

Rodenberg, Birte

Working Paper

Climate change adaptation from a gender perspective: a cross-cutting analysis of development-policy instruments

Discussion Paper, No. 24/2009

Provided in Cooperation with:

German Institute of Development and Sustainability (IDOS), Bonn

Suggested Citation: Rodenberg, Birte (2009) : Climate change adaptation from a gender perspective: a cross-cutting analysis of development-policy instruments, Discussion Paper, No. 24/2009, ISBN 978-3-88985-474-2, Deutsches Institut für Entwicklungspolitik (DIE), Bonn

This Version is available at:

<https://hdl.handle.net/10419/199334>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

d·i·e



Deutsches Institut für
Entwicklungspolitik

German Development
Institute

Discussion Paper

24/2009

Climate Change Adaptation from a Gender Perspective

A cross-cutting analysis of development-policy
instruments

Birte Rodenberg

Climate Change Adaptation from a Gender Perspective

A cross-cutting analysis of development-policy instruments

Birte Rodenberg

DIE Research Project “Climate Change and Development“

Bonn 2009

Rodenberg, Birte: Climate change adaptation from a gender perspective : a cross-cutting analysis of development-policy instruments / Birte Rodenberg. DIE Research Project "Climate Change and Development" – Bonn : DIE, 2009. – (Discussion Paper / Deutsches Institut für Entwicklungspolitik ; 24) ISBN 978-3-88985-474-2

Dr. Birte Rodenberg holds a PhD in sociology and is working as a freelance consultant to governmental organizations and NGOs. From 2000 to 2003 she has worked on cross-cutting issues in development cooperation (poverty reduction/PRSP, gender, participation and sustainable development) at the German Development Institute, GDI, Bonn. Her regional focus is based on post-graduate research in Mexico and short-term case studies in Latin America and Anglophone Africa (Ghana, Kenya).

The present Discussion Paper was prepared in connection with a research project entitled "Climate Change and Development," which was funded by the Federal Ministry for Economic Cooperation and Development (BMZ).

Foreword

Poverty affects many, too many people – and it affects men and women differently and in different numbers. Most of the poor are women, as poverty research has shown, and this is bound up with the fact that in many countries women and girls continue to suffer legal and social discrimination: They have poorer access to education and health care than boys and men, and they do not have the same economic opportunities, be it because their ability to act is curbed by legal restraints, or because they are unable to move freely, or for other reasons.

There is good reason to believe that one result of the political and social discrimination of girls and women is that they are affected differently than men by the impacts of climate change, a circumstance that exacerbates the poverty and other risks they face. If this is in fact the case, the measures of development and climate cooperation designed to support the efforts of developing countries to adapt to climate change will need to have a gender dimension.

The present study provides answers to this question and offers recommendations on ways in which the development- and climate-related instruments used to support adaptive capacity in the developing countries can be articulated with a view to gender equity. The analysis shows that this is a field in which climate policy stands to learn much from development policy.

The study was conceived in Department IV of the DIE, Environmental Policy and Management of Natural Resources, in the framework of a BMZ-funded flagship project on “Climate Change and Development.” The idea for the study was developed in close cooperation between Dr. Susanne Neubert (DIE) and Marita Steinbach, head of the BMZ’s Division 214, Gender Equality; Human Rights, Culture and Development. The study was carried out by Dr. Birt Rodenberg, who had already prepared a number of gender-focused analyses on poverty reduction instruments for the DIE. In the present study she offers an important contribution situated at the field of intersection between the climate and the development debate.

Bonn, November 2009

Imme Scholz

Contents

Abbreviations

Summary	1
1 Introduction	7
2 Climate change and adaptation from the a gender perspective: Discourses and problem areas	9
2.1 Climate change is not gender-neutral: Evidence from the use of the gender approach in development policy	10
2.2 Gender in the climate debate: Conventional pitfalls in new discourses?	12
2.3 Problem areas of climate change, from a gender-specific perspective	15
2.3.1 Threat to ecosystems and biodiversity	16
2.3.2 Agricultural production and food security	17
2.3.3 Water scarcity and uncertain water supply	18
2.3.4 Spread of diseases and infections	19
2.3.5 Rise of sea levels and susceptibility to climate induced disasters	19
3 Gender in development-related agreements and adaptation instruments	21
3.1 Cross-cutting analysis of development-related framework conventions and policy instruments	21
3.1.1 Development-related framework agreements on adaptation and gender	21
3.1.2 Poverty-relevant German DC policy instruments from a gender perspective	23
3.2 Cross-cutting analysis of climate-policy instruments and adaptation-planning instruments	26
3.2.1 Gender justice in climate financing?	29
4 Recommendations	32
4.1 Recommendations for development research institutions	32
4.2 Recommendations for donors and official DC agencies	33
Bibliography	37
Annexes	41
Criteria grid used to screen policy instruments	43
Overview: Establishing linkages between MDGs, climate change, and gender	44
Overview: Human security, climate change, and gender“	47
Overview: Evaluation of NAPAs	50

Boxes

Box 1: Adaptation and vulnerability – Definition of key terms	8
Box 2: Gender mainstreaming – Mainstreaming of adaptation – Double mainstreaming	11
Box 3: Practical and strategic interests of women in the wake of climate disasters	21
Box 4: High aims – substantial efforts: The consideration that donor policy instruments accord to cross-cutting issues	24

Abbreviations

AF	Adaptation Fund (Kyoto Protocol)
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung / Federal Ministry for Economic Cooperation and Development
CBD	Convention on Biological Diversity
CDM	Clean Development Mechanism
COP	Conference of the Parties
CSW	Commission on the Status of Women
DAC	Development Assistance Committee
DC	Development cooperation
DIE	Deutsches Institut für Entwicklungspolitik / German Development Institute
EU	European Union
FAO	Food and Agriculture Organization
GAD	Gender and Development
GEF	Global Environment Facility
Gender CC	Gender Climate Justice Network
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
IPCC	Intergovernmental Panel on Climate Change
ISDR	International Strategy for Disaster Reduction
IUCN	International Union for the Conservation of Nature
YESS	Joint Assistance Strategy
KP	Kyoto Protocol
LDC	Least developed countries
LDCF	Least Developed Country Fund
MDGs	Millennium Development Goal(s)
NAPAs	National Adaptation Programmes of Action
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
PPCR	Pilot Program for Climate Resilience
PRSP	Poverty Reduction Strategy Paper(s)
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCCF	Special Climate Change Fund
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WECF	Women in Europe for a Common Future
WED	Women in Environment and Development
WEDO	Women's Environment & Development Organization
WID	Women in Development

Summary

“Climate change is a global phenomenon, but its consequences will impact differently on women and men. [However:] Linking gender and climate change should go beyond demonstrating the vulnerability of women and their need for focused and tailor-made capacity development. A lot of changes would need an allocation of resources and strong political will among decision makers to appreciate gender inequities in sufficient detail to begin to incorporate such considerations in designing policy interventions.” (Denton 2004, p. 48)

The study presents and discusses a number of approaches that, employed in connection with selected adaptation measures and policy instruments, may lend themselves better than those currently in use to pursuing and implementing the goal of gender-just development.

The Fourth Assessment Report presented by the Intergovernmental Panel on Climate Change (IPCC) underlines that it is above all the developing countries that will bear the brunt of climate change. Global warming will increase the frequency and intensity of extreme weather events and natural disasters, leading to changes in the quantity and distribution of precipitation. The fact that poor people are particularly dependent on environmental conditions and natural resources (precipitation patterns, availability of fertile land) is a clear indication of their vulnerability. It is, however, important to bear in mind that marginalisation and poverty risks are intensified, not caused, by climate change.

It is not the impacts of climate change that bring poor people in the South face to face with a situation in which they lack clean water, medical care, and income. Rather, poverty and the limited means people in developing countries have to secure decent livelihoods or to escape from a situation of need for which they bear no blame are rooted in existing social, economic, and political structures of inequality.

This applies as well for the social inequality between men and women. Gender disparities are the form of social inequality most pervasive in the societies of the South; the reason is that existing systems of cultural or ethnic exclusion are intensified and reinforced by the economic and legal gender divide. In addition, women are for the most part harder hit than men by the impacts of climate change, because women are generally responsible for securing the survival of their families, and the resources they need for the purpose, including e. g. water and firewood, are growing increasingly scarce. And greater workloads, unequal chances of survival, and lack of participation in decision-making serve in turn to further deepen gender inequality.

Climate change has now come to be understood, in development policy, as a cross-cutting factor that poses a threat to human security and the implementation of the Millennium Development Goals (MDGs). In the international climate negotiations there is a growing realisation that poverty and inequality need to be combated in order to strengthen the abilities and capacities required to adapt to climate change in the developing world. Be the arguments rooted in efficiency thinking or rights-based approaches: the linkage between poverty reduction and adaptation to climate change is now widely accepted, and concrete needs for action and financial support from the donor community have been identified.

In ways similar what was observed in the course of the poverty debate, the climate debate has led to a broader understanding of vulnerability. Viewed in terms of a socio-political perspective of this kind, the concept vulnerability refers to a set of general characteristics that impair the ability of a social group to cope with external (climate) shocks, to respond effectively to them (resilience), or to adapt to a situation of persistent climate change. The less people are in possession of such capacities or social resources, including e. g. education, health, and social networks, the more likely they are to be affected by poverty or aggravated forms of poverty caused by climate change.

By comparison, the current discussion continues to accord too little attention to the gender perspective. International climate policy for many years largely turned a blind eye to sectoral and structural gender aspects. Since the Rio Declaration was adopted in 1992, as good as nothing has been done to integrate key concerns of women into the central framework instruments of the climate regime; this goes for the widespread social discrimination of women and the special ways in which women are affected by climate change no less than for women's specific skills in making sustainable use of resources or in coping with crisis situations. And the actors of development policy have thus far also been slow to accept the need for gender analyses and to take up gender-specific aspects addressed in connection with the adaptation debate.

The climate regime's persistent, stubborn gender blindness is due to the following points:

- For many years climate change was perceived mainly as a problem that concerned global changes to broad natural spaces, while little or no attention was paid to the socio-economic impacts at the local level – the level at which gender-specific disparities are most clearly observable.
- The debate on climate change was long dominated by a purely scientific perspective on geophysical causes and effects, one geared to identifying the impacts of anthropogenic emissions on climate change. Questions concerning the need to adapt to the inevitable fact of climate change were in this was relegated to the background and came to be overshadowed by technical-administrative approaches.
- Market based approaches like the Clean Development Mechanism (CDM), the emission-trading system adopted in the Kyoto Protocol have, for over a decade now, dominated international climate policy. It is highly questionable whether and in what ways women or local groups stand to benefit from the large-scale industrial projects typical for the CDM.
- The discourse on global equity has been restricted largely to the need to reconcile the interests of the countries mainly responsible for climate change, the industrialised nations of the North, and the countries mainly affected by the phenomenon, the nations of the South. However, the need for a gender-equitable social approach to the issue of climate equity is hardly discussed even by the governments of developing countries.

Climate change is not gender-neutral

In some central problem areas, the gender dimension of climate change can be elucidated with reference to UNDP's Human Development Report 2007/2008:

While in the developing world women produce 60 to 80 percent of staple foods, they own no more than ten percent of the land cultivated. Especially in the countries of Sub-Saharan Africa, which are highly dependent on agriculture, changes in precipitation levels and protracted drought periods have led to rising workloads for women.

The large measure of responsibility that women bear for food production on the one hand and their lack of control over and access to land, technology, and credit on the other confront women with huge challenges when drought or erratic precipitation patterns alter cultivation times, reduce crop yields, and undermine crop diversity. Time poverty due to the multiple roles with which women are burdened often makes it impossible for women to engage in the long-term investments needed e. g. to improve land quality. One effect of a deeply rooted inequality when it comes to rights of inheritance and titles to land and means of production is that women are often refused access to new land when it comes to cases of resettlement or claims for compensation in the wake of flood events or other natural disasters. This state of affairs is negatively reinforced by illiteracy and lack of access to information and training. A situation of limited decision-making power in family and community often poses an obstacle to women's ability to make adequate use of their knowledge, e. g. by engaging in crop diversification to ensure stable new harvests.

