; Moser, 1993; Byers/Sainju, 1994; CWD, 1994.

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13 "I am the head of the household now": The Impacts of Outmigration for Labour on Gender Hierarchies in Nepal

Heidi Kaspar

Introduction

For many areas in Nepal, particularly in the Mid-hill zone, labour migration is a livelihood strategy with a longstanding history and is thus deeply engraved in the culture. Migration is a common solution to the problem of earning a living in an area with scarce employment opportunities and limited land resources. Migration in Nepal is a highly gendered process: migrants are predominantly male. Women have the main responsibility for housekeeping and child-rearing and are involved in agricultural work. Men are the main cash income earners and migrate in search of work. However, the number of women migrating on their own is increasing in Nepal (Sancharika Samuha & UNIFEM, 2003).

In acknowledgement of the importance of outmigration to earn a livelihood, the issue of migration is gaining increasing attention in the scientific community. But there is still very little research on the "static" side of the migration process – household members who remain at home. The question of the domestic effects of labour migration on wives and children can be described as a blind spot in research (Shrestha & Conway, 2001). The present case study therefore aims to narrow this research gap. It provides a deeper understanding of the effects of outmigration for labour in Nepal, shifting from the perspective of migrants to those who remain in the villages and must cope with the changing circumstances of everyday life. The major research question is: What effects does outmigration for labour have on gender relations, namely on female participation in decision-making?¹

The position of women in Nepal is determined by patriarchy, virilocality, and patrilinearity. Normally, men head the household as husbands or fathers-

in-law. It is thus assumed that men take most of the decisions. Given these circumstances, the present article investigates the effects of male outmigration on female participation in decision-making processes in the home, with the following aims:

- To understand the effects of male migration on women's participation in decision-making in the home
- To understand how those who remain at home cope with changed circumstances

The findings presented below are based on semi-structured interviews with 56 women and 38 men, 60 of whom belonged to households that directly experienced migration, and 16 to households where no member had ever worked abroad². In addition, semi-structured tables were conducted with 32 female and 19 male participants, and two group discussions with four and five female participants were organised. The field research took place in October and November in 2002 in the village of Kalabang in Nepal. The results show that the extent of women's participation in decision-making during labour migration is not only influenced by gender relations, but also by the position of women within the household (usually changing with age), and by the relationship between a woman and her husband and his parents, as well as the relationship between spouses.

Research for this article was conducted in the framework of IP6 of the NCCR North-South Programme, focusing on institutional change and livelihood strategies. It will contribute to the growing body of research on outmigration for labour within the NCCR North-South³ by adding insights into the effects that labour migration has on women in Nepal who remain at home.

13.1 Theoretical background: participation in decision-making as an indicator for gender relations

The present study is based on Agarwal's (1997:1-2) definition of gender relations: "(...) gender relations (like all social relations) embody both the material and the ideological. They are revealed not only in the division of labour and resources between women and men, but also in ideas and representations – the ascribing to women and men of different abilities, attitudes, desires, personality traits, behaviour patterns, and so on. Gender relations are both constituted by and help constitute these practices and ideologies, in inter-

action with other structures of social hierarchy such as class, caste and race".

Women's status in society is often analysed using the indicator of participation by women in decision-making processes –at the household, community or institutional level. It is assumed that gender relations at household level are more equal when women and men participate jointly in decision-making.⁴ Adhikari (2000:8) defines decision-making as "a continuous process of choosing the best among alternative choices". The author further emphasises that decision-making is influenced not only by the resources available, but also "by the worldviews of its members and by their social organizations" (Adhikari, 2000:10). Household decisions are often defined as the result of bargaining processes between household members. Sen developed the most elaborate bargaining model, which will be referred to in the following section.

13.1.1 Cooperative conflicts

Sen's cooperative conflict model describes the functioning of negotiations within households. The questions of who takes which decisions, who gets to consume what, and who does what can be seen as social arrangements (Sen, 1990:129). Individuals within a household work together insofar as cooperative arrangements make each of them better off than non-cooperation (Rodenburg, 2000:243). Sen (1990) assumes that household members can act simultaneously according to their self-interest and in an altruistic manner. Furthermore, as Agarwal (1997:25-27) points out, actions that appear altruistic at the moment might be taken for reasons of self-interest when seen over the long term. Furthermore, social norms and perceptions of obligations and legitimate behaviour influence individual preferences (Rodenburg, 2000:243).

A central point of the cooperative conflict model is the breakdown position. "The breakdown position indicates the person's vulnerability or strength in the bargaining" (Sen, 1990:135). Four factors determine one's bargaining power:

- **1. Breakdown well-being response:** a person's ability to secure a favourable outcome is weakened if he or she ends up in a worse position in terms of well-being without cooperation (Sen, 1990:135).
- **2. Perceived interest response:** a person's bargaining power is weaker when he or she attaches less value to his or her own well-being relative to the well-being of other household members (Sen, 1990:136; see also Agarwal, 1997:22-28).
- 3. Perceived contribution response: a person's bargaining power is

stronger the more his or her contributions to the household are noticed (Sen, 1990:136; see also Agarwal, 1997:22-28).

4. Perceived need response: a person's bargaining power is stronger the more his or her needs are acknowledged within the household (Agarwal, 1997:11).

Women's breakdown positions will be described in detail below. Women's breakdown positions change against the background of male outmigration for labour. Moreover, reflection on women's breakdown positions renders the very general societal situation of women in Nepal visible.

13.2 Living in Kalabang

The settlement of Kalabang is a typical migration village. It is situated in Nepal's Hill zone, the area where outmigration for labour is most intensely applied as a livelihood strategy (HMG et al., 2002).⁵

13.2.1 Social structure and gender relations in Kalabang

Approximately 1,500 persons live in Kalabang, including people from three different jats. The Gurungs⁶ are the numerically, politically and socially dominant jat⁷ in Kalabang. Gurungs make up approximately 65% of the village population, while 22% are Dalits (low caste) and 13% Brahmins (high caste). Hierarchies of gender as well as jat structure social life significantly (Cameron, 2001). The institutions of patriarchy, virilocality and patrilinearity are of fundamental significance in gender hierarchies. Shrestha and Conway (2001:163) state that in Nepal, "a woman's identity or status is directly affiliated with that of her closest male figure: to her father as a daughter, to her husband as a wife, and to her son as a mother⁸". The institution of virilocality means that after the wedding the young wife leaves her mait? and moves to her parents-in-law's household (ghar)10. As a daughter-in-law, a woman usually has little participation in decision-making and must work hard in subsistence agriculture and the household. Furthermore, a recently married young woman is not only a stranger in the household but in most cases is also unfamiliar with the village. A woman's situation changes when she gives birth to a child, especially a boy. By giving birth to a son, a woman affirms her status in her husband's family by providing offspring for the lineage. In patrilineal societies, the tradition of handing over one's own land from father to son means that women normally do not possess land. The lack of property in the form of land – which in an agrarian society signifies lack of a basis for livelihood – makes a woman highly dependent on her husband. This dependence also diminishes her bargaining power when her interests are at stake. Obviously, position within the household – whether a woman is a daughter, daughter-in-law, or wife of the (usually male) household head – matters: This normally changes with age and determines a woman's participation in decision-making. Similarly, gender hierarchies are stricter in Brahmin and Dalit societies compared to Gurung societies. Hence, gender relations are indeed defined through patriarchy, virilocality and patrilinearity. However, the concrete form of relations is also affected by other categories such as age and jat¹¹.

13.2.2 Livelihood strategies: the importance of outmigration for labour in Kalabang

As in many parts of Nepal, agriculture is one of the most important sources of income in Kalabang. All households are somehow involved in subsistence agriculture, even those that possess no land. Because agricultural yields are often not sufficient and paid job opportunities are scarce in Nepal (Graner, 2001), outmigration for labour has become very important. The significance of outmigration is demonstrated in Table 1. In total, 250 people were abroad at the time of the inquiry, which corresponds to 16.7% of the total population of the village. As in other parts of Nepal, the main destination of migration in Kalabang is India, but people also migrate to Gulf countries, Europe, the USA, Hong-Kong and Japan (Thieme, 2005; Gurung, 2001:14; HMG, 2002).

	Current migration	Previous migration	Current or previous migration	No migration	Total persons interviewed	Percentage of married women whose husbands
Gurung	35.9%	48.7%	84.6%	15.4%	52% n=39	are or were abroad Diagram by Heidi Kaspar
Dalit	34.8%	30.4%	65.2%	34.8%	30.7% n=23	
Brahmin	30.8%	15.4%	46.2%	53.8%	17.3% n=13	
Total	34.7% n=26	37.3% n=28	72% n=54	28% n=21	100% n=75	

Note: n = absolute number of interviewed persons

Most of the migrants were young married men. But unmarried men and a few women also sojourned to foreign countries. Women usually do not migrate to find work but to join their husbands in order to "keep the family together". The predominance of males in labour migration can be explained by the gendered division of labour¹² and social norms that define gender relations, as a Dalit woman put it¹³. According to her, women do not migrate

"because women in this village have not been independent until now. They are not allowed to go abroad. They are not well educated so they cannot go abroad".

Male outmigration has a fundamental impact on female spouses, who as a rule stay in the village. Table 1 shows that 72% of all interviewees were directly affected by migration at the time of inquiry or at some previous point in their lives. This means that almost three quarters of all married women live part of their lives – and usually a long part – without their spouses. On the one hand, the situation of a husband working abroad is special, as it is perceived as a temporary phase in one's life. On the other hand, this situation appears very normal, as outmigration for labour is such a common strategy.

13.2.3 "It is important that husband and wife understand each other": decision-making processes in Kalabang before migration

Who decides what within the household is basically determined by predominant gender relations (see above) and by household structure, i.e. whether the couple lives in a nuclear household (a couple and their children) or in a joint household (a couple, their children and parents-in-law). Although men are the unquestioned household heads, most men in Kalabang include other household members – especially wives – in decision-making. Respondents (males and females) often stated that decisions were usually taken with the spouse; they normally would "come to a conclusion." Yet "coming to a conclusion" does not provide information about the extent of participation in decision-making by different household members. Rightly, a consensus is based on the – at least tacit – agreement of all participants. However, this does not imply that power relations do not exist.

Whereas in nuclear households decisions are usually taken by the husband – often together with his wife (see above) – decisions in joint households are

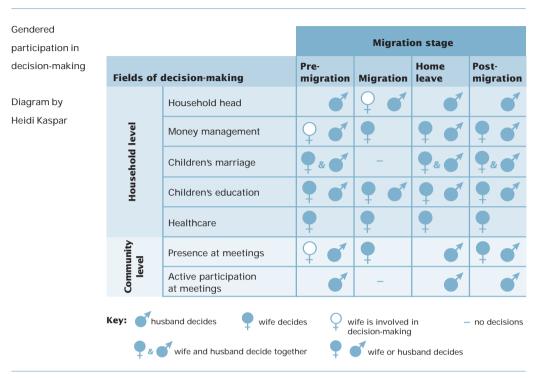
normally taken by parents-in-law, solely or jointly with the husband. In joint households, a wife's opinion is only included in decision-making in an indirect way. Her husband consults her before discussions with in-laws. Thus a daughter-in-law depends heavily on her husband to represent her needs and interests.

13.3 "I am the head of the household now": impacts of migration on women's decision-making power

13.3.1 Shifting competencies during migration

When husbands migrate, communication is maintained through letters or telephone calls¹⁴. Moreover, migrants usually get home leaves once a year or every other year for several months. However, migrants are still quite cut off from activities at home. Hence competencies have to be re-organised. The present study looks at decisions with regard to specific fields of decision-making and the relevance of decisions in general, i.e. operational and strategic decisions. Table 2 presents various fields of decision-making. It shows that migrant husbands remain household heads even though they live far away from their homes - interviewees' indications left no doubt about this issue. However, there are specific tasks that a migrant household head fully delegates to the wife at home: management of money and representation of the household at community meetings. Although these shifts in competence indeed signify an increase in women's participation in decision-making, the increase must be looked at more critically. First, there is usually not much money to be managed. Expenses often are pre-determined by scarcity and hence are not linked with much decision-making power. Bentley (1989:73) comes to a similar conclusion in his study on intrahousehold decision-making in rural Portugal. He reports that household members "often reach a consensus easily, because frequently one choice is the only logical one". This also applies to most decisions concerning expenditures in Kalabang.