For men as well, though, the loss of income security caused by climate change constitutes a burden and serves to shake the foundations of the traditional male breadwinner role. As a psychological and physical stress factor, this quite frequently leads to increased frustration and violence in the family. The high empirical correlation between natural disaster and armed conflict over scarce resources on the one hand and a rise in sexualised violence against women on the other points unmistakably to another scenario of climate change, one that indicates how urgent the need is for more attention to be paid to gender-specific threats.

Development-policy instruments from the perspective of a gender-just adaptation to climate change

The present study has investigated the poverty-oriented instruments used by the United Nations and by German development cooperation (DC), including e. g. the former's National Adaptation Programmes of Action (NAPAs) – which are provided for under the UN Climate Framework Convention (UNFCCC) – and the latter's priority area strategy papers and country concepts, with a view to identifying possible entry points for a mainstreaming of gender-oriented adaptation. To cite the most important findings:

- a) Development-related guidelines and framework agreements: The only more recent UN document that establishes a linkage between gender equity and adaptation is the Report of the 52nd Session of the Commission on the Status of Women (CSW 2008). It recommends that the gender perspective be integrated at all levels of planning and decision-making, with the necessary resources being made available to ensure the full participation of women in all relevant processes. By comparison, none of the adaptation-related concept papers presented by the Organisation for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) and the EU contain any references whatever indicating that gender issues could have a role to play in climate policy – a blind spot of donor policy.

- b) Generally speaking, the more recent poverty-oriented policy instruments of German DC do contain some important references to gender issues. The country concepts (Länderkonzepte), for instance, in many cases make reference either to disregard of women's rights or underline the particularly precarious economic situation of women. If the issue of climate change is addressed at all in these papers, which are constantly updated, the references are restricted to climate protection measures (mitigation), with no linkage being established between the two challenges – gender and climate change. The priority area strategy papers (Schwerpunktstrategiepapiere) do, though, give consideration to practical and strategic gender interests, including women's lack of access to natural resources or their underrepresentation in user groups. Gender inequality is, in part, identified as a core problem involved in the poverty situation in given countries, and women are specified as a target group. All the same, the gender-sensitive problem analyses contained in the strategy papers are not “translated” into a long-term sectoral strategy (policy evaporation). With one exception, they anchor environmentally relevant measures aimed at boosting gender equity only at the micro- or meso-level of social organisation, but without including the issue in the policy dialogue provided for at the macro-level. Here, analysis of the strategy papers on rural development and on water reveals that they reflect the conventional pitfalls that have beset political strategy papers produced by all donors, and had already been identified in connection with Poverty Reduction Strategy Papers (PRSPs).
- c) National adaptation strategy papers (NAPAs): Despite the ambitious claims they raise in terms of a substantive gender-sensitive orientation, a screening of the first-generation NAPAs shows them to be wanting in a number of respects. Scarcely one third of all of the papers submitted worldwide contain relevant references to gender as an important planning principle. While the papers often outline the special ways in which women are affected by the impacts of climate change, they for the most part depict women only as victims. Nor, generally speaking, do they accord sufficient attention to the stated need for a broad participatory process involving local groups of stakeholders. Non-governmental Organisations (NGOs) and gender experts see a major need for improvement in these papers so important for gender and adaptation.
- d) Funding for adaptation: The debate on proliferation, underfunding, and availability of new multilateral funds, still in a very early stage, is in need of deep-reaching studies, from the gender perspective, on these funds' usefulness for and effects on women. Be that as it may, some first assessments indicate that, for instance, the new World Bank funds are typified more by gender blindness than gender awareness. Civil society experts are calling in particular for the introduction of mandatory monitoring instruments as a means of scrutinising the extent to which the funds reflect the principle of gender-sensitive distributive justice. These control instruments would include:
- a) gender-specific indicators and gender analyses on the usefulness and impacts of funds and measures (gender impact assessments);
 - b) inclusion of gender-responsive budgeting in national funding mechanisms designed to allocate and review the use of funds; and
 - c) guarantee of equal access when it comes to negotiations on and efforts to implement mechanisms and programmes.

Central recommendations

The following recommendations are addressed to research institutes and official DC agencies. Their aim is to ensure that gender policy is given a strategic orientation in the issue field of adaptation and that quality assurance measures are in place; they are concerned less with the immediate practice of development-related technical and financial cooperation on the ground.

Research and advisory/consulting institutions

- ... should likewise follow an approach geared to “mainstreaming adaptation in development policy” and consistently key their research work to approaches involving a “double mainstreaming.” Bearing in mind the multilevel approach advocated in the adaptation discussion, future studies on adaptation to climate change should have a gender-sensitive orientation. This calls, in addition, for efforts to point clearly to social power relations at the micro-level and to give due consideration, at all levels, to gender-specific data and analyses.
- However, far from being restricted to the field of adaptation, the future approaches that research and advisory/consulting institutions take in addressing the gender issue should also contribute to developing a visible gender perspective in studies dealing with climate and forest protection (mitigation).

Official development cooperation agencies

- ... should continue to pursue their own dual-track gender approach with a view to providing gender-equitable support for adaptive capacities. Alongside a more consistent consideration of gender aspects in their strategic policy instruments, especially at the macro-level of bilateral development policy, i. e. in intergovernmental negotiations, they should step up their efforts to promote gender- or women’s empowerment projects, precisely in the field of adaptation to climate change. In doing so, they should take whatever steps are necessary to avoid old conceptual pitfalls and to ensure that women are directly involved in decision-making both in and on adaptation measures, and not just when it comes to the implementation of these measures.
- As a member of the international community, the *Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung* (BMZ) should come out in favour of efforts to boost the financial capacities of gender-sensitive multilateral mechanisms, above all those of the UN and its specialised agencies. As a member of the UN, Germany should – in keeping with the call for a gender-equitable Official Development Assistance (ODA) – work for an increase in or actual allocation of all donors funds set to flow into efforts to implement the United Nations (UNFCCC) Climate Fund. The international community’s goal should be to have in place, by 2015, a quota stipulating that 20 % of all funds available will be used for MDG3- or gender-relevant projects carried out in the field of climate protection and adaptation.
- The donors that are members of the EU (mindful of the Gender Action Plan) and the DAC, including Germany, should work, more forcefully than they have in the past towards establishing a visible linkage between the two global challenges of gender and adaptation. Efforts should also be devoted to reviewing the central planning instruments of the EU’s DC, Country Strategy Papers and Regional Strategy papers, to determine whether and to what extent they do justice to the need for a double mainstreaming and where it may be possible to identify entry points for the issue com-

plex of gender and adaptation. In keeping with commitments agreed on the Accra Agenda for Action on aid effectiveness, one of the reference themes in the talks on coordination of the division of labour in the European Union should be “gender and climate change.” Official DC agencies should explore possibilities of assuming a leadership role in establishing this linkage. In addition, the Gender Tipsheets accessible in the DAC GenderNet should include sheets on “Gender & Climate Change” or “Gender & Adaptation” (see www.oecd.org/dac/gender).

- Gender mainstreaming calls for expertise, and for this reason official DC agencies should be required to integrate, on a mandatory basis, the gender dimension of climate change into the advanced training measures they plan to conduct on the issue of “mainstreaming climate adaptation.” The only way to achieve a double mainstreaming is to ensure that the key messages from the development discourse on gender equality and strengthening the social and economic rights of women are given due consideration.

1 Introduction

Already today, climate change constitutes a threat to the hard-won advances made in social development as well as to ongoing international efforts to ensure decent and humane livelihoods and living conditions in the developing world. The international community therefore needs to take on the complex challenge involved in linking an ambitious climate protection with both adaptation to inevitable climate change and effective poverty reduction and the right to development. Having long been conducted solely with a view to the perspective of climate protection, the discourse on climate change and its impacts is now linked with development-related issues bearing on adaptation, poverty reduction, equity, and participation of the people affected. This linkage, important though late to materialise, has led a situation in which international climate negotiations have come to pursue a twofold climate agenda. Alongside the goal of climate protection based on reduction of emissions (mitigation),¹ the 2007 Conference of the Parties acknowledged, in the Bali Action Plan, the urgent need for measures designed to adapt to the impacts of climate change (adaptation). The main concern here is to strengthen the adaptive capacities of the developing countries, that is, of the capacities available to them to prepare for changes to the climate and to take measures to protect themselves from the impacts of climate change. The years since 2001 have seen the creation of a good number of financing mechanisms and funds that make available financial resources for adaptation). The developing countries are calling for a drastic increase in these funds to enable them to meet financing needs that, according to Climate Secretariat estimates, will amount to several billion US dollars per year. For this reason, the international donor community, but also the actors of DC, now see themselves confronted with urgent questions concerning how adaptation funding should be handled in practice and what additional strategic options and planning instruments are available to mainstream adaptation to climate change in development policy.

While the North-South equity divide has moved further and further into the focus of the adaptation debate, giving rise to questions concerning democratic distributive and procedural justice between donor and partner countries as well as between generations, questions involving climate equity under gender aspects or political strategies suited to achieving gender equity have very largely been sidelined. Instead, international climate policy has shown itself to be gender-blind. That is to say, due and differentiated consideration has been given neither to men and women who are affected differently by climate change nor to the different skills used by the two genders to respond to its impacts.

It was not until the debate got underway on the grave vulnerability of the developing countries to the impacts of climate change, and people began to realise that climate change constitutes a danger to the development successes achieved thus far, that development-related problems came in for consideration, alongside ecological issues and possible technological solutions. And gender analyses underlining differences in the gender-specific impacts of climate change on women and men have come to the fore only since the release

1 Binding international targets for reducing emissions responsible for terrestrial warming (so-called greenhouse gases) were adopted in 1997 in the Kyoto Protocol. In particular, this protocol to the UN Climate Framework Convention (UNFCCC) obliges the industrialised countries, as those mainly responsible for the greenhouse effect, to significantly reduce their greenhouse gas emissions by the year 2012.

of the reports of the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Development Programme (UNDP) in 2007.²

The gender approach has been an integral component of international development cooperation for many years now, a fact evidenced, once again, by the high-level conferences on aid effectiveness held in Accra and Doha in 2008. The new adaptation strategies and funds should now, for this reason, be reviewed to determine whether and to what extent they cover gender issues. The task here would be to examine, against the background of the options open to official development cooperation, whether and to what extent the new climate regime accords due consideration to gender equity and women's need for effective decision-making powers. This would call for a double mainstreaming³: mainstreaming of adaptation to climate change in German development policy and gender mainstreaming for this new strategic orientation.

Box 1: Adaptation and vulnerability – Definition of key terms

Adaptation is defined by the IPCC as “*initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects. Various types of adaptation exist, e. g. anticipatory and reactive, private and public, and autonomous and planned*” (Baede / van der Linden / Verbruggen 2008, 86). Accordingly, adaptive capacity is defined as “*the whole of capabilities, resources and instruments of a country or region to implement effective adaptation measures*” (ibid., 86). The most frequently cited examples include increasing the height of river and coastal dikes and the use of drought-resistant plants. Development-oriented approaches to climate change emphasise that adaptation can take place at different levels of society and be influenced by various groups of vulnerable actors.

Vulnerability is generally defined as the potential to be adversely affected by an event or change (Kelly / Adger 2000, cited in: Dietz / Scholz 2008, 194). The IPCC defines vulnerability as the “*the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity.*” (Baede / van der Linden / Verbruggen 2008, 98). Some social scientists use a concept of vulnerability that abstracts from the immediate impacts of climate change and focuses more on the social interdependency of these impacts (Levina / Tirpak 2006; O'Brien et al. 2007). Vulnerability is, accordingly, seen as an outcome of the interactions between socio-economic conditions (e. g. poverty, income distribution, available infrastructure) and institutional structures (e. g. quality of governance, rule of law, decentralisation). In the developing countries in particular, poverty exacerbates vulnerability because poor people are as a rule more dependent on the direct use of natural resources and have fewer possibilities to buffer economic shocks caused by natural disasters.

The present study's aim and structure

The present study is a contribution to the DIE's research work on adaptation to climate change in Africa and Latin America. Wherever possible, the study takes a regional approach. However, despite the high degree of vulnerability of the people affected by climate change in Sub-Saharan Africa, there are hardly any Africa case studies that cast light on the linkage between gender and adaptation discussed here.⁴

2 See the discussion papers on “Gender and Climate Change” prepared by the IUCN (2007) and the FAO (2004–2008).

3 For the “double mainstreaming” terminology used here, I am indebted to Schalatek (2008), who formulated the goal for financing for adaptation (see Chapter 3.3).

4 For this reason the DIE has at the same time commissioned a study on gender and adaptation in East Africa.

The adaptation instruments and funds developed by donors also show a number of blind spots when it comes to a gender perspective. The study is therefore concerned with working out effective approaches that, used in the context of selected adaptation measures and policy instruments keyed to them, may also serve to effectively pursue and implement the goal gender-equitable development.

The analysis is based on a social-sciences perspective that views the impacts of climate change as an intensification of existing social and economic conditions, but without regarding the latter as the root cause of existing (distributive) inequality and injustice. A perspective of this kind, which focuses on social framework conditions, has not yet left many traces in the ongoing climate debate, including e. g. the reports of the IPCC.

The debates on the consequences of irreversible climate change centre on the concepts adaptation and vulnerability. Looked at in terms of the gender perspective, however, one of the risks bound up with the use of these concepts is that they may go too far in casting women in the role of victims and thus fail to address women sufficiently as actors of social processes. With a view to avoiding this overly narrow strategic focus, Chapter 2.1 starts out by outlining the conceptual foundations on which the two – here interlinked – discourses rest, the gender approach in DC and the debate on adaptation to climate change.

But this narrowed conceptual focus should not lead us to assume that men and women do not differ in the ways they are affected by climate change. Chapter 2.2 goes on to discuss these gender-specific vulnerabilities with reference to five problem areas of climate change that will, in the future, call for gender-specific adaptation measures.

Chapter 3 contains a cross-cutting analysis of normative policy framework papers and policy instruments conducted from a gender perspective. Alongside the poverty-oriented policy tools used by German DC – priority area strategy papers and country concepts – the chapter looks into National Adaptation Programmes of Action (NAPAs), the most important policy instrument provided for under the UN Climate Framework Convention, with a view to identifying possible entry points for gender mainstreaming. The recommendations derived from the analysis, and presented in Chapter 4, are addressed to research institutes and official DC agencies. Their primary aim is to ensure that gender policy has a strategic orientation in German DC and that quality assurance measures are in place; they are concerned less with the immediate practice of development-related technical and financial cooperation on the ground.

2 Climate change and adaptation from the a gender perspective: Discourses and problem areas

Unlike the international climate debate, which for many years completely disregarded both sectoral and systemic gender aspects, gender issues have, for some time now, been part and parcel of debates on development.

But why is it that gender interests were not integrated earlier, and more comprehensively, into the climate discourse and the international climate negotiations? After all, the debate on the issue complex ‘women-environment-development,’ which first came to the fore in

the 1980s and now extends far beyond academic boundaries, has served to strengthen the processes of women's self-organisation. At the local, national, and international level, numerous women's organisations have come out in favour of measures to protect vital natural resources against environmental degradation and overexploitation. In the 1990s representatives of women's organisations like Women's Environment & Development Organization (WEDO) succeeded in gaining influence on the discourse concerning the UNCED process, and it was this that rendered visible both the special ways in which women are affected and the "vital role" women played in efforts to enshrine sustainable development in the Rio Declaration of 1992.⁵

The following chapter deals, in three sections, with the blind spots in the adaptation discourse. It points to elements of a gender-specific perspective that need to be taken into account in a poverty-oriented debate on adaptation.

2.1 Climate change is not gender-neutral: Evidence from the use of the gender approach in development policy

Since the UN Fourth World Conference on Women in 1995, the international community has acknowledged equality of men and women as an autonomous development goal; gender equality is also one of the central vehicles of poverty reduction in developing countries. It is widely recognised that gender disparities exacerbate the social, economic, and legal divides that continue to exist in many countries. Conversely, better life chances for women in terms of education, health, security, and participation in social power act as catalysts for the whole of a country's socio-economic development (UNDP 2005). In its human development strategies, development cooperation does justice, at the same time, to the acknowledged need for more efficiency and greater legal rights referred to above.

The aim of the organisational principle of gender mainstreaming anchored in the EU's 1997 Treaty of Amsterdam is to establish more equitable gender relations in both policies and programmes. It is based on the insight that the effects of development-policy measures can never, and in no individual sector, be gender-neutral (see Box 2).

Role rigidity despite climate change? Gender-hierarchical division of labour

While in the developing world women produce 60 to 80 percent of staple foods, they own only ten percent of agricultural land and hold only roughly two percent of land rights. Worldwide, women perform an estimated 70 percent of all unpaid work, although they receive no more than ten percent of overall incomes and own no more than one percent of

5 In the 1980s the Women–Environment–Development discourse (in short: WED) emerged from the ecologically oriented agricultural and forestry development institutions. Women had early become a target group for these development–planning disciplines, because it was through that women could on the one hand help to reduce resource consumption (firewood) and on the other contribute to large–scale reforestation efforts. In the UNCED process these strategies were criticised by women as “end–of–pipe strategies,” since they sought to shift responsibility for environmental protection to households and/or to women (Braidotti et al. 1994)

Box 2: Gender mainstreaming – Mainstreaming of adaptation – Double mainstreaming

Gender mainstreaming implies, for all social projects and decision-making processes, the need to consistently give due consideration to the different life situations and interests of women and men; for there is no gender-neutral reality.

Gender mainstreaming is a call for the top levels of organisations and all of the actors involved in them to take account of these differences in their structure, their management, their products, and in their public relations work. While gender analysis must be the point of departure of any programme geared to equal rights, the goal should be reached on the basis of the principle of mainstreaming. It is not only in development cooperation that gender mainstreaming serves as a gender-oriented strategy geared to integrating the goals of equal opportunity into all political decision-making processes (BMFSFJ 2003).

However: Gender mainstreaming should neither be equated with formal in-company equal rights promotion nor is it, as an approach, sufficient to eliminate gender-specific discrimination and social marginalisation. With explicit reference to civil society approaches calling for efforts to strengthen women's rights, international DC has, since 2000 followed a dual-track approach. What is needed to reach the development goal of gender equity are efforts to create a linkage between gender mainstreaming and empowerment of women.⁶

Mainstreaming of adaptation to climate change implies the integration of climate-policy approaches and measures into development planning and sectoral decision-making processes, with the twofold aim of reducing the susceptibility of advances in development and the vulnerability of the poor population to the impacts of climate change. It is useful to distinguish between three areas here: a) protection against climate risks (mainstreaming minimum), b) reduction of the population's vulnerability (mainstreaming plus), and c) issues concerning policy coordination (mainstreaming policy).⁷

Double mainstreaming, i. e. consideration of gender issues in poverty-oriented adaptation measures, is relevant above all for mainstreaming plus and for policy coordination.

the world's assets.⁸ These figures illustrate, first of all, the inequality of men's and women's access to natural and social resources. This, furthermore, is rooted in a structural inequality of women when it comes to participation in social and political decision-making processes. These lack of entitlement to social goods and use rights, marked as it is by social inequality, must be seen as a key dimension of gender inequality.⁹ Women's lack of entitlement to resources, goods, and ownership rights, as well as their utter lack of choices and options, are responsible in crucial ways for the fact that women continue to account for the major share of the world's 1,4 billion poor. They are far more vulnerable to poverty than men, and they are far less able than men to protect themselves against, or to escape, crisis situations.

Worldwide, gender inequality is based, in very essential ways, on a social division of labour that assigns different gender role to men and women. Typically, women are mainly

6 See the BMZ's "Konzept für die Förderung der gleichberechtigten Beteiligung von Frauen und Männern am Entwicklungsprozess" / "Concept for the Promotion of Equal Participation by Women and Men in the Development Process" (www.bmz.de) and Rodenberg (2004, 15 ff.).

7 Mainstreaming minimum is geared to sector and project planning; mainstreaming plus is concerned with socio-economic and political entry points with a view to reducing the individual and collective vulnerability of affected persons and boosting adaptive capacities. Mainstreaming policy refers to an early development of political strategies conceived to close knowledge gaps on local impacts of climate change, to secure additional financial resources, and to gain influence on the post-2012 climate regime, see Scholz / Klein (2008).

8 See <http://www.bmz.de/de/themen/menschenrechte/frauenrechte/hintergrund/index.html> and http://www.unifem.org/attachments/products/PoWW2005_overview_eng.pdf (accessed on: 13 March 09).

9 Sen, cited in: Kabeer (1999, 436).

responsible for securing the survival of their families and households. This care economy is often not acknowledged and valued in society, and it is not included in national economic accounting. If environmental destruction and climate change lead to degradation and growing scarcity of natural resources such as land and water, women, in particular in poor, remote, and rural regions, will be faced with increases in the – already sizable – amount of time and energy they need to invest in reproduction. They will need to walk longer distances and shoulder heavier burdens in gathering food, fodder, water and firewood. But women in urban and peri-urban areas, in any case seriously deficient in terms of the infrastructure needed to provide for day-to-day needs, will also have to continue to perform unpaid care work, and their workloads will increase substantially under the pressure generated by climate change and the need to adapt to it. At the same time, the options and choices open to women are often limited and far more restricted than those of men in the same regional or cultural context. This may – depending on the specific degrees of structural discrimination involved – mean that women are far more exposed to climate shocks and disasters and that their adaptive capacities are restricted in life-threatening ways.

In some individual countries, however, we find, sporadically, examples of traditional gender roles taking on new forms under the pressure of climate change, with women capturing new choices and options. Malawi, for instance, is an especially poor country whose agricultural production, largely dependent on rain-fed farming, is already hard hit by climate change. Women smallholders in several Malawian communities have succeeded in overcoming acute famine situations by developing ecological cropping techniques that enable them to take advantage of changing rainfall periods to produce a second maize crop. In addition, women in particular show commitment in looking for new income-creating activities beyond the bounds of traditional role assignments. Quite often these additional sources of income in the hands of women serve to break down men's power to make decisions concerning household money and resources. In some Malawian village communities, empowerment has enabled women to reduce their greater vulnerability to famine caused by climate change. In the course of time these women also succeeded in breaking down once rigid gender roles, paving the way for men and women to join forces in developing and practicing small-scale adaptation strategies. However, it is not possible to induce such changes, with their far-reaching cultural implications, from outside, through DC projects, and the best approach is invariably to provide outside support for change. It should be noted, though, that changes of this kind tend for the most part to come about in locally managed, participatory processes of self-organisation.¹⁰

2.2 Gender in the climate debate: Conventional pitfalls in new discourses?

Even though the Rio Declaration emphasises equality of opportunity for men and woman as especially important for sustainable development, and Chapter 24 of Agenda 21 acknowledges the role played by the achievements and knowledge of women for environmental protection and resource conservation, the central UN reference documents on which the ongoing climate negotiations are based contain no references to a policy of ac-

¹⁰ Action Aid (2008, 21), and an oral report by a women smallholder from Malawi presented at a COP 14 event in Poznan, 06 Dec. 2008.

knowledge and promotion of women or any further-reaching aspects concerning gender equity. Apart from the Convention on Biological Diversity (CBD), gender-relevant approaches have not been anchored in any of the UN environmental conventions. Neither the UN Climate Framework Convention nor the Kyoto Protocol make any mention of gender aspects or of women as an especially affected group (Skutsch 2002). Still, one positive development does seem to be emerging: The percentage of women in delegations to the international climate negotiations has risen, slowly yet steadily, although the figure of 30 percent representation for women that UNIFEM regards as necessary if women are to constitute a critical mass has yet to be reached. Representatives of Women for Climate Justice, worldwide civil society network devoted to climate equity, regard it as politically significant that the organisation was, for the first time, given an opportunity to present its own positions at the concluding plenary sessions of the UN Climate Change Conferences in Bali in 2007 and in Poznan in 2008.