Second, women who attend community meetings to represent their household rarely raise their voices in discussions. Therefore, despite increasing participation in community meetings, their interests are not better represented, although they are at least better informed. Table 2



Other decisions, such as those regarding children's education and healthcare, are not affected by the absence of the husband. Arrangement of a child's marriage, by contrast, is always postponed to the return or next home leave of the migrant. When migrants return for home leave, they usually assume their "ancestral" position within the household (see Table 2).

Besides gender division in decision-making and participation in specific fields of decision-making, a more basic gender division was detected concerning the relevance of decisions. During migration, women take on responsibility for everyday decisions with little impact on household members – designated here as operational decisions. More complex and farreaching decisions, by contrast, are made later by both spouses jointly or even by the husband alone. These decisions will be called strategic decisions. In most fields of decision-making, both operational and strategic decisions exist. For example, in relation to money management, there are operational decisions, such as buying a new bottle of oil, and strategic decisions, such as taking a loan in order to facilitate outmigration for the eldest

son. Other fields of decision-making are by nature strategic, such as arrangement of marriage.

Owing to difficulties in communication during migration, only the most important decisions are discussed between husband and wife; others are decided by the wife alone, by the wife and her parents-in-law, by in-laws only, or even await the husband's home leave.

Women in nuclear households. In nuclear households, operational decisions are handed over to women, who manage the household and field work and thus become de facto household heads. A Gurung woman described her position within the household during migration: *"When my husband was abroad, I took all the decisions".* And a Dalit woman, whose husband has been working in India for 25 years, stated: *"I am the head of the household now [since her husband had emigrated] and have to look after everything".*

Though these statements are typical, as they highlight women's augmented autonomy in decision-making after their husbands' departure, the first statement is unusual in that the woman retains full decision-making competence even after the husband's return (see below). This rarely occurs, even in Gurung households, which are generally structured with more egalitarian gender relations than Dalit and Brahmin households. The second statement is thus atypical because a Dalit woman refers to herself as the household head. The majority of women interviewed did not refer to themselves as household heads, although they took all operational decisions.

Strategic decisions, on the contrary, are not taken without the formal household head. Thus husbands participate in decision-making or even take decisions during migration. However, whether a decision is a strategic or an operational one is not always self-evident. As women stay home with the children, the household and the fields, they are usually the first to know about a problem. After becoming aware of the problem, women have to decide whether a decision requires their husbands' or anyone else's consultation. In a more general way, wives have a gatekeeper function, not only in deciding for which decisions they need their husbands' consultation but also in selecting and pre-interpreting information about events at home and passing the information on to their husbands.

Women in joint households. Whereas for women living in nuclear households labour migration is generally accompanied by increased partici-



Fig. 2 Men go away, women stay: three generations managing the household and subsistence work

Photo by Heidi Kaspar

> pation in decision-making and responsibility for operational tasks, as just shown, for wives living in joint households the husband's departure signifies instead a decrease in decision-making. The situation of a young Gurung woman, who was living with her in-laws while her husband was working in Dubai, serves as an illustration. Since her husband had left the village, she was no longer included in decision-making. Before, her father-in-law used to consult with her husband, and he, in turn, consulted with her. Hence the absence of her husband - the interface who represented her interests and attitudes - meant that her needs were no longer noticed. Furthermore, it is more likely that a women will express her opinion in the presence of her husband than face her in-laws, who are much older and therefore merit her full respect. The situation of confronting in-laws is new for the wife and requires more diplomacy in order not to offend someone's honour. Yet there are women who reported expressing their opinions. Normally, the older a woman gets, the more self-esteem and legitimacy (after she has had offspring) she has to defend her interests and express her views.

> Indeed, the roles of wives and husbands can be reversed during labour migration. When a wife is established within the household, it is she who represents her husband's opinion in discussions during his absence. The responsibility not only to act on behalf of herself and her children but also on behalf of her husband might increase a wife's scope in intra-household decision-making. On the other hand, she might also just adopt her husbands' opinion. Furthermore, it is also possible that the husband has direct contact

with his parents and they discuss and decide together, excluding the wife from decision-making. But when a husband's contact with his family is maintained predominantly through his wife, labour migration renders a husband more dependent on his wife. Hence, how much a woman in a joint household participates in decision-making during labour migration is influenced by her position within the household (usually changing with age), the relationship between her husband and his parents, and the relationship between spouses.

13.3.2 Persistent shifts?

When husbands return from employment abroad, division of decision-making power changes again, competencies have to be re-negotiated, and all household members have to re-adapt to the new situation in which a household member reclaims an active position in everyday life. Generally, husbands once again assume the function of household head (formal and de facto). Only a few households were (de facto) headed by women after their husbands' return. But even when husbands assume the household head function de facto, it appears that wives may participate more in decisionmaking after migration than they did prior to migration. By managing the household and the farm during their husband's absence, wives gain knowledge and self-confidence. Hence it is unlikely that they would not make use of their experience and knowledge and have an influence on decisions, at least in a subtle way. Miller (1990:153) describes the gendered participation in decision-making of a couple in a village in Palpa District, Nepal. The husband, who had spent 17 years in Bombay, "relies much on her [his wife's] experience, while keeping the final decisions in his own hands". Hence, after migration the situation generally returns to the pre-migration division of decision-making competencies based on gender.

13.3.3 Tacit gender arrangements

There is still the question of why, when a woman manages the bulk of work and takes many decisions on her own, she does not name herself as the formal head of the household. It can be assumed that this is part of a tacit arrangement between spouses. Although a woman takes over tasks from her husband, she does not challenge his position within the household; a husband's position is protected. This signals that labour migration is only a temporary phase and does not basically affect gender hierarchies within the household. Kabeer's study (1997) of income-earning women in Bangladesh provides insight into these complex processes of challenging and perpetuating social norms. Kabeer discovered that women whose preferences conflicted with those of males resorted to secrecy and deception (Kabeer, 1997:291-192). Women satisfied their interests but did so secretly in order not to challenge male authority. Similarly, women ensure social norms by reserving the household head function for their absent husbands. Women may enjoy increased participation in decision-making as long as the special circumstances allow it – but no longer. Autonomy does not extend to "normal conditions" as there would be no excuse for women to function as household heads. Consequently, women act as reproducers of social norms – even if they are curtailing their own autonomy. This can be explained by the fact that sticking to social rules is linked with many advantages, such as social prestige (see Rodenburg, 2000:236).

13.3.4 Cooperation and conflict between spouses during migration

If we keep in mind the character of Nepalese society, which clearly disadvantages women in many aspects, it can be assumed that women's contributions within the household are underestimated in terms of their workload. Additionally, women's needs and interests are subordinated to men's or perceived as being concordant with "the family's" interests (Agarwal, 1997:11). Moreover, as women do not own land and are not expected to remarry in case of divorce, abandonment, or the death of their husband, they depend more on the continuation of matrimony than men. Thus all four factors that determine bargaining power according to Sen (1990) and Agarwal (1997) are basically shaped in a way that discriminates against women. The following factors highlight how labour migration impacts women's bargaining power:

Breakdown well-being response: Labour migration is a joint strategy. Both spouses do their share in order to implement the strategy and attain a common objective: more cash income. To this extent, labour migration represents a form of cooperation. As we have seen, women have to shoulder greater workloads during migration. They have greater participation in decision-making, but it is limited. Why, then, do women give their consent to labour migration? There are four possible explanations:

1. Women also wish to profit from labour migration. Despite increased workloads, they expect their lives to become easier because their financial resources will increase.

- 2. "Perceived interest response": women subordinate their own interests (e.g. less work) to the well-being of the entire household.
- 3. Cultural norms stipulate that a woman supports her husband's intentions. Society honours her with a higher status for doing this. People who follow the rules usually enjoy greater esteem.
- 4. Women are simply not in a position to give anything other than consent. They are not consulted, but must accept the facts, as the decision to migrate is only made by the husband himself or together with his parents. But this was rarely the case in Kalabang, where most women were consulted by their husbands. Yet given the cultural values and social reasons mentioned above, a wife might find it impossible to express disagreement. Most women simply did not see an alternative.

Perceived interest response/perceived need response: During migration, the interests and needs of a woman living with her in-laws receive less attention because her husband is not present to intercede, and in-laws are less likely to take her interests into account. The situation improves when a woman gives birth to a son. She might then speak in the name of her son. In nuclear households the situation is different. As a wife cannot confer with her husband on every issue and every decision she has to take, she has to rely on her own assessment of what is best. However, she is not free to do whatever she wants. First, a woman's decision-making autonomy is limited to operational decisions. Strategic decisions later on require the consent of the husband. Second, a woman has an idea about her husband's interests and will not ignore them, since the husband's role as formal household head is usually unquestioned. Hence a husband's interests are taken into account in a limited way, even when he is not present.

Perceived contributions response: The contributions of a woman to the household's subsistence economy, household maintenance, and even income generation in the agricultural sector are generally valued less than a man's contribution (cash income). Yet during outmigration for labour, women's contributions increase in value, as they have to shoulder bigger workloads. Indeed, many men expressed their concern with women who had to work too much. This esteem augments a woman's bargaining power.

Bargaining for new roles and competencies is often assumed to be a factor in triggering conflict between spouses. Yet data for this study reveal very few cases of conflict between spouses. But how decisions are taken is shaped by cultural and social norms and values as well as by how participants in deci-

sion-making relate to each other. In Kalabang, decisions are mainly based on consultation, discussion and consensus. However, this does not necessarily mean that both spouses – and all participants – contribute equally. The harmonic way in which decisions are taken indicates instead that different individual roles are not contested and questioned. When a husband prefers a certain young man as a groom for his daughter and the wife prefers another man, she might not insist on her preference (perceived interest response). She might not even reveal her preference, as she accepts that her husband is the household head and that this is a decision he is entitled to take. But she might also accept any choice made by her husband for another reason: as she has had a chance to pre-select a potential groom, any choice corresponds with her interest. Hence the absence of conflict indeed indicates harmonious relationships – but not necessarily egalitarian relationships. In a consensus culture, conflicts are circumnavigated. Furthermore, in a society where migration is such a standard solution to an economic problem, one can assume that there are standard behavioural patterns concerning adequate labour division and decision-making during periods of migration.

13.4 Conclusions

The present article has analysed the effects of male outmigration for labour on women's participation in decision-making in Kalabang. It was assumed that in a society such as Nepal's, where the institutions of patriarchy, virilocality and patrilinearity play a fundamental role, men predominate in decisions taken on behalf of all household members. It was further assumed that male outmigration would increase women's participation in household decisionmaking. It was shown that generally speaking, this indeed is the case. However, increased participation in decision-making must be critically assessed. The following factors set limits on women's participation:

Household type factor: Only women living in nuclear households augment their participation in decision-making. In joint households, it is the fathers-in-law who decide in particular. As husbands, who usually intercede between wives and in-laws are absent, women's participation in decision-making at the household level may even decrease.

Relevance of decision factor: Women only take on the responsibility for operational decisions. Strategic decisions, which are larger in scope and importance, are jointly made by wives and husbands or even by husbands

alone. However, women have the important function of triage: whether to consult their husbands is an underlying factor in the evaluations they make.

Duration factor: Women's participation only increases as long as their husbands are absent. When husbands return for home leave or permanently, the prior division of participation in decision-making applies once again. The only exceptions are money management and presence at community meetings, where women participate more even after their husbands' return.

These factors, which prevent women from achieving greater decision-making power, show the persistence of gender hierarchies.