The only plausible explanation for the obstinate climate blindness observed in the climate negotiations can be found in the ongoing climate discourse itself. Women environmental and development experts trace the late start of the gender and adaptation debate back to the following points (see Denton 2004):

- **For many years climate change was perceived mainly as a problem that concerned global changes to broad natural spaces**, while little or no attention was paid to impacts at the local level and the socio-economic consequences they entailed. Accordingly, even the available gender-specific data on climate change and its impacts were neither systematised and processed nor given due consideration or deepened.¹¹ The Intergovernmental Panel on Climate Change (IPCC), which was early to give consideration to socio-economic aspects of adaptation, has thus far not undertaken any noteworthy efforts to integrate a gender perspective into its investigations and reports.¹²
- **The debate on climate change was long dominated by a purely scientific perspective geared to identifying the geophysical and anthropogenic causes and effects of climate change:** Thus far a technical-administrative perspective has shaped the adaptation debate, in industrialised and developing countries alike. Whether the concern was expansion of irrigation infrastructure and alternative agriculture, reforestation, or the construction of dams and coastal-protection facilities, too little attention was accorded to governance and power issues, either in conceptual or in practical terms. For the most part, little was done to identify who stands to benefit from relevant measures and whether and to what extent affected population groups – including men and women, young and old – are able to exert influence, on equal terms, on planning, orientation, and implementation. This will become particularly relevant when it comes to measures that require resettlement of vulnerable population groups. In view of the fact that women generally lack formal land and ownership titles, women are harder hit than men when people are forced to abandon house and land. While criticism is often voiced of the fact that local populations are resettled, nothing is said about the specific discrimination suffered by women on account of their legal inequality

11 Unpublished FAO research overview that shows that gender-specific data are in fact available for many environmental aspects associated with climate change (FAO 2007).

12 In the IPCC's Fourth Assessment Report on climate change, which focused on impacts, adaptation, and vulnerability, Working Group II made one reference to the disproportionate burden that drought poses for women in small farming communities in southern African countries (Parry et al. 2007, 69).

- **Market-based approaches like the emission-trading system adopted in the Kyoto Protocol have, for over a decade now, dominated international climate policy.** While it is often acknowledged that this is a market that is “politicised through and through,” since it is based on emission rights granted by the state, the Clean Development Mechanism (CDM) consists, in essence, of “instruments for marketing nature” (Altvater / Brunnengräber 2008, 11) that make reference neither either to human rights nor to the vulnerability of given social groups. And for this reason there is no reason to expect any consideration to be given to gender aspects in this area of climate policy. Substantial doubts have therefore been expressed as to whether and in what ways women and local communities stand to benefit from the mainly large-scale industrial projects envisioned under the CDM.¹³
- **The discourse on global equity has been restricted largely to the need to reconcile the interests of the countries mainly responsible for climate change, the industrialised nations of the North, and the countries mainly affected by the phenomenon, the nations of the South.** However, whether the question under discussion has been the special responsibility of the industrialised countries for climate change (the so-called polluter-pays principle) or the procedural equity of the new adaptation funds, the need for a gender-equitable social approach to the issue of climate equity has largely been ignored.

A poverty-oriented adaptation agenda as a precondition for the gender perspective

The points listed above clearly indicate that climate policy has been engaged mainly in a search for technical-administrative solutions. If the social and economic framework conditions of affected people and groups have received little attention, social hierarchies and power relations have received even less. But integration of a gender perspective into adaptation policy calls for both a “multilevel approach” (Dietz / Scholz 2008, 194 ff.) and inclusion of all relevant groups of social actors. The stage for this has been set by the dissemination of a poverty-oriented adaptation concept in recent development-related debates, one motivated by two different considerations: on the one hand, a rights-based approach (compensation for those who bear the least responsibility for climate change); on the other hand, the need for efficiency and effectiveness in development cooperation (minimisation of the risks posed by climate change in order not to endanger any further the chances of reaching the Millennium Development Goals.) (Eriksen et al. 2007; O’Brien et al. 2007; Tanner / Mitchell 2008a).

A broader conception of vulnerability has evolved against the background of a multidimensional poverty concept that extends beyond income poverty. Following a socio-political perspective of this kind, vulnerability is seen as encompassing a number of general characteristics that impair a social group’s capacity of to cope with external (climate) shocks, to resist them, or to adapt to persistent climate change. The less groups or people are in possession of these capacities or social resources – including education, health, and social networks – the more likely they are to be particularly vulnerable. This in turn goes hand in hand with a greater probability that climate change and shocks will lead to extreme poverty (Tanner / Mitchell 2008b, 9).

¹³ A comprehensive gender analysis would be needed to identify the actual benefits that CDM projects entail for women and households. See Denton (2004, 43); Biesecker / Winterfeld (2008, 196), and the Gender Climate Justice Network, under www.gendercc.net/policy/topics/flexible-mechanisms.html.

In other words, vulnerability does not result mainly from the interaction between ecological factors (climate change leads to degeneration of arable land) and economic factors (national budgets are unable to finance irrigation systems). Instead, vulnerability arises out of a nexus socio-economic factors, including e. g. lack of access to productive resources or social-protection and infrastructure systems. Just as in the debate over broad poverty concepts, a social definition of vulnerability makes it possible to include some other important factors, including in particular empowerment, accesses to entitlements, and human security and dignity.¹⁴ One important ecological and social category that figures in the adaptation debate is the resilience to climate change that may emerge, for instance, from the capacity of social groups to organise on their own.

A multidimensional approach of this kind, recognising that it is not entire states that need to be seen as vulnerable, shifts the focus from the inequality inherent in the North-South framework to the different situations of social groups and their livelihoods in the countries affected by climate change.¹⁵ Here we have seen the emergence in recent adaptation concepts of an important interface to the gender perspective, and this in turn has cast a new light on the need to accord differentiated consideration to the different interests of marginalised men and women when it comes to developing strategies.

All the same, one problem that is clearly emerging in the adaptation debates with a focus on vulnerability is the issue of a sharply abbreviated gender approach: First, women tend more to be stylised as victims than to be perceived as agents of change. And then, second, they are bunched together to form a homogeneous social group, with regional, cultural, and age-related distinctions tending to fall by the wayside. A third conceptual “pitfall” encountered in the debate is a narrowed-down view of the ways in which women may be affected, one that turns a blind eye to how gender relations in society serve to restrict both genders to the fixed roles defined for them. These aspects go far beyond any academic debate; in fact, they are of crucial significance for double mainstreaming and strategy development.

2.3 Problem areas of climate change, from a gender-specific perspective

The IPCC is convinced that the impacts of global warming already observable today – an increase in extreme weather events like droughts, flooding, and hurricanes – are set to become more frequent and intense in the years to come. And no one doubts that it will be the poorest people in the developing world who suffer most from the impacts of climate change: Flooding caused by rises in sea levels will increase the vulnerability of the populations living in the delta and coastal regions of Africa, Asia, and Central America, while in the near future millions of additional people will be hard hit by declining crop yields and growing scarcity of freshwater resources. The particular ways in which poor people are dependent on natural resources such as sufficient precipitation, fertile soils, or resistant plant strains are a manifestation of their vulnerability. Poverty, marginalisation, and pov-

14 See Tanner / Mitchell (2008b, 9) and the contributions of Sen and Kabeer (1999) to the poverty debate; cited in: Rodenberg (2004).

15 The debate in the German-speaking countries distinguishes between a “climate perspective” and a socio-ecological perspective.” See Brunnengräber et al. (2008) and Dietz / Scholz (2008).

erty risks are, though, intensified by climate change, not brought about by it. This goes in particular for the social and economic gender disparities found in the developing world.

In its Human Development Report 2007/2008, the United Nations Development Programme points to five central problem areas resulting from climate change, so-called “transmission belts” that may reinforce one another in the future. The following section explains how and to what extent these risks and threats, which ultimately represent well-known problems for human development, serve to deepen gender inequality.

2.3.1 Threat to ecosystems and biodiversity

Climate change and its roots causes (greenhouse gas emissions from the combustion of fossil energies and deforestation of large areas of the world rainforests) are currently altering our global ecosystems. A rise in temperature of only two degrees would threaten roughly one quarter of the world’s plant and animal species with extinction (UNDP 2007b, 105). The Convention on Biological Diversity (CBD) underlines the important role played by women in conserving biodiversity, noting, however, that the knowledge and competence of women are often underestimated. Worldwide, some 350 million people are dependent on forest resources for their livelihoods. Bearing the chief responsibility for securing the survival of their families, women, mainly from local communities, are reliant on access to the wild foods and non-commercial forest products they gather to meet their own needs and to sell at local markets. In addition, foodstuffs like seeds, nuts, berries, and mushrooms, as well as medicinal plants have an important role to play for subsistence farmers in a situation marked by increasingly frequent crop failures. On the one hand, climate change poses a threat to local forest management by mostly indigenous populations, with irregular precipitation patterns substantially reducing yields of wild foods harvested in forests. On the other hand, deforestation poses a threat to the living space of the populations concerned, and deforestation in turn contributes substantially to worldwide greenhouse gas emissions. Above all in developing countries, huge forest areas are falling prey to commercial interests. A new forest-protection mechanism is under discussion in connection with the climate protection agreement: Reducing Emissions from Deforestation and Forest Degradation (REDD). The REDD mechanism has been welcomed by development-oriented environmental organisations as the most important approach for an international forest-protection agreement. At the same time, though, the mechanism’s concrete formulation as a market-based instrument has attracted controversy, and it is claimed in some quarters that the instrument is suited more to covering the opportunity costs of commercial actors (livestock breeders, soya farmers, plantation owners) than to advancing the interests of people and groups who traditionally use and protect forests, including indigenous peoples and smallholders. Criticism has also been voiced concerning possible negative impacts on local populations. NGOs are calling for comprehensive land reforms and assignment of titles to land rights in order to a) prevent the small-scale farming population from being displaced and b) ensure that forests and land are used in sustainable ways that protect species diversity.¹⁶ Women account for a large share of the estimated 200–300 million landless persons whose livelihoods depend on forests. Women are often

16 On the current discussion on REDD as an instrument of forest protection, see Schroeder (2009, 18 f.), and several contributions in the Rundbrief Forum Umwelt und Entwicklung (1/2009).

refused ownerships rights and formal land titles. The CBD emphasises that women are in need of full control and rights of disposal over resources in order to be able to effectively manage and conserve resources. At present, however, this dimension of inequality is not an element of the international discussion.¹⁷

2.3.2 Agricultural production and food security

Rising temperatures and altered precipitation patterns and drought periods will have substantial implications for food security in countries dependent on agriculture. In some Sub-Saharan African regions in particular, crop yields could decline by up to 50 percent in the coming years, seriously endangering efforts to reach the MDGs, on which progress has in any case been sluggish. Age-old, deeply ingrained gender inequality when it comes to inheritance law and land titles and real assets as well as a division of labour that assigns most unpaid work to women – these are the central factors that lead to a situation in which women smallholders are forced to bear the brunt of the impacts of climate change. For in developing countries women produce 60 to 80 percent of staple foods, although they are in possession of only ten percent of farmland. The large measure of responsibility that women bear for the production and procurement of food on the one hand and their lack of control over and access to land, technology, and credit on the other pose huge problems for women when droughts or erratic precipitation alter cropping periods and reduce crop yields, threaten crop variety, and erode soils. Negatively reinforced by illiteracy and lack of information, women's lack of ownership titles often mean that they are refused access to new land in cases of resettlement or when it comes to indemnification proceedings in the wake of floods and other natural disasters. Lack of access to credit and technologies makes it impossible for women to make long-term investments, e. g. to improve land quality. And their very limited decision-making powers in family and community may also make it difficult for women to make use of their adaptation knowledge or to try it out in small areas with a view to using crop diversification as a means of ensuring that there will be new crops to harvest. In any case, though, crop losses and hunger means additional workloads precisely for female household members. This forces women to seek alternative sources of food and income, and their children, girls in particular, are involved in these activities. This entails rising health risks and a close to complete lack of time for education or social activities.¹⁸ Equal ownership rights and unobstructed access to natural resources are a matter of fundamental importance for the vulnerability of women vis-à-vis the impacts of climate change (Quan / Dyer 2008, 50).

17 The Gender Climate Justice Network is critical of the definition of “forest” in the REDD mechanism, noting that it also extends to fast-growing commercial forests. The network emphasises the need to prevent the diverse ecosystems of tropical forests from being crowded out by plantations, with the women currently involved in managing publically accessible forests being relegated to poorly paid jobs as plantation workers und (www.gendercc.net/action/forests.html; accessed on 10 Jan. 2009).

18 One study on climate change, poverty, and gender sees growing gender inequality as a threat to the MDGs: “Loss of livelihood assets, displacement and migration may lead to reduced access to education opportunities, thus hampering the realization of MDG 2 on universal primary education. Depletion of natural resources and decreasing agricultural productivity may place additional burdens on women's health and reduce time for decision-making processes and income-generating activities, worsening gender equality and women's empowerment (MDG 3)” (UNDP 2007c, 1).

Food security and gender-specific violence

For men too, the loss of fertile land and crop and income security brought about by climate change constitutes a serious strain and a threat. In keeping with traditional gender roles, in rural communities it is for the most part men who are responsible for managing crops and livestock produced for the market. The loss of men's employment options and their identity as family breadwinners to which ecological degradation inevitably leads is a substantial psychological and physical stress factor that may lead to increased frustration and violence in the family.¹⁹ On the other hand, a study released by Action Aid points to the positive effects of newly defined gender roles in rural communities (Action Aid 2008).

2.3.3 Water scarcity and uncertain water supply

Even today, over one billion people in poorer countries have only limited access to clean drinking water. From the mid-21st century on, altered precipitation patterns and droughts could dramatically exacerbate the situation of water scarcity faced by 350 to 600 million people in Africa (UNDP 2007a, 95 f.).

The gender-specific dimension of water use and water management is well documented. The growing tendency towards privatisation of public water supply is giving rise to a gender-specific inequality of access. For poor women will often be unable to afford the user fees that are increasingly likely to be adopted in connection a situation of growing water scarcity due to ecological factors. It has also pinpointed in sufficient detail the primary responsibility of women and girls for supplying their households with the water they need for drinking, cooking, and washing as well as for their small livestock. In view of the fact that men use water primarily for irrigation as well as for small-scale industry and livestock farming, women and men have different gender-specific interests when it comes to the use of drinking water. Against the background of a rigid gender-specific division of labour in connection with this vitally important good, the growing scarcity of freshwater and sources of clean drinking water means, above all, greater workloads for women and girls. Having to walk longer distances to fetch water will aggravate their problem of time poverty. And in connection with a deterioration of water quality bound up with climate change and environmental degradation, this growing time poverty will often mean that this water is not properly treated prior to use. The consequence will be an increase in infectious diseases that pose a danger above all to children. In addition, the need to walk longer distances to fetch water (or firewood, fodder, and food) exposes women and girls to a greater risk of sexual assaults and harassment (Brody / Demetriades / Esplen 2008, 5). Looked at in the light of the gender perspective, this growing scarcity of and threat to a vitally important good clearly indicates that adaptation strategies need to include the factor of social and gender inequalities.

19 Looking at processes of impoverishment and marginalisation, "Voices of the Poor," a renowned World Bank study, was early to point out the correlation between altered male gender roles and an increase in violence in the family that serves to compensate for this loss of self-worth and identity (see *Voices of the Poor* (1999), cited in: Rodenberg (2004, 28). See also Masika (2002), Brody / Demetriades / Esplen 2008, 4).

2.3.4 Spread of diseases and infections

Even today, heat waves and other extreme weather events accompanying the food and water scarcity caused by climate change are leading to additional strains on human health. Above all in developing countries, climate change has led to an accelerated spread of diseases, infections, and co-infections. Even today, for instance, global warming has led to an increased incidence of dengue fever, and the number of people suffering from malaria may, in the coming years, rise by up to 80 million cases. However, the increasing proliferation of epidemic diseases is – in this sense resembling water scarcity – itself only one factor in a complex nexus of causes and effects of climate change that in turn generate and reinforce further problems involving social, gender-specific inequality. To cite an example, due to existing patterns of discrimination when it comes to unequal distribution of food or limited access to medical care, women and girls are exposed to far greater health risks than men and boys.²¹ Socio-cultural constraints and economic discrimination pose a risk to elderly women in particular. While the latter are especially susceptible to climatically induced health risks (heat stress and undernourishment), they still take on invisible but highly stressful caring tasks in the family context. And yet elderly women are often inadequately integrated into social networks and have as a rule as good as no access to social protection systems.²² The vicious circle of disease and marginalisation, lack of human rights, and impoverishment has been analysed from the gender perspective for the socially induced HIV/Aids epidemic. Even though these findings are transferable, there is still a lack of empirical studies on the gender- and generation-specific aspects of climate-related health risks.

2.3.5 Rise of sea levels and susceptibility to climate induced disasters

The IPCC is convinced that worldwide temperatures are set to rise between 1.1o and 6.4o Celsius by the end of the 21st century. Even though the temporal and spatial dimensions of this change remain controversial, the melting of the polar ice caps and the warming of the world's oceans are thought more than likely to lead to a rise in sea levels. According to calculations of the Potsdam Institute for Climate Impact Research (PIK), this rise may reach levels between 75 and 190 cm by the end of the century, a range considerable higher than what the IPCC anticipates. The consequence could be that up to 500 million people will be forced by flooding to leave their homelands.²³ Over 300 million people continue to live in the areas most often hit by tropical hurricanes and monsoons, which are likely to increase in intensity and frequency due to the warming of the world's oceans. If natural disasters and extreme weather events increase as predicted, roughly one billion people in developing countries will be acutely threatened, according to UNDP. This irreversible loss of the places in which people live, of their agricultural land, of their communities, and of

21 Röhr (2008a, 8) also refers to a greater vulnerability of women on account of biological differences; woman, for instance, appear to react far more sensitively to heat than men, and pregnant women are especially susceptible to malaria. Secondary diseases like anaemia in turn distinctly raise maternal mortality rates.

22 This aspect, lack of social networks, may also affect men, in some cases even more than women. See Brody / Demetriades / Esplen et al. (2008, 4).

23 Opening address by Hans-Joachim Schellnhuber, Director of the PIK, at the IHDP Open Meeting in Bonn, 27 April 2009.

all their goods will intensify migration flows and streams of refugees, and it poses a massive threat to the health and human security of the people affected. This state of vulnerability due to climate-related natural disasters is in no sense gender-neutral, as has been shown by studies on previous natural and environmental disasters. To cite an example, the probability that women and children will be killed in connection with a disaster is 14 times higher than that for men. The tsunami disaster in Indonesia and Sri Lanka, which men were three to four times more likely to survive than women, has, like earlier flood disasters in Bangladesh, served to cast light on certain socio-cultural gender stereotypes that constrain women in life-threatening ways when extreme situations occur: Due to their care duties in the family, women are for the most part tied to the house. And in many countries women are not allowed to leave the house without male permission or accompaniment, and if they do so anyway, in order to flee a real danger, they may well find themselves in acute risk to life and limb because they – unlike boys and men – often do not learn to swim or to climb trees. Warnings – if any are issued in the first place – are for the most part communicated only in public places, which women are often unable to reach.

On the other hand, in Central America, in 1998, Hurricane Mitch claimed more male than female lives, and this, too, is attributed to traditional male gender roles and a masculine identity that impels men to show more courage and bravado in the face of danger, an attitude that induces them to expose themselves to extreme risks, e. g. in seeking to save people at risk.²⁴

In causing additional work for clean-up and nursing activities and provision of food and water, disasters not only lead to substantially greater workloads in the subsistence and reproduction work needed to ensure survival, most of which is done by female household members. At the same time, and after the fact, they also in many cases lead to sex-related violence, threatening the human security mainly of girls and women. Scenarios of this kind are known from regions affected by war and violent conflict. The especially dreadful example of violent attacks on women gathering water and firewood outside the confines of refugee camps in Darfur have served to illustrate the transferability of gender-specific impacts of violent conflicts that may also occur in connection with climate change. Here, there is a major need for action to protect women's fundamental human rights.²⁵

Coping strategies and interests of women that have been recorded in the wake of disasters show that restoration of security as well as access to information are of major importance. Formal safeguards for ownership and land titles are an important precondition here (see Box 3).

24 Brody / Demetriades / Esplen (2008, 7); see IUCN / WEDO (2007).

25 IUCN / WEDO (2007, 9). For further information, see www.gdnonline.org, Gender and Disaster Network.

Box 3: Practical and strategic interests of women in the wake of climate disasters:²⁶

- Security, i. e. finding a secure abode for oneself and one's family, including resettlement in safe areas; protection and adaptation in situ based on construction of sturdy dwellings;
- protection for crops and livestock;
- adaptation of agricultural techniques and crop diversification and
- access to agricultural extension services;
- improved access to information (early-warning systems) and medical care;
- development of women's capacities through training and advisory services on adaptation strategies and alternative provisions for survival;
- access to resources such as adaptation funds and improved access to credit and markets;
- ecological restoration of women's livelihoods and environment.

3 Gender in development-related agreements and adaptation instruments

The chapter that follows looks into the state of double mainstreaming in selected climate- and development-related concepts, guidelines, and mechanisms geared to adaptation. Wherever present, the chapter highlights entry points for improved consideration of gender aspects and gender equity.

3.1 Cross-cutting analysis of development-related framework conventions and policy instruments

Bi- and multilateral donors long ago acknowledged gender-specific inequality as a cross-cutting task and have since included in their poverty reduction strategies approaches designed to strengthen women's rights.²⁷ By comparison, one new feature of the development discourse is its treatment of the impacts of climate change as an overriding factor and the need to strengthen adaptive capacities as a cross-cutting task. Each of these issues – gender and adaptation to climate change – is highlighted as an autonomous challenge in recent international negotiations and framework documents on the international community's development policy.

3.1.1 Development-related framework agreements on adaptation and gender

- **The UN Millennium Development Goals** refer specifically to the need to “[p]romote gender equality and empower women” (MDG 3) and to “[e]nsure environmental sustainability” (MDG 7). Motivated by criticism that gender concerns were not consistently integrated into all of the MDGs, the updated list of official indicators for the MDGs include the following provisos: “Each of the ... goals has a gender dimension to it and gender equality is indispensable for achieving all goals” and that all of the indicators need to be broken down, as far as possible, by ur-

²⁶ WEDO (2008, 12). See also Quan / Dyer (2008, 50).

²⁷ As a means of emphasising the goal's autonomy, some concepts refer to gender equity as an “overriding issue” of development policy, thus classifying it in a way similar the paramount goal of poverty reduction.

ban/rural and gender. As far as country reporting on the implementation of the MDGs is concerned, data broken down for gender are particularly important for Targets 7.C and 7.D.²⁸ The indicators assigned to the target could then include the proportion of women that have, by 2015, improved access to safe drinking water and improved basic sanitation.