Finally – and this is surely also an important limitation – it is not obvious whether increased participation in decision-making during migration is really an advantage for women. Whereas from an outsider's and feminist's perspective this question would clearly be affirmed, women in Kalabang often stated that they found it difficult to cope with new competencies, being left to their own resources. Husbands' home leaves or their return – and accompanying limitations on participation in decision-making by women – signified relief for most women. By characterising their experience of increased participation in decision-making as a burden, women highlighted the ambivalent character of decision-making.

This research on Kalabang has allowed an initial overview of the impact of outmigration for labour on gender relations. Further research should particularly scrutinise decision-making processes in greater detail, and reveal women's and men's subtle roles and strategies in decision-making. Furthermore, the inclusion of other issues such as social networks will present a more all-embracing picture of the effects of migration on gender relations. Additionally, the (theoretical) link between participation in decision-making and women's position in society should be reviewed and carefully considered.

Endnotes

- ¹Special thanks for support go to Sabina Gurung, Ganesh Gurung, Ulrike Müller-Böker, Susan Thieme, Michael Kollmair, and Martina Locher.
- ²The remaining 18 interviewees were not specific about their migration or belonged to a household that was already counted.
- ³See Geiser & Müller-Böker, 2003; Müller-Böker, 1999; Müller-Böker & Thieme, forthcoming; Thieme, 2003; Thieme & Müller-Böker, 2004; Thieme et al., forthcoming; Wyss, 2004; Seddon et al., 2001. In addition, Balz Strasser, Christine Bichsel (IP7) and Silvia Hostettler (IP5) are studying migration processes in Mexico, India and Kyrgyzstan, respectively.
- ⁴Despite the wide application of the dimension of decision-making, little theorisation on the links between women's subordination and decision-making power exists.
- ⁵Nepal's national census 2001 reports a total of 762,181 people working abroad. Of this total, 331,880 (43.5%) originate from the Western Development Region, 8.1% from the Kaski District (HMG, 2002: 66-67). In Kaski District, 11.5% of all labour migrants are women (ibid., see also Seddon et al., 2001).
- ^oFor a detailed description of the Gurungs, see Pignède (1993), Macfarlane (1976) and Adhikari & Seddon (2002).

⁷Jat (Nepali): Caste or ethnic group.

- ⁸For a detailed discussion of the position of women in Nepal, see e.g. Upreti (1991),
 - Majupuria (1982), Subedi (1997), Lama (1996), Asian Development Bank (1999),
 - Dahal (1996), Molesworth (2001), Bennett (2002), Cameron (1998) and Suwal (2001).
- 9Maiti (Nepali): a woman's parents' household.
- ¹⁰Ghar (Nepali): a man's parents' household.
- ¹¹The concept of the "axes of difference" (Achsen der Differenz) acknowledges these differences within the social group of women (see Herzig & Richter, 2004; Knapp, 2001).
- ¹²Men are responsible for cash income, women for household maintenance and childcare.
- ¹³Generally, interviewed women evaluated gender relations in Kalabang as fairly equal. It was striking that the few women who decidedly expressed their irritation about gender inequalities were Dalit.
- ¹⁴There are three telephones in Kalabang. Calling usually is costly and complicated, as a date for a phone call has to be fixed. Therefore, people do not telephone much.

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14 Incorporating Gender in Research on Indigenous Environmental Knowledge in the Tunari National Park in the Bolivian Andes

Elvira Serrano, Sebastian Boillat, and Stephan Rist

Introduction

Since pre-Columbian times, indigenous farmers of Quechua and Aymara origin have occupied the highlands surrounding the city of Cochabamba. Between the 15th Century, at the beginning of colonial times, and the middle of the 20th Century, landlords owned the land, while former peasant landowners were kept under serfdom. In the agrarian reform initiated in 1952, the government abolished serfdom and returned the land to farmers who were willing to form a syndicate, which was later on transformed, through gradual incorporation of indigenous organizational elements, into what is today perceived as a "community" (Rocha, 1999).

However, the peasants' autonomy over their territory was of short duration. In 1962 the central government enacted a law declaring part of the highlands surrounding the city of Cochabamba as the Tunari National Park (TNP). The main reason given was that the creation of a national park would lay the groundwork for extensive reforestation, aiming to prevent the repetition of the floods that occurred in 1959 and protect natural water sources for the benefit of the expanding city. Adding an element of "natural lungs" and some references to biodiversity, the government significantly extended the park area in 1991. These laws were elaborated in a typical top-down manner without any consultation of the local inhabitants. Currently the park area comprises approximately 350 indigenous communities, representing a total of some 100,000 inhabitants. In foreseeing the expropriation of uncultivated land, totally forbidding cattle-keeping and establishing state-based forestry projects in the whole area - which is combined with a strict prohibition of extraction of firewood, felling and pruning of trees - the legislation represents an almost lethal threat to the livelihoods of the peasant families affected by the park. Due to lack of interest and financial resources, the TNP remained a "paper park" until, at the beginning of the 1990s, the Prefecture, which represents the central government's Ministry of Sustainable Development, started to carry out studies and to take initial steps to implement the park.

These attempts gave rise to a powerful and massive social movement of affected peasants and other poor people, who have illegally settled within the limits of the TNP. The consequence is a series of conflicts that even produced violent encounters between local communities and those in charge of managing the TNP, such as the Prefecture, the Municipality of the city of Cochabamba, the Ministry of Sustainable Development, and organisations for the protection of the environment and nature (Serrano, 2005).

In this context the Public University of Cochabamba, through the Agroecology Program (AGRUCO), decided together with the main stakeholders involved to engage in a transdisciplinary research project, which forms part of the National Centre of Competence in Research North-South (NCCR North-South). This led to the formulation of three PhD-level projects and two interrelated Partnership Actions for Mitigating the Syndromes of Global Change (PAMS) projects. Both the research and the PAMS projects aim to create a platform where the parties in conflict could meet in more "neutral" contexts in order to exchange ideas, needs, worries and doubts, as a first step in seeking common ground for negotiating the future of the TNP (Figure 1).

Fig. 1 Identification of important features of the "living landscape". Shown here are: Elvira Serrano, Sebastian Boillat, and some peasants from the Tirani community

Source: AGRUCO, 2005



The first phase of the project was successfully finished with the organisation of the first joint stakeholder meeting held in February 2004. The different positions, perceptions of the stakeholders involved, discussions they had with the researchers, and common ground for seeking further alternatives for the TNP are documented with great detail in Delgado and Mariscal (2005).

The analysis of the initial findings of a research project addressing the relationship between ecosystem diversity and environmental knowledge in the indigenous community of Chorojo (Figure 2), which lies within the perimeter of the TNP, showed that "Andean" knowledge of the environment is closely related to a "gendered" perception of nature. According to the Andean perception of nature, plants, animals and humans are not the only living beings that can be differentiated by sex or gender; the same is also true for rocks, mountains, planets, lagoons, rivers, winds or clouds (Boillat, 2005).

Almost all interviews and joint field visits were carried out with males. Although women were present in the visits and workshops, their active participation was minimal. The lack of a more pro-active integration of women into the research process had an external reason: the researcher in charge was a Swiss male, for whom it was not easy to overcome the culturally defined barriers of interaction between indigenous women and a foreign male researcher (Figure 3).



Fig. 2 Regular visits from researchers to the families of Chorojo are fundamental to participatory research methodology

> Source: AGRUCO, 2005



Fig. 3 Sebastian Boillat with research participants

Source: AGRUCO, 2005

> Discussion of this situation, concurrent with the enhancement of the gender group in the NCCR North-South in 2004, created awareness of the need to incorporate a gender perspective into the current research project. On the one hand this would make it possible to overcome possible biases in information coming mainly from male peasants, helping to make explicit to what degree environmental knowledge is shared between women and men. On the other hand it would also make it possible to learn more about how Andean people's specific perceptions of "nature" expressed in the notion of *Pachamama* (earth's mother) influence the definition of gender roles and relations. As a consequence, it was decided to organise a complementary study by a Bolivian female researcher who is in charge of systematising the environmental knowledge of women living in the participating communities.

> The present paper presents the first results in the process that aims to incorporate gender dimensions into ongoing research. Consequently, the results reflect an initial stage, which nevertheless makes it apparent that including a gender perspective is more than just adding some additional element to the research project (Premchander and Müller, 2004). The first step was related to situating complementary research in the context of broader debates on gender, development and ethnicity in Bolivia. A second step consisted of the revision of rather abundant documentation resulting from more than 10 years of action research carried out with the members of the communities of Chorojo and the first results of the fieldwork of the NCCR North-South team, in order to differentiate environmental knowledge in terms of gender.

The third step explored the degree to which the currently observed definitions of gender and the relations between them are related to the specific "gendered" perception of "nature" and what this implies for the conceptual framework of the research.

14.1 The gender debate in Bolivia and the community of Chorojo

The present section does not aim to present a comprehensive account of the status and trends of current debates on gender in Bolivia. This has been done in great detail by other authors (e.g. special issue 5/2 of the *Journal of Latin American Anthropology*, 2000). Here we shall mention only those aspects considered relevant for incorporating the gender dimension into current research in one of the case studies represented by the community of Chorojo.

In general terms, the situation of women living within the TNP, as represented by the Chorojo, reflects the most common features of many other rural areas of the highlands and valleys of Bolivia: While some progress has been made in terms of incorporation of women into the broader society in terms of education, access to health services, more direct participation in the market economy and political decision-making, the specific gender differences are still considerable, as pointed out by the United Nations Development Program in its report on gender in Bolivia (2003).

Analysis of the reasons for this situation reflects a general and controversial debate in which different perspectives form the South encounter those that have arisen in the North. Ray and Korteweg (1999) labelled the debate as a dilemma involving particularist and universalist approaches to gender. In Bolivia this debate unfolds between two clearly opposing positions taken by intellectuals and professionals engaged in policy-making and development projects. On the one hand, there are groups, generally well supported by international public and private donors, who state that traditional societies are generally male-dominated and authoritarian, meaning that modernisation is the alternative that could lead to modern societies supposed to offer more democratic and equitable conditions for women. On the other hand, there is a growing number of intellectuals with less international support who emphasise aspects related to ethnicity - and the related cultural capital that constitutes the ontological foundations of the struggle in manifold social movements of indigenous people - as opposed to emphasising universalist positions on gender (Table 1).