- **Accra Agenda for Action (2008):** The third high-ranking forum on aid effectiveness emphasises, in its agenda for action, the threat posed by the linkage between extreme poverty and lack of access to water and health care. It at the same time underlines the obligation of the international donor community to promote gender equity.²⁹
- **Doha Declaration on Financing for Development (2008):** The resolution adopted by the International Conference on Financing for Development acknowledges the new challenges to which climate change is giving rise and sets out a commitment to finance adaptation measures designed to reduce the vulnerability of people in developing countries.³⁰ Following difficult negotiations, the donors reaffirmed their commitment to a gender-equitable development financing.³¹ “[F]ostering gender equality” and “preserving the environment” are specified as tasks in connection with official development assistance to reduce poverty, though without establishing any direct linkages between the two points (see paragraph 41).
- The only recent UN document that establishes a linkage between the two global challenges – of gender inequality and adaptation to climate change – is the **Report on the 52nd Session of the UN Commission on the Status of Women (CSW 2008)**. The session, devoted mainly to gender-equitable development financing, emphasises the urgent need to investigate the impacts of climate change on the lives and social standing of women and on gender relations. The report recommends that a gender perspective be integrated at all levels of planning for and decision-making on climate issues and that resources be made available to ensure the full participation of women.³²

28 Target 7.C: “Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.” Target 7.D: “By 2020, to have achieved a significant improvement in the lives of at least 100 million slum-dwellers.” (Official list of indicators for the UN MDGs, August 2008; <http://mdgs.un.org/unsd/mdg>). See also the discussion in the annex: “Establishing linkages between MDGs, climate change and gender” (IUCN 2007).

29 “(1) 1.4 billion people – most of them women and girls – still live in extreme poverty, and access to safe drinking water and health care remains a major issue in many parts of the world” (Accra Agenda for Action, www.accrahlf.net).

30 “(80) We recognize that multiple financing for development challenges and opportunities have emerged since the Monterrey Conference, including the impact of the financial crisis, additional costs of climate change mitigation and adaptation and damage to the Earth’s environment”... And “(82): in order to support appropriate national adaptation and mitigation strategies and actions. We reiterate that it is critical to address the pressing needs of developing countries, especially those that are particularly vulnerable to the adverse impacts of climate change (...)”.

31 See in particular paragraph 4 of the “Doha Declaration on Financing for Development”: Outcome Document of the Follow-up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus. UN, New York, 9–12–2008 (A/CONF.212/L.1/Rev.1).

32 “(jj) Integrate a gender perspective into the design, implementation, monitoring, evaluation and reporting of national environmental policies, strengthen mechanisms and provide adequate resources to ensure women’s full and equal participation in decision-making at all levels on environmental issues, in particular on strategies related to the impact of climate change on the lives of women and girls” (UN Commission on the Status of Women. Report on the 52nd Session, 25 Feb.–7 and 13 March 2008; E/CN.6/2008/11, 8).

- **The Hyogo Framework for Action** (2005) likewise defines a clear-cut mandate for an international obligation to reduce gender-specific vulnerabilities. The framework convention of the UN World Conference on Disaster Reduction calls for the integration of a gender perspective into all policies, planning, and decision-making processes involved in reducing disaster risks. This includes measures designed to promote early-warning systems, information management, education, and training.
- The fact that the gender debate has until now been a blind spot in climate policy, a circumstance that may well prevent this issue field from being carried into the adaptation debate in development policy, is reflected very clearly in framework agreements and concept papers of the **OECD/DAC and the EU** bearing on adaptation. In their papers on development policy, though, these two donor communities generally do show a certain gender sensitivity. Without exception, however, the documents of both EU Commission and Council on adaptation policy (2006–2008) lack any reference to gender aspects or the specific vulnerability of women to the impacts of climate change. While the DAC Declaration on Integrating Climate Change Adaptation into Development Cooperation views developing countries on the whole as vulnerable, it does not differentiate between vulnerable population groups.³³

3.1.2 Poverty-relevant German DC policy instruments from a gender perspective

At the time of writing, there were hardly any German DC concept or strategy papers available on the issue of poverty-oriented adaptation. As noted for international concept papers, the limited number of BMZ publications on development-related climate policy give very little consideration to the gender perspective. To cite an example, a BMZ paper entitled “Klimawandel und Entwicklung” (Climate Change and Development) makes one reference to “the need to reduce the vulnerability to climate risks of the populations in partner countries,” although it does so without breaking this down any further.³⁴

The main reason for this shortcoming is that work has just got underway on mainstreaming adaptation policy, as an integral component, into development cooperation. The two issue complexes are being gradually worked into the development-policy instruments used in German DC. However, it needs to be emphasised on the positive side that the BMZ’s Gender Action Plan 2009–2012 names “gender-specific responses to climate change” as one of its four thematic focuses. The point of departure is inequality of rights and a special vulnerability of women. In implementing the Action Plan, efforts will be undertaken to systematically examine the risks that climate change entails for women, in particular in water management, agriculture, infrastructure, and health (BMZ 2009).

33 The “DAC Statement of Progress on Integrating Climate Change Adaptation into Development Cooperation” (2008) refers only once to poor people. The one exception is an authored paper that, looking at the issue of adaptation, points to references in international agreements to the needs of the local population; this in connection with the aim of working out important aspects that deserve to be given consideration for a possible international framework agreement. We here find several references to women’s rights and the need for improved participation of women (Levina 2007).

34 See BMZ (2007, 11. No documents were available from the German DC implementing agencies on the issue complex investigated in the present study.

Assessment of country concepts and priority area strategy papers

The cross-cutting analysis of these policy instruments of German DC covers 16 country concepts (Länderkonzepte) and eight recent (from 2006 to present) priority areas strategy papers (Schwerpunktstrategiepapiere) that have been coordinated with partners. The aim of the analysis was to determine whether and to what extent a gender perspective has been included in the thematic focuses relevant to climate adaptation policy.³⁵

The more recent poverty-oriented policy instruments of German DC generally contain important references to gender issues. Many of the country concepts either point to failure to respect women's rights or underline the especially precarious economic situation of women. If climate change is addressed at all as an issue, the reference is for the most part to mitigation measures, although generally no linkage is established between the two challenges. The priority area strategy papers give consideration to practical and strategic gender interests, including e. g. women's lack of access to natural resources or participation in user groups. Some identify gender inequality as a core problem of the poverty situation in a given country and specify women as a target group. However, the gender-sensitive problem analyses presented in the strategy papers are not "translated" into long-term sectoral strategies (policy evaporation). With one exception, the strategy paper on Malawi, gender-relevant environmental protection measures are anchored only at the micro- or meso-level of social organisation; but they are not included in the policy dialogue at the macro-level, e. g. in intergovernmental negotiations.

<p>Box 4: High aims – substantial efforts: The consideration that donor policy instruments accord to cross-cutting issues</p>
--

<p>Since the adoption of the Millennium Development Goals (MDGs), the international community has formulated high aims for its holistic development policy, seeking in particular to reduce the gap between aspirations regarding and actual implementation of the MDGs by further developing, standardising, and reviewing its poverty-oriented policy instruments. Since 2000 German DC has, in cooperation with partner countries, defined regional focuses designed to enhance its effectiveness. The central policy instruments involved – a) country concepts and b) priority area strategy papers – have been improved in a cyclical process of organisation. Embedded in a comprehensive coordination process both within the BMZ itself and with the German implementing agencies, German DC has redefined its support strategies. A large part of this multi-year process was devoted to the most important cross-cutting tasks of German DC, the aim being to ensure that the political strategies accord due consideration to participation of disadvantaged groups, to gender equality, and to ecological sustainability.</p>
--

Entry points for double mainstreaming in policy instruments

In order to improve policy instruments in terms of boosting the consideration they give to adaptation and gender aspects and advancing "double mainstreaming," it is essential to adopt a social conception of vulnerability, one that is itself based on a broad concept of poverty. The impacts of climate change are intensifying social inequalities, and these in

³⁵ The analysis covered only country concepts and strategy papers on African partner countries. The criteria grid used for screening can be found in the annex. A list of the papers screened can also be found in the German-language version of the present study (www.die-gdi.de).

turn impede individual and collective capacities to adapt to the emerging new ecological and economic conditions.

In the ongoing process of reviewing their policy instruments and country papers, donors, adapting a gender perspective, should ask: “What needs to be done to reduce socio-economic and political vulnerability – which involves divergent gender-specific aspects – to the impacts of climate change and to increase the adaptive capacities of men and women – which differ in gender-specific terms?”

The DIE has already identified some fields of action for a development-oriented adaptation policy geared to an “expanded mainstreaming of adaptation to climate change in development policy.”³⁶ Looked at in terms of a gender perspective, the fields that offer central entry points for action on adaptation are a) resource management and (rights of) access to resources and b) governance and broad participation.

If the announced reorientation of the present focuses of DC with a view to adaptation aspects in fact materialises, it would be important to give due consideration to the available analyses on the integration of gender, as a crosscutting issue, into national and international poverty-reduction policy instruments with a view to avoiding the mistakes and pitfalls of the past (Rodenberg 2004, 37; Denton 2004, 46 f.).

- There is a lack of gender-specific analyses on the impacts of climate change and the adaptive capacities of women and men. Available data are often not utilised and – even though the problem has been identified – not translated into a long-term sectoral strategy (policy evaporation).
- Thus far, too little has been done to integrate the gender-and-development approach (GAD) as a cross-cutting task. Instead, the picture continues to be dominated by the women-in-development approach (WID), which focuses on women as a target group (targeting instead of mainstreaming). One indicator for this is the fact that men and boys do not figure as a target group of development policy.
- Too little is done to address either stereotypical role assignments or socio-cultural barriers to adaptive capacities or to identify them on the basis of participatory approaches. There is also a marked tendency to perceive or to depict women as a homogeneous, vulnerable group (concept of sameness).
- Development or environmental measures that take account of gender aspects continue for the most part to be oriented to the micro- or meso-level of social organisation; that is to say, they are too infrequently anchored at the macro-level – and fail to ensure that gender-specific concerns are included in the dialogues held with partners on the occasion of intergovernmental negotiations.
- Data of high quality, broken down for gender-specific aspects, and thoroughly processed and translated into macro-strategies, are of little use in this connection if they depict women only in a victim role, stigmatising them. Just as the concept of vulnerability mainly served, in the earlier discourse on poverty, to emphasise the particular vulnerability of poor women to economic crises, the debate on adaptation to climate change has tended to depict women as victims. However, factors with social roots

36 To name the fields referred to: basic health care, integrated water resources management, combating deforestation and desertification, promotion of good governance and decentralisation (Scholz / Klein 2008, 2).

can be altered only by processes of social change. This is why it is essential that adaptation measures be geared to existing emancipatory potentials and capabilities of affected people.

3.2 Cross-cutting analysis of climate-policy instruments and adaptation-planning instruments

The 1992 United Nations Framework Convention on Climate Change (UNFCCC) constitutes, at the international level, both the political and the institutional framework for climate-change adaptation measures. In it, the industrialised countries commit themselves to support particularly vulnerable country groups in their efforts to adapt to climate change. Additional guidelines and financing mechanisms, including e. g. the Least Developed Countries Fund (LDCF), have been adopted for Least Developed Countries (LDCs).³⁷

While the Climate Framework Convention makes no reference whatever to gender issues, the 2001 Conference of the Parties in Marrakech (COP 7) established some first linkages to gender, although these have to do primarily to demands that the percentage of women in negotiating delegations be disclosed (Röhr 2006, 2).

In Marrakech some important decisions were taken on the institutional and financial framework with a view to advancing the efforts of developing countries to adapt to climate change. These decisions include an agreement on the need of LDCs to prepare National Adaptation Programmes of Action (NAPAs) which are to serve as the basis to identify their most pressing adaptation needs. The guidelines on the formulation of NAPAs stipulate that the latter need to be worked out in a participatory process involving the local population in particular. Another of the core elements of the guidelines has to do with gender inequality. It is emphasised in this connection that climate change has different impacts on men and women, with the former frequently being harder hit than the latter. For this reason women, as important repositories of local knowledge, need to be recognised as key stakeholders in consultations and in decision-making.³⁸

The institutional structure and the core principles of an NAPA display distinct parallels to the Poverty Reduction Strategy Papers (PRSPs).³⁹ Unlike NAPAs, PRSPs are embedded in

37 Brunnengräber et al. (2008, 160) note critically that the Climate Framework Convention, with its orientation towards financial and technology transfer and its spatially focused approach, has paved the way for the sectorally and strategically narrow approach to adaptation policy adopted by the international community. Horstmann (2008), on the other hand, argues that the Climate Framework Convention leaves open, and for good reasons, the question of what precisely is meant by the terms adaptation strategies and measures, in this way creating space for locally adapted programmes and strategies identified by means of participatory processes.