Table 1

Comparison of	Oleanized mendem employees	Andrew combraction of monday	
·	Classical gender analysis	Andean exploration of gender	
"classical" and	Information, knowledge, and opinions are gathered through interviews with individu-	Research focus is on community, rejecting	
"Andean"	als, especially women. Profile of community	individualism as a Western concept. "Andeans do not exist outside of the family	
approaches to	studied is based on sexually segregated sta-	and the community"; "women do not think,	
gender	tistical data on individuals	need, act outside of the couple"	
5		(qhari-warmi or chachawarmi)	
0	The nuclear family is the unit of analysis for	Extensive kin and compadrazgo	
Source:	calculating wealth, property, labour, resi- dence, relative status and position of women	networks/dynamics and <i>ayllus</i> are studied as groups and in women's contexts of action	
Paulson, 2000	dence, relative status and position of women	and relations.	
	Institutional analysis of male/ female partici-	Analyses male/female participation in ritu-	
	pation focuses on farmers' syndicates, pro- ducers' cooperatives, irrigation associations,	als, work parties (<i>mink 'a</i>), exchange net- works (<i>ayni</i>), and other non-Western, non-	
	and other formal corporate institutions.	corporate forms of organisation and action.	
	Analyses division of labour by sex in sepa-	Emphasises flexible and complementary	
	rate domains: productive, reproductive,	organisation of labour within an integrated	
	community organising (after Caroline	system without segregated domains.	
	Moser).		
	Compiles sexually-disaggregated data on	Explores personal and spiritual relationships	
	land tenure, water rights, income, livestock	between men and women and the land	
	ownership.	(<i>Pachamama</i>) water (<i>Q'ocha</i>), animals, and other natural forces and creatures	
	Methodological characteristics of clas- sical gender analysis	Methodological characteristics of Andean exploration	
	Emphasis on "objective" quantitative data		
		Emphasis on qualitative, in-depth explor-	
	and replicable survey formats.	Emphasis on qualitative, in-depth explor- ation of unique visions and experiences.	
	and replicable survey formats. More focused and specific definition of indi- vidual phenomena and discrete measurable	ation of unique visions and experiences.	
	and replicable survey formats. More focused and specific definition of indi-	ation of unique visions and experiences. More integrated approach to holistic,	
	and replicable survey formats. More focused and specific definition of indi- vidual phenomena and discrete measurable indicators. Apply universal categories and indicators to	ation of unique visions and experiences. More integrated approach to holistic, flexible, relational phenomena. Generate unique, local characteristics, terms	
	and replicable survey formats. More focused and specific definition of indi- vidual phenomena and discrete measurable indicators.	ation of unique visions and experiences. More integrated approach to holistic, flexible, relational phenomena.	
	and replicable survey formats. More focused and specific definition of indi- vidual phenomena and discrete measurable indicators. Apply universal categories and indicators to	ation of unique visions and experiences. More integrated approach to holistic, flexible, relational phenomena. Generate unique, local characteristics, terms	
	and replicable survey formats. More focused and specific definition of indi- vidual phenomena and discrete measurable indicators. Apply universal categories and indicators to get comparable data. Focus on modern institutionalised facets of life, such as formal education, hospital	ation of unique visions and experiences. More integrated approach to holistic, flexible, relational phenomena. Generate unique, local characteristics, terms and concepts Focus on non-Western, non-institutionalised facets of life such as ritual and spiritual rela-	
	and replicable survey formats. More focused and specific definition of indi- vidual phenomena and discrete measurable indicators. Apply universal categories and indicators to get comparable data. Focus on modern institutionalised facets of	ation of unique visions and experiences. More integrated approach to holistic, flexible, relational phenomena. Generate unique, local characteristics, terms and concepts Focus on non-Western, non-institutionalised	

Although the opposing positions summarised in Table 1 are a good starting point, we agree with many authors that the reality in indigenous communities lies somewhere in between these exclusive approaches (Healy, 2000). However, we think it is important to search for answers beyond a merely anthropocentric view. If not, the indigenous women and men living on the basis of other than anthropocentric worldviews would be once again pushed into a position of exclusion or intellectual subordination. This implies that the aspects of gender must be seen in a broader context. This means defining a clear starting point for analysis represented by an actor-oriented and phenomenological perspective. We think that our first aim is to understand – rather than to qualify – how indigenous women and men organise their relationships, drawing on specific combinations of endogenous and exogenous knowledge and how this process is linked to wider social, political and economic structures and historic tendencies.

Another important feature also present in the gender discussions that we observed in the communities, as well as in general terms, is related to "complementarity". Taking into account that the principle of complementarity was, and still is, an important feature of social and ecological organisation of livelihoods throughout the Andes (Delgado, 2001), it is not surprising that this principle is also found in the definition of gender (Jimenez Sardón, 1995). Indeed, as pointed out by Zulawski (1990), for the case of Bolivia it can be stated that "despite the conflict and inequality that must have existed in relations between men and women even before the conquest, the tradition of gender complementarity still prevailed among native peoples in the seventeenth and eighteenth centuries. In fact, the economic partnership of men and women was always desirable, and in many cases became indispensable for negotiating the colonial system. Whether struggling through a year of forced labour in Potosi or running a pulperia in La Paz, families working together had the best chance of survival. The fact that in the Andean family the wife and other female relatives were important parts of the household economy may have, to some extent, mitigated woman's oppression" (ibid: 109).

This means that the observed "gender relations and the struggle against discrimination should not be analysed on the basis of the assumption of an ideologically liberated "I" and an ideologically blind "Other", but rather from the mutual exploration both of our critical capacities and our ideological limitations. Clearly, the solution is not the promotion of a single ideal model of gender relations. While seeking to elevate the status of subordinated groups and to broaden the possibilities open to them, we must also affirm the freedom of individuals to choose the types of relations most satisfactory to them, be these "progressive" or "traditional" "(Luykx, 2000:163).

Such an approach allows us to make explicit the initiatives and processes through which indigenous people shape and reshape their identities and the related gender relationships, recognising that indigenous people in Bolivia are "using fluid cultural identities to weave their way through different social scenarios" (Healy, 2000:3). Moreover, the formation and transformation of identities of indigenous men and women are also closely related to ecology, resource management, astronomy, climatology, etc. (San Martin, 1997; Rist, 2002; Paulson, 2003).

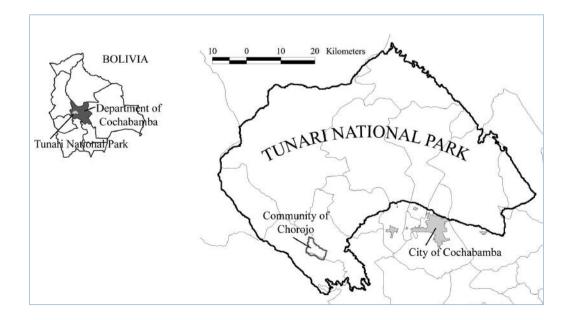
14.2 "Gendered" perception of nature in the community of Chorojo

Initial results of the research done on the environmental knowledge of the members of the community of Chorojo shows that "Andean" knowledge of the environment is of paramount importance for maintaining the diversity of ecosystems, which is a "natural" characteristic of the zone (Boillat, 2005; Mariscal and Rist, 1999). Chorojo is an ex-hacienda community located in the upper valley step of the Quillacollo Province of the Cochabamba Department (Fig. 4). Its territory covers an altitudinal range of 3200 to 4600 m. The community is composed of 80 Quechua families who share about 16 km². The livelihood systems are based on a complex, dynamic and highly diverse combination of activities related to agriculture, animal keeping, agroforestry, handicrafts, off-farm activities, and temporal migration to other socio-economic (urban) or ecological (rural) spaces (Serrano, 2003).

Fig. 4 Location of the Chorojo community in Bolivia and the Tunari National Park

AGRUCO, 2005

Source:



The topography of Chorojo constitutes a micro-watershed where fog and atmospheric humidity from the tropics accumulate, allowing the formation of a dense forest cover. In the higher part of the community, croplands and pasture lands are communal property, while the middle and lower portions are still owned by the community but managed as "family fields" where maize and vegetables are grown, using at least some temporary irrigation. Social organisation is based on a "syndicate", which by introducing elements of traditional governance was transformed into what people consider "our community".

In general terms, there are clear differences between women and men in regard to different activities related to food production, commercialisation, social organisation, etc. While women are generally responsible for running the household, education of small children, keeping animals, collecting firewood, cooking, food storage, handling and selection of seeds and handicrafts, men are in charge of crop production, temporal migration, representation of the family in community meetings, and collective work and education of adolescent boys (Table 2).

It is important to emphasise that the gender roles described are highly dynamic; one always observes some men herding animals or women selling products or running small businesses outside the community, or representing the family in meetings and deliberations of the community, especially when traditional authorities are appointed, important decisions have to taken, or the husband is not present.

The discussions about the park law clearly showed that it creates significant pressure on women, as it is mainly their activities that are indirectly blamed when livestock keeping (mainly sheep and goats) and fire wood collection are declared the most "prominent enemies of nature", making them responsible for overgrazing, and lack of rejuvenation of shrubs and trees. Furthermore, traditional livestock keeping is often seen by outsiders as a severe obstacle to the construction of terraces and other soil conservation measures (living fences, reforestation).

The categories used by the peasants of Chorojo to characterise their territory show how a physical landscape is turned into a cultural one. An example is the farmer's concept of *Puruma*, which is also called *Inca Puruma* and means "virgin land" that is uncultivated, especially in the higher regions of the community. These are basically grazing lands, but the concept can also

Table 2

Gender	Activity	Men	Women	Sons	Daughter
differentiation in	Productive activities				
key productive	Seed selection	Х	XXXX	XX	XXXX
and reproductive	Seed conservation		XXXX		XX
activities in the	Grazing	Х	XXXX	Х	XXXX
community of	Soil conservation	XXXX		XXX	
Chullpa K'asa, near	Soil preparation	XXXX	Х	XXX	
Chorojo	Soil manuring	XXXX	XXXX	XXX	XXX
	Seed provisioning	XXXX	XXXX	Х	ХХ
Source:	Sowing	XXXX	XXXX	XXXX	XXXX
Cruz, 1999	Weed removal		XXXX	Х	Х
	Harvesting	XXXX	XXXX	XXXX	XXXX
	Irrigation	XXXX	Х	XXX	
	Reproductive activities				
	Firewood gathering	XX	XXXX	XX	XX
	Fetching water	Х	XXXX	Х	XXX
	Food preparation	XX	XXXX		XXX
	Caring for children		XXXX		XXX
	Washing children		XXXX		XX
	Washing clothes	XX	XXXX	XX	XXX
	Sewing clothes		XXXX		XX
	House cleaning	XX	XXXX	XX	XXXX
	Food storage and processing		XXXX	Х	Х
	Educating children	XXXX	XXXX		
	Caring for the sick	XXXX	XXXX		
	Building and repairing of houses	XXXX			
	Construction of tools	XXXX			
	Buying clothes	XXXX	ХХ		
	Buying tools	XXXX			
	Buying agricultural inputs	XXXX	XXXX		

refer to croplands, which were used by ancestors living there in pre-colonial times (at the time of Incas at the end of the 15th Century). Places with *Puruma* are believed to have a stronger presence of spiritual beings or ancestors, explaining that they don't want to be disturbed and therefore "they live

where there are no other people". Conversely, land that is under cultivation is called *Chaqra* (meaning 'breeding place') while it is producing, and *Sumpi* during the years it is recuperating its fertility during the fallow period. As the interviews below show, in a similar way the notions of *Mallku* (grandfather; male ancestors) and *T'alla* (grandmother; female ancestor) are associated with certain peaks in the closer and further spaces of the community, configuring a cultural landscape that represents a community of beings which embraces humans living in the present and the past. In the places called *Mallku* (and *T'alla*, present and past inhabitants meet in order to join in communication with *Pachamama* (earth's mother), which is decisive for achieving satisfactory production and reproduction of the material, social and cultural foundations of the "extended community of living beings". This "gendering" of the physical landscape became further differentiated by associating certain parts of the territory with specific characteristics in regard to temperature, elevation, humidity etc. (Table 3).

Gender concepts	Female expression	Male expression	Aspects
in Quechua	T'alla (female ancestors)	Mallku (male ancestors)	Sacred mountains - ancestors
peasants' charac-	Ura (low)	Pata (high)	Topographic elevation
terisation of	<i>Qoñi</i> (warm)	Chiri (cold)	Temperature
landscape in the community of	Joq'o (humid)	<i>Ch'aki</i> (dry)	Humidity
	Umbrano (shady side)	Solano (sunny side)	Exposition of landscape
Chorojo	Killa (moon)	Inti (sun)	Stars and planets
-			

The above elements permit understanding of how and through which kind of rationale the landscape is turned into part of a wider "community of living beings", and how the notion of gender plays a fundamental role in this. In such a view, human gender categories become "naturalised" while the terrestrial environment and the universe become "humanised". Gender categories create meaningful linkages, which strongly influence the organisation of social, economic, ecological and cultural production and reproduction.

As the following testimonies exemplify, this kind of "cultivating" of the physical landscape is shared by women and men and relates to general as well as specific activities in the domains of the material, social and spiritual spheres of life.

Table 3

"In life, everything has its aspect of male and female: the male mountains are the "Mallkus", which have sharp peaks, such as the "Illampu" mountain, the "Tata Sabaya", "Cora Cora"; the female mountains are flat and somewhat elongated, these are the "T´allas", such as, for example, the "Thunupa", which is a volcano; other mountains possess the "Chacha-Warmi" [Man-Woman], this means that both [poles] are located there: male and female together, and these mountains are the most respected. For example, the Tunari is "Chacha-Warmi", there is the Mallku, and next to it is its T'alla. On these mountains ritual marriage ceremonies are carried out, and they are the most respected mountains. In the Illimani, for example, there are three female mountains and three male mountains"(Prudencio Mejía, male, 2003).