38 *“Climate change will have different impacts on men and women, and in most cases, the adverse effects of climate change disproportionately affect women. For example, with increasing drought it is women who have to walk longer distances to collect water. Women are often the main repositories of vital local and traditional knowledge, and they need to be recognized as key stakeholders in the consultations and in decision-making”* (UNFCCC LDC Expert Group: Annotated Guidelines for the Preparation of NAPAs, 2002, 7).

39 An official national focal point is in charge of NAPA management and a team of interdisciplinary experts is responsible for concrete elaboration. The process is accompanied by international donors like the World Bank, UNEP, or UNDP.

a multi-year policy cycle; one aspect common to both instruments, and required by donors, is that these papers need to be the product of a participatory process involving consultations with the local population and civil society representatives. Alongside broad country ownership, another common aspect is the requirement that consideration be given to cross-cutting issues. One obstacle to preparation of NAPAs on a broad scale must be seen in insufficient financial support. The Least Developed Countries Fund provides up to 200,000 US dollars per NAPA, depending on the size of a country and its population.

These parallels permit us to take a critical look at the extent to which NAPAs accord due consideration both to women as a target group and the need to advance gender equity. For years now Poverty Reduction Strategy Papers have been measured by means of surveys conducted in situ and cross-cutting analyses to determine the extent to which they have met the high expectations placed in them, and they have been found in many cases to deficient. In general, hardly any gender-specific data were collected, and those that were available were not analysed with a view to deepening them. Gender-specific problems were, ultimately, not analysed sufficiently for national poverty reduction strategies. One other aspect that came in for criticism was the fact that the possibilities available to women or representatives of disadvantaged groups to influence the preparation process were quite limited.⁴⁰

Participation and access to information in the NAPA process

Against the background of the criticism that has been voiced of a mainly gender-blind adaptation processes, international women's organisations see in the obligation of national governments to give the NAPA process a participative orientation a reasonable and promising point of departure for placing the special vulnerability of women and girls on the political agenda. But they are also demanding that women be included more comprehensively in relevant decision-making procedures. The few cases studies that have appeared on this issue have a sobering effect; they note that local and non-state actors have no more than limited influence in NAPA processes. Wherever consultation processes have taken place, the results have not necessarily been translated into concrete measures that serve to involve women or indeed to benefit them.⁴¹ There is a huge gap between the actual adaptive capabilities of women and efforts to translate this knowledge as well as women's needs into concrete political priorities. Above all in the countries of Sub-Saharan Africa, independent participatory consultation processes, gender studies, and short-term empirical research on gender-specific knowledge and adaptation strategies should be used to support and guide the NAPA process in its orientation. This is a reasonable measure that bilateral DC could have used to accompany and support the process. Data broken down and analysed for gender-specific aspects are one of the conditions required to ensure that gender criteria are included in the planning, structure, monitoring, and evaluation of poverty-oriented adaptation strategies (Brody / Demetriades / Esplen 2008, 16).

In addition, there are progress reports available from the PRSP cycle on the cross-cutting concerns of empowerment and broad inclusion of structurally disadvantaged, poor popula-

40 For a more extensive analysis from the gender perspective, see Rodenberg (2004) and the literature cited there.

41 See WEDO (2008, 20) and Brunnengräber et al. (2008, 166 ff.).

tion groups. These experiences and participatory processes should be taken into account in future NAPA preparation processes as well as in political decisions on adaptation policy.

One essential precondition for the participation of disadvantaged and vulnerable groups in the processes involved in developing adaptation strategies is access to information. In surveys, it was mainly women who complained about lack of access to knowledge, in two respects: on the one hand, women lack comprehensive information on what impacts climate change may have on their lives and livelihoods. On the other, at the local level many civil society representatives have no access to the political processes involved in developing adaptation strategies, because they lack the necessary information or because the information provided is not comprehensible. In some PRSP preparation processes, the public relations work that proved most successful was not only based on the conventional media but at the same time worked with multiple methods of communication and information dissemination – including in remote areas. Local radio broadcasts, theatre presentations, brochures with lists of simple questions on the interests of affected people, etc. have proven to be reasonable and effective means to strengthen the right to information, and they may, above all, promote the active involvement of women (Rodenberg 2007, 60 ff.).

Gender relevance of NAPA papers

There is also controversy over the contents of the National Adaptation Programmes of Action. As far as the human development factor is concerned, UNDP points to the low number and weak nature of the entry points offered by NAPAs that have already been submitted. While many of them provide a comprehensive picture of the emerging risks that climate change poses for vulnerable groups, these NAPAs are unable to process this information for use in the planning for adaptation measures in poverty reduction strategies. Conversely, only in exceptional cases do PRSPs make reference to the increasing vulnerability of poor people and include this information in national planning. That may be understood as an indication of the marginal political significance attached to adaptation policy, which has thus far been sufficiently integrated neither into bi- and multilateral DC nor into national development planning (UNDP 2007a, 189 and Brunnengräber et al. 2008 166 f.).

In terms of a gender perspective, the present assessment of this new policy instrument is not much more positive, either. A review of all NAPAs submitted by African countries by January of 2009 confirms the findings of screenings carried out elsewhere – which also covered NAPAs from Asia:

Scarcely one third of them make explicit reference to gender equality or equity as an important planning principle (Schalatek 2008). While nearly all of these NAPAs speak of the threat of “sectoral” and human effects of climate change on health, food security, availability of water, and even education, they rarely see links between the lower socio-economic status of women and their vulnerability. Still, some of these papers do point to the growing strain caused to women by the gender-specific division of labour involved in adaptation and outline cases involving drastic violations of women’s rights and social effects stemming from the impacts of climate change:

“Uganda’s NAPA describes ‘famine marriages’ which occur in times of drought when families marry off young daughters, securing dowry for their survival, but in-

creasing the spread of sexually transmitted diseases via older husbands who tend to have had many sexual partners. And because families in Tanzania have been forced to start purchasing water because of its scarcity, women must forgo other productive activities such as subsistence farming of cash crops that need irrigation” (WEDO 2008, 20).

One especially problematic aspect here is the conceptually narrow focus on women as victims of climate change. Very few adaptation strategies focus on women’s knowledge, change management capabilities, and political potential. The NAPAs submitted by Malawi, Zambia, and Tanzania, exceptions to the rule, present strategies geared to empowerment.⁴² If justice is to be done to the gender-sensitive model for NAPAs, they will be in need of substantial “adaptations” to bring them into line with the demands formulated in the guidelines. More DC support for the preparation of NAPAs would also be helpful.

3.2.1 Gender justice in climate financing?

In contrast to strategic adaptation planning in developing countries, the international community is investing very little in terms of financial support for adaptation. In its Human Development Report (2007), UNDP sees a need for over 86 billion US dollars for climate change adaptation in developing countries. However, the funds available from climate financing mechanisms and official bilateral DC amount only to 200 million US dollars.⁴³ Compared with the funds invested in climate and forest protection, i. e. made available for mitigation, adaptation mechanisms are significantly underfinanced.

Nor have the numerous new financing initiatives created by the donor countries of the North in connection with their DC done much to change this situation. With the exceptions of the GEF funds already set up and the World Bank’s Pilot Program for Climate Resilience (PPCR), most of these bi- and multilateral climate funds are geared to reducing greenhouse gas emissions by developing clean technologies, promoting renewable energies and energy efficiency, and investing in forest protection; but they are not geared to reducing the vulnerability and risks of marginalised population groups when it comes to the impacts of climate change. In development policy this proliferation of climate funds may lead to the parallel structures and fragmentation of assistance that the donor community is seeking to overcome with the new principles of development assistance. For adap-

42 *“Malawi, a notable exception, has identified gender as its own sector, not merely as a cross-cutting issue: Several interventions are proposed that target women in highly vulnerable situations: (i) empowerment of women through access to microfinance to diversify earning potential, (ii) ensuring easier access to water and energy sources by drilling boreholes and planting trees in woodlots, and (iii) use of electricity provided through the rural electrification program” (Malawi NAPA, March 2006, x–xi, in: WEDO ibid.).*

43 One contentious issue in both climate negotiations and the debate on development financing is whether the funds provided should be voluntary additional contributions or compensation paid by the countries mainly responsible for climate change. In the Kyoto Protocol and the Bali Action Plan as well as in the Doha Declaration on Financing for Development, the industrialised countries reaffirm their obligation to make new and additional funds available to finance adaptation. It is, however, unclear whether “additional” refers to funds additional to existing adaptation funds or to existing ODA funds. The donor community is also divided on the demand to mobilise adaptation financing in addition to the 0.7 goal, that is, without counting these funds towards ODA.

tation financing in particular, UNDP notes, what is being done is “too little, too late, too fragmented.”⁴⁴

The critical balance drawn by UNDP and others on the implementation of national adaptation plans is inextricably linked with the latter’s underfunding. Thus far, their implementation has not been supported significantly through bi- and multilateral DC, nor do the Climate Framework Convention’s funds have sufficient resources of their own. The NAPAs, for instance, are a product of the Least Developed Country Fund (LDCF), which, like the Climate Change Fund, is administered by the Global Environment Facility (GEF). The LDCF has less than 10 million US dollars, and 200,000 US dollars of this is made available to every country preparing an NAPA. Only eleven of a total of 38 NAPAs have been completed thus far. This figure, which is far too low, is not only a reflection of the general underestimation of global adaptation costs, indeed, it is also a reflection of the low political significance attached to efforts designed to reduce vulnerability and the social costs to which it leads. However, this underfunding is also relevant from the gender perspective, for one effect of the evident lack of willingness on the part of the donor community to reduce the vulnerability of the poor population is that it serves ultimately to intensify the especially high vulnerability of women and raises the risk that climate change could deprive them of their livelihoods. There is an urgent need to overcome conceptual bottlenecks in the relevant instruments and to ensure that gender aspects are given systematic consideration in climate policy. Without solid financing, these efforts are, however, likely to lead into a discourse devoid of any practical implications.

The lines of argument advanced thus far by gender experts have focused on equal access to technologies in climate protection strategies and CDM projects (Röhr 2008; Brody / Demetriades / Esplen 2008, 18 f.). This is one reason why we are now faced with a lack of studies and analyses on the quality and quantity of adaptation financing from a gender perspective.⁴⁵

Some recent, first position papers have now begun to take note of the highly multifaceted critique of the architecture of climate financing addressed above. They point, for instance, to the gender blindness of the World Bank’s new Strategic Climate Fund. The Pilot Program for Climate Resilience (PPCR), set up to promote mainstreaming of climate change adaptation into the national development planning and budgets of several developing countries, should actually give due consideration to gender aspects from the very start; but this has been done only in some individual cases. Nor do the financing mechanisms for which the multilateral development banks are responsible do much to provide for participation of actors from developing countries. However, every financing instrument that has impacts at the national level should give due consideration, *ex ante*, to gender-specific interests and social disparities within societies. Still, “funding competition” in the climate regime – that is, between the GEF, the financing arm of the UN Climate

44 A detailed overview of the adaptation funds already in place is presented in UNDP (2007a, 186 ff.), Dietz / Scholz (2008), and Horstmann (2008). For a critique of the “global patchwork quilt of financing mechanisms,” see Porter et al. (2008); and see Petit (2008) on the need to formulate adaptation financing in keeping with the Paris Principles.

45 Regrettably, we also find, again and again, that there is a need for dedicated studies on this aspect, since the critical studies on adaptation financing and the architecture of climate financing currently available fail to address gender issues. See Porter et al. (2008).