"In Chorojo, every place possesses a name. There are female places that do not like women and other places that do not like men; if boy children are born in places that do not like them, they die, the same happens in a place where there is no cow IIIa [small representations of stone of the spirits, helping in animal raising]; the herds do not reproduce. Pachamama knows what must be raised in each place" (Anacleta Romero, female, 2003).

"This is true: it is said there is man and woman, also animals always walk together, and also the mountains. The male mountain is the highest one, and the lower are female, they are like us. Also highlands are male and lowlands are female, so it is" (Andrea Mairana, female, 2005).

"Male and female lands do exist here. Don't you see? These warm lands [points towards the lower part of the community] are female lands, that's how we call them; and cold lands are male lands" (Encarno Mairana, male, 2005).

The Chorojo River divides the territory of the community into two hillsides. The sunny hillsides with southern exposure (*solano*) are considered "male territory" because they are drier and possess scarce vegetation, while the shady hillsides with northern exposure (*umbrano*) are considered "female territory", yet are more humid and have more dense vegetation.

A series of interviews addressing specific moments and activities in the yearly crop cycle shows further details of how gender categories play a fundamental role in the organisation of life and production, according to the Quechua perception of the human-nature relationship. In what follows, further evidence for sustaining such an idea is presented.

Soil preparation after fallow period

In this activity men open the soil with the plough, which is pulled by a pair of bulls; this work requires much physical force. The woman meanwhile turns over the blocks of soil left behind in the plough's furrow, and children also participate by gathering pebbles, depending on their age.

"The entire family goes to prepare the soil. The men hold the plough and the women are behind, turning over the Kurpas (earth clods). It is rare to see women ploughing, but if there is need to do so, it is done, but then it is slower. We [men] do it faster and drive the plough in a straight line. The preparation is not work for a woman; that is the reason why they seldom do it; one needs to be strong to drive the plough, and when women do the preparation, they get sick because the Pachamama makes them sick. It is dangerous for women to make too much effort. It is said that their womb moves. But when women are widows or single mothers and they have to do the preparation of the land, they have to make a ritual (ch'alla) and then they do not get sick. The Pachamama herself helps her in this case" (Francisco Mondragón, male, 2003).

Sowing, planting and the "Ispalla"

Sowing begins with a ritual in which the whole family makes a petition asking *Pachamama's* permission for initiating the crop cycle. In order to assure "healthy" production, men open the furrows and women sow the seeds and put the manure. Women call themselves *junt'u ampara* (hot-handed), meaning that they hold the force of reproduction and regeneration. That is why all *Ispalla'*, the spiritual beings that allow the seeds to regenerate, are handled by women and will stay with the family for many years. In contrast, males are supposed to have "cold hands" meaning that "they do not know well enough how much earth the plant needs". If a man does it, he hurries, while women have much more patience. The *picchadoras* (sweepers) are those that cover the furrow with earth; these are generally children (regardless of their sex) (Figure 4).

After the plants develop for half the period of their crop cycle, the important festivity of Carnival arrives:

"During the carnival, we propitiate the Ispallas by the ch'alla ritual; we make a table for the Ispallas, we embellish them with coloured paper lace, confetti, flowers, alcohol, and we must give thanks to the Ispallas because they provide food for the house, and ask for their forgiveness if we have not taken

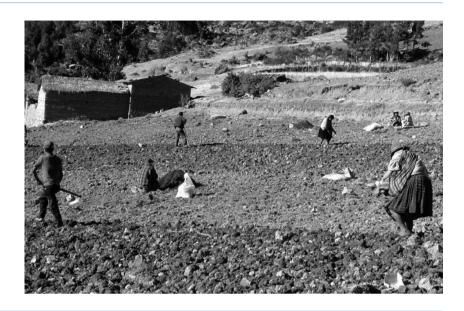


Fig. 5 While men open the furrows women sow the potato seeds

Source: AGRUCO, 2005

> good care of them; because if we mistreat them, they leave us. Then, hunger arrives at our house; that is why we have to propitiate well, especially the women, because we are always united with the Ispallas. At the time we sow, we move and place the seed in the earth, we are also Ispallas" (Nieves Ramos, female, 2003).

Earthing up (potatoes)

The cultural tasks vary according to the crop. Ideally men and women organise this task together: men loosen the earth, and women add soil to the plant.

"My mother usually tells me that in the time of earthing up plants need soil; they are like women about to give birth, and when we do not give them soil, the potato usually cries out saying 'what do you want me to give, for sheltering my wawas [babies]? They feel cold!' The plots that are not weeded do not produce. The tender mother 'Candelaria' gets angry when the plot is not weeded by the time of her festivity, she nags us saying 'where are the diapers, what do you think you will use to raise your children?'. The plots complain sobbing to the mother [earth], and she punishes negligent families, does not make them produce well. In the community, when a plot is not weeded or earthed up, it means that the family is lazy or not doing well" (Encarno Mairana, male, 2003).



Fig. 6 Peasants threshing wheat

> Source: AGRUCO, 2005

Seed selection

Before proceeding to the selection of the potatoes, men carry the still unsorted production from the *phynas* (traditional silos, mainly made within or nearby the plot) to the place where seed selection will take place. Women mainly make the selection of seeds. They have to choose an auspicious day when the potatoes are separated according to different uses (for food, for dehydration to make *chuño*, seeds) and to pick out wormy tubers or very small potatoes (*tuna papas*).

"For seeds, we have to choose the healthiest potatoes; we manage and care for the seeds. During the ch'alla ritual, women are called Ispallawalla [female warriors of the spirits of the seedlings], because we gather the seeds, while seeds escape men, because they walk whistling and make them escape" (Calixta Mejía, female, 2003).

The harvest

The harvest is a festive moment in which all members of the family, including the partners of the extended networks of reciprocity and kinship, aim to be present.

"For us, digging the potato is a blessing from the Pachamama; it is a party, and to harvest, one must first propitiate, give the Pachamama her food, just as she gives us her food in our crops; we men take out the plants with pikes, and the women gather the harvest, the children pick the small potatoes and take care of the chickens which we sometimes take with us to eat the worms; sometimes we also take the pigs or the sheep, because all of us go to the harvest. We call our brothers, uncles, and relatives to help us. We also give them part of our harvest, because they helped; even if the potato is in our plot, it belongs to the Pachamama, and we must give freely" (Prudencio Mejía, male, 2003).

"There is a time for everything. For the harvest, I look and tell my husband to prepare everything we need. We wait for a good day and then we go to tell our relatives to help us; if the harvest is good, they take a lot of potatoes, if not, then they take what can be given. When we carry out a good ritual, production does not fail, but if we are neglectful, Pachamama will also neglect us" (Clotilde Mondragón, female, 2003).

The planets

A gender dimension is also present in the wider solar system: The people of Chorojo refer to the sun as *inti* which is "male" and its complement *killa*, the moon, which is female. Both have to join in a specific moment in order to contribute to the nurturing of life on earth:

"The time to sow is when the sun is big; it is born after winter and by September the sun is ripe. The first rain tells us when we should sow, but to sow you must also look at the moon. The moon is like the woman: she is not fertile all of the time. When we menstruate we cannot raise or hold seeds. The same happens with the moon, during wañu killa (new moon) we are not allowed to sow; we cannot sow during pura killa (full moon) either. Further, we cannot wash clothes because they turn to rags" (Juana Vargas, female, 2003).

14.3 Discussion

The above testimonies allow us to understand that men as well as women share the rationale and the corresponding categories for characterising "human" and "non-human" components of the world according to the belief that "everything lives" and is thus interrelated at one major level of interaction and interdependence. Human-related gender categories make it possible to influence concrete day-to-day activities and relate them to the terrestrial environment and the solar system, which are also "gendered". Therefore it is common in the community of Chorojo to hear the saying in Quechua *Tukuy ima Ohariwarmi*, which means "everything is man and woman/male and female". This saying constitutes part of a basic pattern of interpretation, which is used in almost any discursive context and is even valid in other parts of the Andes (Harris, 1985).

These testimonies are evidence for stating that "female" and "male" gender categories are not isolated, pre-existing qualities of life per se. The narrative about the *Mallkus* and *T'allas* points to a hierarchy of which they are a part. At the top of this hierarchy is the union of both principles represented by the *Chacha-Warmi*, Tunari Mountain. As can also be seen in all the other testimonies, gender always relates to physical, social or symbolic differences, which form part of a type of polarity that can involve cooperating, contradicting, destroying, and struggling – one against the other. The underlying rationale seems to be related to the idea that the differences expressed as "gendered qualities" of all "being-things" that compose the world have to come together in order to produce and reproduce life in all its aspects. As long as the differences give place to a dynamic interplay, the polarity (including gender differences) rather than being a problem, is seen as a primordial condition of maintaining life and livelihoods based on complementarity, which is made possible only through the existence of differences.

Pointing to these notions of gender by no means implies "romanticising" the Andean worldview and its implications for the definition of gender roles and relations. From their own perspective, the people of Chorojo have often experienced great suffering from not being able to manage the manifold and complex interrelationships between male and female qualities of humans and the other "natural beings" related to them. Conflicts between families, communities, generations, men and women, or the occurrence of "natural" disasters such as droughts, pests, or accidents are part of the experience of the people of Chorojo as well. The degree to which the general principle of *Chacha-Warmi* produces "blessings" or "punishments" of *Pachamama* is by no means harmonious as such, or pre-defined. In the case of agriculture, this is expressed in the metaphor that women are like "warriors of the spirit of the seeds" (*Ispallawalla*), which have to struggle in order to permit life to embody itself, e.g. in the form of potatoes.

In such a view, complementarity becomes a special feature of gender relationships within and between humans and "non-human" beings. It seems that the people of Chorojo share a notion of gender relationship, which instead of aiming at the elimination of differences as such aims instead to create adequate conditions for allowing complementarity between the different qualities of life to emerge. Although the symbolic order of the world seems to be based on such ideas, this does not imply that humans have to follow such an ideal-typical understanding of gender relationships in a mechanical way. When the conditions are not given, one can deviate from the "normal" gender roles for humans and even get help doing this from *Pachamama*, as made explicit in the testimony of Francisco Mondragón.

This kind of clearly defined symbolic order of the whole world in terms of gender qualities and a rather pragmatic management of day-to-day life is also confirmed by the analysis of the division of responsibilities into key activities of production and reproduction in the domestic units in a community nearby (Table 2). The main criteria for deciding who carries out which kinds of activities are based on the simultaneous consideration of the symbolic order of the "gendered" world and the current possibilities one has for acting in accordance with or against it. The main point in this regard relates to organising the complementarities of different gender qualities in such a way that they contribute as much as possible to fulfilling the needs, wishes and aspirations of the families living in the community of Chorojo. The focus on complementarity in regard to human gender roles thus forms part of a rationale of the organisation of the whole rest of the world. On the one hand this means that the whole world becomes "humanised", and on the other hand it implies that the definition of human gender roles and relationships is becoming "naturalised". The emphasis on complementarity, which tends to draw attention to a shared horizon of meaning, implies greater emphasis on the "other" pole or partner than on one's own point of view.

This might be an explanation for the observation that women, in private conversations as well as in public deliberations, e.g. in community meetings, strongly protest when men do not fully contribute to their families with the resources that are at their hands. It was frequently observed that women blamed their husbands in a community meeting or a workshop because they were misusing the money they earned from temporal migration or the selling of products for "their own pleasure" instead of taking account of the needs of the whole family and community. This shows that women can also use the principle of complementarity as a cultural and ethical resource, allowing them to resist the internal tendency of domination by men. Interestingly, such a strategy points away from affected individuals (women) and draws attention to the lack of collective response of the "other" (man) in fulfilling his specific – and indeed gender-dependent – role in achieving the wellbeing of the whole family and community.

Such a view seems to be consistent with the observations made by other authors, highlighting the fact that present as well as historical strategies and movements among indigenous women, rather than making their own (individual) suffering the centre of attention, have emphasised - and continue to emphasise - the need for their women-specific contributions in the main struggles related to the recovery of the right for "land and dignity" based on self-determination and autonomy (Taller de Historia Oral Andina (THOA), 1986; Stephenson, 1999:203 ff). From such a perspective, it becomes possible to imagine that struggles to maintain and broaden the spaces and conditions for self-determination – in which men as well as women are actively engaged, also in Chorojo - are relevant to a more adequate understanding of their own view of the future of gender relations. If land and dignity were more respected, the conditions for conciliation and complementarity of gender differences would also improve. Consequently, past and present struggles do not exclude changes in gender relationships. But instead of focusing on the individual level, indigenous women are aiming to change currently felt gender inequities as part of a broader collective project that envisages a structural transformation of the societal macrostructure, based on their own cultural foundations. As a consequence, the results available provide evidence for maintaining that, when dealing with gender aspects in the context of indigenous communities, it is wise to go beyond an analysis that starts from the primacy of egocentric and individualistic notions of gender and identity. This means taking into account debates which suggest that gender must consider an eminent intercultural dimension. Accordingly, it must be recognised that the interface of Andean and scientific or expert knowledge represents different ontological, practical and epistemological stances, and that a meaningful dialogue must be able to integrate these dimensions (Rist et al., 2004).

Moreover, it seems to be an imperative that, when aiming to understand gender aspects in the community of Chorojo, one must take into account the close relationship that exists between the definition of gender roles and environmental knowledge. This implies that changes in gender definitions and relationships also have consequences in terms of "practical" knowledge, which is the basis for the production and reproduction of the ecological foundations on which families and communities build and re-build their livelihood strategies. Such an "ecological dimension" is clearly underrepresented in the gender debate and should be systematically enhanced. Putting these first findings back into the context of the overall research project that aims to understand the backdrops of the conflicts around the TNP makes it possible to formulate the following hypothesis: Incorporating an actor-oriented gender perspective into the current research project allows us to disclose an important ontological element that underlies the "practical knowledge" of the indigenous communities involved. It relates to the ways by which humans, the terrestrial environment, and the wider space of stars and planets interrelate, according to a culturally shaped rationale. Against this background, it becomes clear that other views, e.g. those represented by ecologists, anthropologists, or experts in nature protection, contradict fundamental aspects represented by an Andean ontology and epistemology. In such a perspective the conflicts related to the TNP must be understood as the result of the encounter of different "epistemic communities". Haas (1992) defines the latter as a specific group of people that share a faith in a common set of cause-effect relations and beliefs, as well as common values on which principles will be applied to manage these relations and beliefs.

The challenge to enhance the co-management of the TNP, and to mitigate related conflicts, means promoting an intercultural dialogue that can address and constructively tackle the different perceptions of the society-nature relation represented by the different epistemic communities. Initial findings allow us to conclude that discussions about the future of the TNP – due to the close relationship between gender notions and environmental knowledge in the indigenous communities – must also include an intercultural exchange of Andean and non-Andean (Western?) epistemic communities dealing with different notions of gender.

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Part III Synthesis and Conclusion

Synthesis and Conclusion

Christine Müller

Based on the case studies in Part II, this chapter will summarise and synthesise findings on a conceptual level within the framework of sustainable development by integrating them into three dimensions: economic prosperity, ecological sustainability, and social justice. We shall focus on action in the NCCR North-South by proposing how the instrument known as PAMS (Partnership Actions for Mitigating Syndromes) can be used to transform unequal gender relations or overcome constraints through empowerment. PAMS are one dimension within the NCCR North-South approach, where research is integrated in application-oriented, participatory actions to test strategies for mitigating syndroms. In accordance with the overall approach of the NCCR North-South, the methodology for creating this synthesis followed the three steps of identifying root causes leading to syndrome mitigation, developing pathways for syndrome mitigation, and identifying potentials for syndrome mitigation. Recommendations regarding potentials and challenges at project level from each case study can virtually be integrated into the operational level of PAMS. Yet it must be noted that the qualitative case studies cover neither all issues that might be of concern to women nor gender policies in the particular context. In Figure 1 the main findings are clustered according to dimensions of sustainable development and region; this serves as a first comprehensive overview of the main topics identified within one region. Gaining, consolidating and capitalising on gender-related or gender-specific knowledge within one region offers the advantages of:

- Obtaining an accurate and adequate research knowledge base
- Merging experiences
- Opening up ways of making complementary and comparative analysis
- Designing a clear context-close vision for policies

This section will conclude with recommendations for integrating gendersensitive methodologies at the different research and policy levels in the NCCR North-South.

North-South perspectives

Table 1

- ihigh
 priority
- : priority

	Self- esteem				•	•					•
Personal	Infor- Social mation/ Image Knowl- of edge Shyness										•
	Infor- mation/ Knowl- edge			•				•	•		
	Edu- cation	•									
	Violence/ Edu- Security cation		•						•	•	
stice	Health								•		
Social Justice	Decision-Health Making/ Political Partici- pation					•			•		•
	Knowl- edge of NR								•		
ability	Live- stock								-	-	
Ecological Sustainability	Agri- culture								•	-	
Ecologic	Water Supply								•		
	Social value of labour/ goods								•		
rity	Access to mar- kets	•									
Economic Prosperity						•			•		
Economi	& Time control					•			•		•
		South Asia					West Africa		East Africa	South America	

A Comprehensive Overview of Case Studies

Gender Methodologies in Research	Kate Molesworth
	- Sound scientific research; intergrative research
Identified Gender	– Long-term absence of men who migrate to larger towns
Constraints or Inequalities	 Heavier workload for women, children, elderly
	 Less mobility of women due to reproduction
	 Change in image of femininity due to access of men to film, music videos, information
	 Less time for young children to attend school
	 Increase of male handling of household earnings, male control of household cash resources
	 Influx of goods from India/China in rural areas; shrinking economic markets for women
	 Increased spread of HIV along road networks
	 Less access of women and girls to information
Root Causes	- Improved infrastructure "road building" project (1980)
Research Methods	– Micro-study
	 Long-term ethnographic enquiry
	 Micro-demographic techniques
Potentials and Challenges at Project Level	 Equal inclusion of women, men, girls and boys for optimal development planning
Ghana	
Gender Methodologies	Christine Müller
in Research	 To portray various and different dynamics in the social organisation of knowledge
Identified Gender	- Social and political marginalisation
Constraints or	– De-valuation of female knowledge
Inequalities	- Negative gender constructs
	- Limited discursive power in the negotiation of knowledge
Root Causes	– Political change in post-colonial Ghana
	- Christianisation
	- Invisibility of women in research
Research Methods	- Multi-site fieldwork
	– Ethnography
	- Qualitative research methods
Potentials and	- Inclusion of women in project design, planning and realisation
Potentials and Challenges at Project Level	 Inclusion of women in project design, planning and realisation Development as transformation of social relations

India	
Gender Methodologies in Research	Susanne Fleischli -To contribute to the body of knowledge on environmental conflicts -Closer attention to the public and private spheres
Identified Gender Constraints or Inequalities	 Violence against women Increased workload due to male migration Underrepresentation of women in water management organisations and conflict management Structural discrimination
Root Causes	– Water scarcity – Violence due to water conflicts
Research Methods	- Expert interviews
Potentials and Challenges at Project Level	 Planning new opportunities to enhance conflict management with women in composing agendas
Nepal	
Gender Methodologies in Research	Martina Locher
Identified Gender Constraints or	-Disadvantage of women from geographically and economically marginalised households
Inequalities	 Increased workload Undervaluation of women's labour Underrepresentation of women in management bodies
Root Causes	-Increased workload -Undervaluation of women's labour
·	 Increased workload Undervaluation of women's labour Underrepresentation of women in management bodies

Ivory Coast	
Gender Methodologies	Mohamed Doumbia
in Research	 To identify and analyse women's and men's contraceptive practices
Identified Gender	- Insecure family planning
Constraints or Inequalities	- Secret practice of contraception
Root Causes	- Subordination of women to decisions of men
Research Methods	- Quantitative survey
	– Focused group discussion
Potentials and Challenges at	 To mitigate economic/educational disparities between women and men
Project Level	- Participation of men in family planning programmes
Nepal	
Gender Methodologies	Heidi Kaspar
in Research	 To understand both the effects of labour migration on women remaining at home and their coping strategies
Identified Gender	- Unbalanced position in decision-making
Constraints or Inequalities	- Persistence of negative norms and discrimination
Root Causes	- Outmigration of men
	- Gendered division of labour
	- Socio-cultural norms
	- National laws
Research Methods	- Semi-structured interviews
	- Expert interviews
	– Semi-structured tables
	- Focus group discussions
	– Mental map
Potentials and Challenges at Project Level	– Sensitive change in norms and laws

Kenya	
Gender Methodologies	lfejika Speranza Chinwe
in Research	 Gender-based analysis of vulnerability to establish a plat- form for differentiating the contributions of gender to household welfare
Identified Gender	– Increase in workload
Constraints or Inequalities	- Seasonal and permanent migration of men
mequanties	 Women consume infected, contaminated, chemically preserved grains
	- Undervaluation of "women's" crops
	- Lack of control over sale of grains and income therefrom
	- Reduced power in decision-making over sale of poultry
	 Long-distance water fetching
	- Traditional norms and values
	– No land rights (cultural constraints)
Root Causes	– Drought (unreliable rainfall)
	- Traditional norms and values
Research Methods	– Longitudinal survey
	- Qualitative and quantitative methods
	 Participation, interviews, group discussion, secondary literature
Potentials and	- Reduction of workload
Challenges at Project Level	 Increased financial capacity
FIOJECT LEVEL	– Ownership rights
	 Stabilising the efficiency of self-help groups
	– Education (free primary, secondary and technical levels)
Bolivia	
Gender Methodologies	Elvira Serrano/ Sebastian Boillat/ Stephan Rist
in Research	 Male and female representation as complementary parts of an epistemic community
Identified Gender	- Gender gaps in education, income, violence
Constraints or Inequalities	- Patriarchal concept of public and private
Root Causes	- Internal tendency of domination of men
Research Methods	- Observation
	- Interviews
Potentials and Challenges at Project Level	 Recognising different gender-specific but complementary forms of knowledge, tasks and responsibilities

India	
India	
Gender Methodologies in Research	Smita Premchander – Understanding the impact of micro-finance on women's liveli- hoods
Identified Gender Constraints or Inequalities	 Traditional hierarchies among women Religious norms and practices
Root Causes	– Poverty – Social hierarchies – Social construction of poor women
Research Methods	– Longitudinal study – Interviews – Women-centred approach
Potentials and Challenges at Project Level	– Integration of contextual factors – Multilevel focus
Argentina	
Gender Methodologies in Research	Ada Freytes Frey, Karina Crivelli, Florencia Partenio, Maria Ines Fernández Alvarez, Cecilia Cross – Grasping the meaning of the subjects – Impact of women's participation in the organisation
Identified Gender Constraints or Inequalities	– Suspicion and opposition of men – Time constraints – Gender division of labour – Female subjectivity/feminine roles
Root Causes	– Poverty – Hierarchical structure of demands
Research Methods	 In-depth interviews Observation Content analysis of documents Quantitative information

Research methods

All the case studies presented here indicate that a participatory process of communication and interaction with local actors - both women and men - was realised and reflected upon by the researchers during their fieldwork. Although it is not explicitly mentioned, women are conceptualised as actors and not just as passive beings. The research process took place with the partial assistance of a language interpreter, where intercultural settings were involved. The application of accurate qualitative methods made it possible to collect gender-specific data and/or to connect it with quantitative genderdisaggregated data. The methods applied are rooted in "classical" sociology or social-anthropological research paradigms, and as such do not constitute "real" feminist or women's methods, but belong to the very general methods of social science and can be used by both female and male researchers. Although the studies focus mainly on the micro-level, they refer to global change (e.g. international migration, feminisation of poverty) and therefore narrow the methodologically crucial gap between dynamics at the microand macro-levels. The dynamics in terms of the roots of and the reasons for non-sustainability are thus revealed. Such a intergrative conceptual approach is important for analysis of:

- 1. Gender relations at household and community level and within organisations
- 2. Access to and control over resources, knowledge and information
- 3. Construction of gender identities
- 4. Formation of power relations in decision-making processes

Despite the different topics of investigation, each qualitative research approach focuses on interactions, negotiations and processes in the formation of social realities: the emphasis is on understanding and explaining how the social reality of non-sustainable development, in its different dimensions, is constructed with specific emphasis on gender relations, but also on how such trends can be reversed.

Root causes of gender inequalities and constraints

The root causes identified for persistent or newly evoked or enforced gender inequalities and constraints vary according to the specific social, political, environmental and historical context. This makes it impossible to single out only one cause, or even reduce causes to one main factor within a particular context. On a very generalised level, the main root causes identified are :

- (1) Development in a historical-political and economic context
- (2) Recent changes in the environmental context
- (3) Externally induced forces such as efforts in development cooperation
- (4) Emic concepts such as cultural values (e.g. gender division of labour) or local institutions (e.g. land rights).

Taking account of the variety of root causes together can sensitise our understanding of the possible directions root causes might take which are – despite the variations between societies – *internally produced and externally induced*.

Identified core topics in non-sustainable development

Within the normative framework of sustainable development, research findings are clustered around the three dimensions of economic prosperity, ecological sustainability, and social justice. It was necessary to add a fourth dimension which is not normally part of the framework of sustainable development but is of relevance in order to obtain a more integrative picture, which is also part of NCCR's multilevel stakeholder approache: the personal level (see Table 1). This conceptual approach combines the systemic level with an individual level, making it possible to observe and monitor changes at both levels.

The common denominators of women's disadvantages

Economic prosperity

Labour/time cluster

Almost all research findings mention *heavy workload* or even a continual increase in women's workloads. The underlying root causes differ: outmigration of husbands, external development interventions, special projects for women. There is a persistent heavy workload in daily life, for instance making long trips to fetch water. But women are also increasingly being forced to assume male responsibilities. This tendency has a direct negative impact, especially on the health of women. In one case the absent male labour force resulted in a higher fertility rate to fill the labour gap. The direct result is a "body effect" on women's health, in terms of physical constitution,

psychological pressure, or higher fertility. Beyond these direct impacts, there are far-reaching social consequences. In some cases women even have to take their children, particularly girls, out of school to compensate for the lack of a male workforce. The long-term consequence in such cases is a widening of the gender gap in education.

The availability of *time* is closely connected with the amount of work. Lack of time is one reason why women have fewer opportunities to access information, education and knowledge, and maintain social networks, in comparison with men. A lack of time also means a serious decrease in women's economic opportunities, such as access to markets. In short, the social and spatial mobility of women is much more limited in comparison to that of males. While men can access these (new) spheres and sources more easily, obtaining new information and knowledge, there is a tendency for them to claim that their knowledge is superior to that of women. The time aspect is also important for participating in meetings of women's groups and women's organisations, which women see as crucial platforms for exchange of and access to information, knowledge and (non-formal) education, and for matters of social security and welfare, whether in savings associations or political associations. Following this line of argumentation, it becomes clear that there is a strong connection between economic prosperity and social justice.

Another common denominator in reference to labour is the *social undervaluation* of women's labour. Even if the heavier workload falls on the shoulders of women due to the absence of their husbands, this negative valuation does not change. The significant contributions made by women and their daughters to family income are often not recognised and valued by men. While women frequently perform physically difficult community labour for which they are not paid, the work of men is often compensated by payment. The undervaluation of women's labour in general is best expressed in the economic undervaluation of their produce: crops of high value for their drought resistance in semi-arid regions have a low market value.

Income

A lack of *control over income* is a further common denominator. Empirical results present a mixed picture of attempts to improve the income situation of women. In some cases where women develop their own strategies for income-generating activities there is no increased control or autonomy in relation to their income. In other cases women have growing control over income and use it to expand their business activities, for instance. Money

earned in savings associations is most often accompanied by the self-confidence of being able to manage a micro-finance scheme alone. In one case the shrinking of markets and growing competition with foreign goods was responsible for a decrease in opportunities to sell products and generate income. The sale of produce is often not controlled by women, even in cases where they are responsible for production. Even in situations where contributions to household income increase or profits are made, there is a tendency towards greater control of household cash income by men who have migrated. In the very particular case of outmigration of men, the change in the direction of money management tends to result in a new form of dependence by wives on husbands who send remittances (to hire labour). In most cases where women control the purse, regardless of the absence or presence of husbands, the money involved and the savings are small.

Persistent gender inequalities and constraints disadvantaging women exist in

- (1) The balance of labour and time
- (2) Access to information, education, and economic and social networks
- (3) Undervaluation of labour and produce
- (4) Emerging competitive markets and goods
- (5) A lack of control over financial means

Ecological sustainability

Several case studies refer to the issue of water. Besides the fact that water may have a cultural meaning, it is also a resource needed to satisfy a basic need. In many cases women are responsible for the water supply within the family. A situation of water scarcity in a river, which women normally use for household purposes, can produce a long-lasting conflict over water that may lead to serious personal violence against women (see the case study of Fleischli). It must therefore be assumed that forms of ecological degradation have serious social consequences in terms of personal security. Long trips to fetch water, whether in the semi-arid context of Kenya or the highland-lowland context of Nepal, are not just time-consuming but also affect the physical health of women. Besides the issue of water, case studies refer to knowledge about and use of natural resources such as plants and herbs. In the case of Bolivia, women and men posses different but complementary stores of knowledge embedded in a complex cosmovision, expressed in regulating the agency of women and men relative to nature as well as to agriculture and the processing of agricultural products in particular. The distinction between stores of knowledge is connected with the division of labour, such as the clearing of fields, the sowing of crops, or harvesting. For women, it is not only knowledge as such that is important, but also exchange of knowledge about natural resources with other women in order to obtain and exchange information or integrate and discuss related issues such as land or inheritance rights. Ecological sustainability must also be seen and conceptualised within a broader framework of societal change. One case from a semi-arid agricultural context indicates that a higher income produced negative ecological consequences: money spent to enhance irrigation capacity triggered soil salinity in an already precarious environment.

Persistent gender inequalities and constraints disadvantaging women exist in

- Personal security
- Physical health

Social justice

Decision-making processes in the family and participation of women in political decision-making bodies outside the family context remain crucial. At both levels, decisions about future activities in reference to women, their children and the whole community are made, with reference to such issues as:

- Water and conflict management
- Nature conservation policies
- Infrastructure (road-building, trails)
- Selection of crops
- Reproductive health
- Sale of crops and livestock

Public meetings are not only important for deciding about future activities, but also for obtaining information. There is a lack of gender balance in negotiations concerning family or community matters . Women's interests, needs and concerns are often subordinated to those of males. Even in cases where women's responsibilities increase when they take over male responsibilities, they do not always challenge social norms or change gender relations. In the case of outmigration of men, the autonomy of women might increase, but decisions are often postponed to a later stage (return of the husband). Many reasons underlie the mechanisms leading to "weak" decision-making power in the family context and/or to political under-representation of women:

- 1. The socially constructed ideology of shyness or passivity in women, which tends to exclude them from the public sphere
- 2. Male suspicion/opposition
- 3. Actual shyness and female subjectivity
- 4. Traditional norms (e.g. representing a household is a man's task)
- 5. Restricted articulation in the public sphere and within gender-mixed groups
- 6. Communication patterns
- 7. Geographical distance that hinders participation in meetings
- 8. Lack of time
- 9. Fear of self-expression due to low levels of education

Private-public decision-making processes are closely intertwined, although an ideology is frequently constructed that holds women responsible only for family matters and men for community matters. Empirical insight, however, reveals the nature of such an ideology by showing the interrelations between private and public concerns – for instance, in matters of security and violence, which affect women in both spheres. There are many examples of the dichotomy between the public and private spheres and the exclusion of women from public decision-making bodies. The potentials and the capacities that women have to help solve and decide on public matters are neglected. A critical point in participation in community matters is the fact that equal participation in terms of numbers does not automatically guarantee representation of women's or gender concerns.

Education is a proven asset in the constellation of power when it comes to arguing with men. In particular, being able to read and write, and learning to speak in front of a group, are crucial aspects of self-empowerment and thus decisive in decision-making and negotiating on values, norms, and entitlements. These skills can be most efficiently acquired through participation in women's groups or organisations, and they also increase self-confidence and self-esteem, as knowledge increases. Hence there is a strong link between the personal level and the level of social justice.

Persistent gender inequalities and constraints exist in terms of:

- Under-representation of women in decision-making bodies
- Access to new sources of information, education and knowledge
- Exposure to public/private violence
- Exposure to negative impacts on health

Personal Level

Self-confidence and self-esteem in making one's voice heard in important decision-making processes are part and parcel of sustainable development. Articulation of one's own interests or demands, and broadening of knowledge, are often restricted owing to traditional norms, stereotypes of the "ideal" woman, or negative constructs imposed on women. But in some cases personal shyness also prevents women from participating in decisionmaking bodies or articulating their opinions freely. Their participation in women's groups or organisations is central in altering restrictive identities and simultaneously allowing women to gain access to knowledge, money management skills, negotiation skills, information, and education. In particular, exchanges among women allow them to reflect upon themselves and their living conditions. Moreover, such exchanges support processes of challenging norms and negative constructs, such as the virtual construction of shyness in women and the actual situation of feeling shy about communicating, especially in mixed meetings. Participation in women's groups offers a chance to change existing negative constructs and form new gender identities and visions.

Persistent gender inequalities or constraints exist disadvantaging women concerning the construction of gender identities due to:

- -Traditional norms
- Female roles
- Female subjectivity and stereotyping
- Negative identities such as shyness

Transformation and empowerment

As previously mentioned, social empowerment, in the sense of women's empowerment, is one goal of the NCCR North-South. According to the NCCR glossary, the working definition of *Empowerment of Women* is as follows (NCCR glossary, 2004):

Empowerment of women is a process aiming to change unequal relations between women and men. It requires taking into account power relations, decision-making processes, conceptions and distribution of resources, responsibilities and rights. Empowerment must be integrated within the action context (PAMS) of the NCCR North-South and can be initiated through new forms of mutual learning. Empowerment processes must include women and men working in partnership, in order to aim for the overall goals of gender equality and sustainable development.

Empowerment of women is a process that links the individual and societal levels. Ideally, processes of empowerment should be supported by scientific knowledge gained through research and translated into recommendations for action. Within NCCR's transdisciplinary approach, PAMS (Partnership Actions for Mitigating Syndromes) offers an opportunity for linking scientific knowledge with direct action focusing on syndrome mitigation.

For this purpose, either gender-sensitive or gender-specific PAMS can be developed and realised. Both can help to overcome existing gender inequalities and disparities. It would be an exaggeration to assume that one or two PAMS could achieve the long-term goal of gender equality. Nevertheless, such actions could motivate actors and stakeholders to take up actively the challenge of focusing on and contributing to gender equality within their particular society. They also offer the chance to address real sustainable development through empowerment. Ideally, the common efforts of multiple gender-sensitive PAMS in their respective JACS (Joint Areas of Case Studies) regions could make a substantial contribution to achieving the overall goals of the NCCR North-South.

The expected long-term impact, based on a social learning process, would focus on a change in behaviour or attitudes, and changes in responsibilities, power relations, and the distribution of resources. Smita Premchander, Christine Müller, Karl Herweg and Frank Haupt have addressed this issue in a collaborative study, and published a paper on *Gender-Sensitive PAMS and Impact Monitoring* (2004), and also developed *Guidelines for Gender-Sensitive PAMS* (Annex 1).

Designing gender-sensitive or gender-specific PAMS

Independent of research results and issues to be addressed, PAMS should have three operational stages:

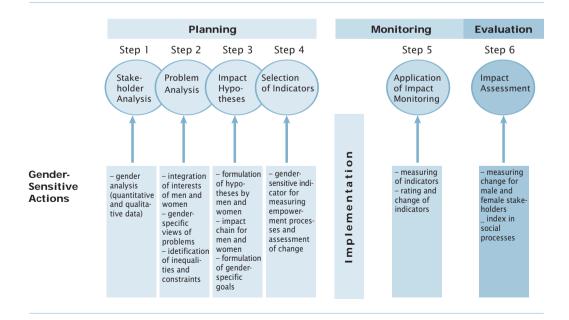
- 1. Planning (steps 1-4)
- 2. Monitoring (step 5)
- 3. Evaluation (step 6)

The potential of women's groups

Empowerment within PAMS involves combining changes at the individual *and* social levels in order to overcome gender inequalities and constraints. Although the scope of PAMS is limited by duration (one year), there is a capacity to cover the systemic levels of a society, such as the economic, political or legal spheres. Several case studies (Martina Locher, Smita Premchander, Chinwe Ifejika Speranza, Christine Müller) have shown that the formation or existence of women's groups is central in these processes, although some women's groups may reproduce gender ideologies, and individual women in leadership positions may not tackle gender issues(see Fleischli, this volume). The issues of membership, and of exclusion or inclusion in women's groups, must be carefully tackled, since factors such as class or distance influence the chances and options of individual women in accessing women's groups.

Recent publications by international organisations monitoring the progress of women at global level state that "a notable feature of women's associational activity in the past decade has been the central role women have played in many democratisation struggles" such as in Latin America or South Africa (UNRISD, 2005:16). Several of our case studies show that the

Fig. 1 Procedures in a gender-sensitive PAMS



creation of a common forum for discussions and reflection within women's groups, areas of interest, and organisations is central to empowerment and sustainability. Within a common process of reflection, awareness creation, gender conscience, and mutual learning, individual women can articulate their interests more freely, think about themselves, and possibly lose their fear of articulating their concerns by gaining the ability to express themselves more openly in intra-gender dialogues, group discussions or meetings, and negotiation processes (e.g. with bankers, husbands). Separate women's groups help to build up such capacities by making it possible to exercise the freedom to develop skills, leadership, and self-confidence. This process can help women to change self-constructed or negatively constructed gender ideologies, negotiate new gender consciousness, take up new responsibilities, create new gender and political visions, and provide mutual support – for instance, in the face of male violence. It also strengthens the negotiation capacities of women, which is a necessary precondition for integrating their interests in decision-making processes. The degree to which and the time at which male participants such as policy makers and local community leaders are integrated in these processes should be carefully discussed, reflected upon, and decided upon in each case. It could be assumed that in order to change gender relations effectively and durably, a dual strategy of separated and mixed meetings should be considered.

In summary, women' groups and organisations function as vehicles at the personal, social and systemic level:

Personal	Social	Systemic
 Free articulation Accessing and sharing of information and knowl- edge, (non-formal) educa- tion 	 Challenge of social norms and gender ideologies 	 Overcoming unequal gender relations
	 Process of reflection and discussion Awareness creation 	
 Enhanced negotiation capacities 	- Welfare and social security	

The potential for alliance building

A complementary step for capacity-building and further mobilisation in order to achieve gender equality would be to establish links between women's groups, organisations and fora. The rationale for this is to achieve a translocal structure of multilevel alliance building. Such connections are particularly necessary, since they have the potential to ensure long-term change through mutual exchange of information and knowledge at a distance. An example from Uganda (Johnson, Kabuchu, and Vusiya, 2003) shows that such an approach among women (mainly farmers) in rural areas, together with women in government as well as lawyers and media representatives, made it possible to achieve inclusion of a gender law in the national constitution, which should ensure representation for women in the various Councils that govern village affairs. On the other hand, the gender law was a model for the constitution of local governments, which were reorganised in a process of decentralisation. Formulation of such a law was based on a consistent process of mutual exchange, assistance and information among the various women involved. The alliance structure worked at multiple political levels (rural, governmental) involving women from different social and educational backgrounds.

Conclusion: working towards achieving sustainable development

With reference to the normative concept of sustainable development, an integrated research approach addressing different dimensions offers a chance to understand and, in consequence, to influence the dimensions of non-sustainable development, particularly unequal gender relations. The dimensions of non-sustainable development – namely economic, ecological and social – are closely interlinked. These complex links demand a intergrative research approach in order to understand, and a coherent policy approach in order to mitigate, syndromes of global change. The transition from non-sustainability to sustainability can be achieved through careful support of processes of empowerment at individual, community, and institutional scales. Such a development orientation, however, implies redefining the original concept of sustainable development and modifying the normative framework to focus on basic needs and basic rights (see Bieri, this volume). The original definition of sustainable development by the Brundtland Commission – "development that meets the needs of present generations without

compromising the possibilities of future generations to meet their needs" (WCED, 1987) – has a particular emphasis on needs. This emphasis should be enlarged to include integration of women's social, economic and ecological rights, which can confer agency, enlarge opportunities for participation. and enable women to articulate claims for equality. In accordance with Diane Elson, claiming rights refers "to a set of social arrangements - norms, institutions, laws and an enabling economic environment - that can best secure the enjoyment of these rights" (Molyneux, Razavi 2003). Such a redefined concept of sustainable development emphasises the needs and rights of women (needs- and rights-based development) as well as their capacities for negotiation at the local-global scale of interaction. The NCCR North-South research approach, following the logic of problems and potentials for mitigating syndromes of global change, has the analytical and organisational capacity to initiate and support such sustainability-oriented processes of development. The following aspects at the levels of research and action are essential for achieving sustainable development and gender equality within the partnership approach of the NCCR North-South:

Research approach

- At the conceptual level: the social category of gender should be integrated into and operationalised within the dimensions of the sustainability framework. Analysis within such a refined framework results in research outcomes on gender relations in the areas of economics, ecology, and in social justice, as well as in interrelations among the three dimensions.
- 2. At the level of transdisciplinarity: social learning processes should take account of three aspects in gender relations: 1. practical gendered knowledge of local actors (diversity); 2. the interdisciplinary level (variability); 3. people participating in social learning processes with the particular objective of gender equality (complexity).
- **3. At the level of interdisciplinarity:** working within a multidisciplinary context demands continuous exchange among social and natural scientists, working in the same region and on similar topics, at different stages of research. This serves to deepen understanding of the intertwined dynamics that lead to (non-) sustainability beyond the context of one's own discipline. Interdisciplinary helps to tackle (non-) sustainable development with appropriate measures and solutions, based on a more complete or complementary picture.

- **4. At the level of methodology:** a consistent gender perspective at the empirical level should be adopted in the data-gathering process during fieldwork. Researchers must ensure that women and men participate in the research process in a numerically balanced and culturally sensitive way. Participatory methods of exploration, such as qualitative or quantitative data gathering, can be used in order to compile a gender-sensitive data base.
- 5. At the level of epistemology: generating academic knowledge in a multicultural and gender-sensitive setting requires critical reflection on existing concepts, categories and the structures of knowledge production. This should be done by reflecting upon and questioning prevailing scientific categories and concepts, i.e. dichotomies such as private/public or culture/nature, or ideologies such as the passivity and shyness of women. This further nurtures critical debate on claims of the universality of theories, cultural and academic hegemony, and acknowledgement of other forms of existing systems of knowledge besides academic ones.

Policy approach

6. At the level of action: gender-sensitive or gender-specific actions should be integrated into every step of a project (from planning to monitoring and evaluation), and careful support must be given to the potential of women's groups and organisations by developing and using tools for individual and social empowerment. Establishing such gendered mechanisms can foster effective and durable sustainability.

Recommendations – Activity - Outcome

These steps together determine the overall direction necessary for achieving sustainable development, and coincide with and support the main goals of the NCCR North-South, which are: 1. research partnerships; 2. capacity building; and 3. social empowerment. The vision of sustainability remains a challenge, but an entry point has been designated.

Recommendations	Activity	Outcome
Conceptual	Engendering SD dimensions	Gender relations in economic, ecological and social dimensions
Transdisciplinarity	Gender as an integral part of research and negotiation between scientists and local actors	Appropriate empirical and transformative knowledge
Interdisciplinarity	Exchange between natural scientists and social scientists	Appropriate measures for SD
Methodology	Consistent gender perspective during fieldwork	Gender-sensitive data base
Epistemology	Critical reflection on concepts, categories, theories	Acknowledgement of varieties of knowledge systems
Action	Gender in all project steps (planning, monitoring, evaluation)	Gendered mechanisms fostering effective/durable sustainability

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Annexes



Annex 1 Guidelines for Gender -Sensitive PAMS

Partnership Actions for Mitigating Syndromes of Global Change (PAMS) are a program component of the NCCR North-South consisting of small projects with limited funding and duration. Their purpose is to test and implement strategies for mitigating the effects of global change. The PAMS concept is based on the assumptions that merging scientific and non-scientific knowledge produces added value, and that transdisciplinary research has an impact on mitigation of non-sustainable development when it triggers social learning processes.

- 1. The staff realising a PAMS should be gender-balanced and gender-sensitive, to support the strategy of incorporating a consistent gender perspective into PAMS activities.
- 2. A PAMS proposal must clearly indicate which gender issues are to be taken up, and appropriate strategies should be formulated to reach women and men.
- 3. A stakeholder analysis should incorporate a gender analysis, otherwise it should be conducted first.
- 4. A problem analysis should clearly delineate which problems are articulated by men and which by women. It reveals existing problems, which can differ among gender. Existing inequalities and disparities have to be recognised and negotiated.
- 5. Formulation of problem analysis should be done with the respective actors both men and women. Special attention should be paid to their availability and time constraints. In every case a form of meeting must be chosen according to cultural or social backgrounds, whether mixed or separated by sex.
- 6. The formulation of impact hypotheses reflects the aims and goals of women and men, so that the interests and concerns of both sexes are represented.

- 7. Indicators for change should be gender-specific. Gender-specific indicators serve as important assets and as the baseline for change, by referring to the expected outcome and performance of PAMS activities.
- 8. The assessment of a PAMS should be conducted by men and women separately, so their perspectives on expectations or failures (positive/ negative impacts) can be openly articulated.
- 9. Measurements of empowerment should be carefully documented and shared with other PAMS and actors in the NCCR North-South.

Annex 2 List of Abbreviations

CDE	Centre for Development and Environment
DAWN	Development Alternatives with Women for a New Era
GRB	Gender-Responsive Budget
HDR	Human Development Report
IMF	International Monetary Fund
ICDP	Integrated Conservation and Development Project
ICPD	International Conference on Population and Development
IP	Individual Project
ІТС	Integrated Training Course
JACS	Joint Areas of Case Studies
КСАР	Kanchenjunga Conservation Area Project
MDG	Millennium Development Goals
MFA	Material Flow Analysis
NCCR	National Centre of Competence in Research
NCWD	National Council of Women and Development
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Cooperation and Development
PAMS	Partnership Action for Mitigating Syndromes
PRSP	Poverty Reduction Strategy Paper
PUW	Poor Unemployed Working People
SDC	Swiss Agency for Development and Cooperation
SHG	Self-Help Groups
SNSF	Swiss National Science Foundation
ST	Schedule Tribe
TNP	Tunari National Park

UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNRISD	United Nations Research Institute for Social Development
VDC	Village Development Committees
WBGU	German Advisory Council on Global Change
WCED	World Commission on Environment and Development
WED	Women, Environment and Development
WEDO	Women, Environment and Development Organisation
WESD	Women, Environment and Sustainable Development Approach
WIDE	Women in Development Europe
Wildaf	Women in Law and Development Africa
WDR	World Development Report
WID	Women in Development
WAD	Women and Development

WWF World Wide Fund for Nature

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