Framework Convention, on the one hand and the bilateral DC measures of donors countries and multilateral banks on the other – may also prove to have conducive effects when it comes to giving due consideration to gender in the relevant mechanisms. After all, nearly all donors as well as the World Bank and the regional development banks have – unlike the UNFCCC – committed themselves, in their policy guidelines, to advance equal opportunity and gender mainstreaming.⁴⁶

But against the background of a number of independent voices warning that the GEF could be sidelined politically, we see clearly that the advantage named above is not more than a chance viewed in isolation. The basic problem posed by the fact that climate adaptation policy gives far too little consideration to gender (in-)justice is only one element of the worldwide lack of accountability toward women and their recognised rights – on the part of governments and the market and its actors.⁴⁷ However, unlike governments and UN member states, banks and market-based institutions cannot be called to account if they fail to meet the social and political obligations they have voluntarily assumed. Institutional reforms and gender-sensitive mechanisms are the only way open to monitor and effectively address the glaring contradiction between existing obligations and the political practice of resource allocation. This is the reason why demands have been raised, from a gender perspective, in the incipient debate on climate financing that mandatory monitoring instruments need to be adopted for adaptation and climate protection.⁴⁸ The demands call in particular for

- adoption of gender-specific indicators to monitor the gender-just usefulness and the effects of climate funds, programmes, and projects;
- performance of gender impact assessments and gender audits;
- mandatory adoption of gender-responsive budgeting in national and international financing mechanisms in order to monitor the gender-specific allocation of resources and its effects/benefits;
- measures to ensure equal involvement of woman and men in negotiations on and implementation of financing mechanisms; and
- development and application of gender-specific indicators as well as of gender analysis in each phase of adaptation programmes and projects.

But more is needed than instruments to reduce the gap between the claims and the reality of a gender-just adaptation policy. What is called for is a clearly articulated political will and a substantial increase in international financial resources. And if this is not achieved, there will be doubts not only as to the effectiveness of poverty-oriented adaptation policy but also regarding whether the third MDG will be reached, and the achievement of all of the MDGs depends, in very crucial ways, on reaching MDG 3.

46 Schalatek (2008) and (2009). See also the case study on the Philippines prepared by the Heinrich Böll Foundation and WEDO (2008).

47 See UNIFEM, Progress of the World's Women 2008/2009 (UNIFEM 2008).

48 See Heinrich Böll Foundation / WEDO (2008, 4); Schalatek (2009), and Gender & Climate Change Network (2007, 9).

4 Recommendations

These recommendations on strengthening gender justice in development-related adaptation measures build on the strategic options offered by “mainstreaming plus.” They have been developed from the social-sciences perspective outlined above, and, like them, the present recommendations are based on a broad concept of poverty and a conception of vulnerability defined in terms of social considerations. They are addressed primarily to official DC agencies and keyed to the various areas in which the latter are active – their cooperation with the international community, their function as institutions responsible for managing bilateral DC, and as agencies committed, both internally and externally, to gender mainstreaming. The recommendations have an orientation more structural than gender-specific in nature. The following section starts out with recommendations for agencies responsible for development research and consulting / advisory services.

4.1 Recommendations for development research institutions

Situated at the interface between research and practice, independent research and consulting institutes like the DIE and others have a central role to play when it comes to contributing, on the basis of their research work, to closing the “gender and adaptation” gap. In all of their research work dealing with climate change, new research projects should for this reason include further studies and empirical research work on the issue of gender equity in poverty-oriented climate policy and/or climate policy from/with a gender perspective.

- In substantive terms, there is an urgent need for – to name an example – research on the issue complex of poverty- and **climate-related migration**. The design and execution of this research would need to adopt the gender-sensitive perspective required to analyse context- and gender-specific roles, responsibilities, and rights of women and men. Ultimately, the growing scarcity of natural resources leads here to conflicts that may substantially reduce the adaptive capacities of vulnerable groups (Tanner / Mitchell 2008b, 12 f.; Brody / Demetriades / Esplen 2008, 13).
- In methodological terms, gender-sensitive adaptation research needs to adopt a **multi-level approach**. To come up with policy-relevant results, such research needs primarily to focus on, and involve, the micro- and meso-level of society. Only in this way will it be possible to identify distribution conflicts at the household and local community levels. One absolute precondition for this is that the data collected and analysed are gender-specific, i. e. broken down for gender-related factors.
- For political advisory/consulting activities, it would be necessary to further develop existing instruments and criteria grids (or to revise them with a view to the problem complex of adaptation). These tools would then help to ensure that the goal of gender equity is factored into the preparation, implementation, and monitoring of adaptation strategies and policy instruments concerned with climate change.
- Instead of being restricted to adaptation, the more in-depth work done by research institutes on the gender issue should seek to help establish a visible gender perspective in studies on low-carbon development and climate and forest protection (mitigation).

4.2 Recommendations for donors and official DC agencies

There is no doubt that donors are faced with a very difficult task, a tightrope act as it were, in seeking, in their policies, neither to carry on in the footsteps of conventional approaches to the advancement of women nor to contribute, through mainstreaming, to rendering women's concerns "invisible." However, a poverty-oriented adaptation policy offers a good number of entry points for establishing linkages between the goals of strengthened women rights and sustainable development. It would for this reason be important to promote empowerment projects precisely in this area, not least also with a view to reaching the Millennium Development Goals.

As members of the international donor community:

- Effective and gender-sensitive multilateral mechanisms are essential to secure women's rights in international negotiations, but also to create substantial linkages between gender aspects and adaptation strategies. The donors in the EU and the DAC should therefore work for a significant increase in contributions to the relevant UN organisations, in particular for UNIFEM. They should also – in keeping with the quota demanded to ensure a gender-equitable ODA (20 % by 2015) – come out in favour of an increase in or targeted allocation of all donor funds earmarked for the implementation of the UNFCCC Climate Fund.
- Alongside intensified cooperation with UNDP, the bilateral donors should step up their cooperation with the FAO and its specialised departments for gender and adaptation and food security.
- They should likewise come out in favour of a gender-sensitive adaptation financing and a large measure of social accountability for the mechanisms used in the relevant bodies and take steps to advance the adoption of gender-responsive budgeting in national and international financing mechanisms designed to monitor the gender-specific allocation of funds. They should, furthermore, work for the adoption of gender impact assessments in the multilateral adaptation-financing mechanisms.
- In keeping with the provisions of the Accra Agenda for Action on aid effectiveness, one of the reference themes in the talks on coordination of the division of labour in the European Union should be "gender and climate change." Official DC agencies should explore possibilities of assuming a leadership role in establishing this linkage. This should include a review of the central planning instruments of the EU's DC, the Country Strategy Papers and the Regional Strategy Papers, to determine whether and to what extent they do justice to the needs of a double mainstreaming and where there are entry points for the issue complex of gender and adaptation.
- In addition, the Gender Tipsheets accessible in the DAC GenderNet should include sheets on "Gender & Climate Change" or "Gender & Adaptation" (see www.oecd.org/dac/gender).
- More intensive cooperation is recommended with the Gender and Climate Change Network (GenderCC) with a view to strengthening independent civil society organisations, which not only perform essential lobbying work in this issue field but also, and in many different ways, reflect the voices of vulnerable groups. Alongside WEDO, GenderCC is at present the most competent independent organisation in the field, and it is set to become a focal point of the "Women and Gender NGOs," a new constituency set up in the UN climate process. If it is to effectively fulfil this role, it will be in need of longer-term financial support from European donors involved in international coordination. To strengthen the position of women in the South in the

post-Kyoto-process climate negotiations, the BMZ and other donors should a) invite partners – from the South – of the international network to attend important meetings of the UNFCCC’s subsidiary bodies; b) anchor the gender dimension of climate protection and climate change in the contributions provided by the German negotiating delegation; and c) work to ensure that the plenary sessions of the official climate negotiations include an adequate time window for the gender dimension of climate change.

As partners in bilateral DC:

- UNDP’s Human Development Report 2007/2008 names three fields of action for efforts to strengthen adaptive capacities on the basis of improved planning and implementation competence in developing countries. These so-called levers are: information, infrastructure, and insurance for social protection. Wherever they constitute a priority for measures in bilateral cooperation, these levers should be reviewed to determine in what ways they can be formulated with a view not only to their poverty orientation but to their gender equity and gender sensitivity as well.
- In strategic terms, gender and adaptation would be better anchored at the macro-, the programme level. Wherever climate- and environment-related strategy papers have identified gender aspects and women’s rights as a serious problem, they should be prioritised in both intergovernmental negotiations and policy dialogue.
- When priorities are shifted, what is called for is not only mainstreaming plus but a “double mainstreaming plus.” In the priority areas food, agriculture, agricultural trade, water management, and governance in particular, efforts should be undertaken to give more systematic consideration to gender-relevant issues – including land rights and access to resources, capacity building and training, access to effective participatory structures – and this should be done in all stages of work, from analysis to strategy preparation. Impact monitoring should, accordingly, have a gender-sensitive orientation. To this end, efforts should be undertaken to broaden existing instruments, including e. g. gender impact assessments and gender-sensitive indicators, to include criteria geared to strengthening adaptive capacities.
- It should by no means be seen as an academic exercise when it is pointed out, as it is, time and again, that adaptation policy is beset by conceptual pitfalls. Indeed, the question of how the socially defined concept of vulnerability is applied in practice is a matter of political significance: Women are not victims of climate change and ecological degradation, and adaptation programmes and measures should address them in their role of agents of social change, and do so by linking support for coping strategies with programmes designed to strengthen political self-organisation and collective change potentials. Official DC agencies (as well as NGOs) should hone their sense for this approach with a view to ensuring that women, escaping their role of “helpers,” are able to assume the role of decision-makers when it comes to environmental protection. And it would hardly be possible to ask too critically where e. g. the empowerment element is to be found when women’s groups are harnessed to plant thousands of trees in reforestation measures in Kenya. In this regard, the donors should work, in African partner countries, for a joint evaluation, placing the focus on social and gender-specific disparities in adaptation projects.
- It is also important that bilateral measures do more to include and promote progressive conceptions of manliness, addressing men wherever socio-cultural role assignments are found to be impeding the adaptation and coping strategies of the two genders (e. g. in the issue fields flight, coping with disasters, resource conflicts, food security).

- “Gender” is also in need of expertise when it comes to implementing the binding obligation assumed by European governments to carry out gender mainstreaming and advance gender equity in their own (development-policy) institutions. The challenge of integrating poverty-oriented adaptation policy as a new cross-cutting task should be taken as an opportunity to include, on a mandatory basis, the gender approach in advanced training measures on “mainstreaming adaptation to climate change.” A series of advanced training courses specifically targeted to developing and promoting gender expertise would also be conceivable. This should open to all departments dealing with and interested in the issue complex of ‘climate’ (environment, food security, poverty, MDGs, gender, human rights, emergency aid as well as persons with regional responsibilities who are likely in the future to be focusing on climate protection and adaptation).

Bibliography

- Action Aid* (2008): The time is now: lessons from farmers adapting to climate change, Johannesburg
- Altwater, E. / A. Brunnengräber* (eds.) (2008): Ablasshandel gegen Klimawandel? Marktbasierete Instrumente in der globalen Klimapolitik und ihre Alternativen, Hamburg: VSA-Verlag
- Baede, A. P. M. / P. van der Linden / A. Verbruggen* (2008): Glossar Annex II, in: IPCC (eds.), Klimaänderung 2007, Synthesebericht: Ein Bericht des Zwischenstaatlichen Ausschusses für Klimaänderungen (IPCC), Berlin
- Biesecker, A. / U. von Winterfeld* (2008): „Wider die Kolonisierung im Klimaregime“, in: E. Altwater / A. Brunnengräber (Hrsg.), Ablasshandel gegen Klimawandel? Marktbasierete Instrumente in der globalen Klimapolitik und ihre Alternativen, Hamburg: VSA-Verlag, 185–198
- BMFSFJ (Bundesministerium für Familie, Senioren, Frauen und Jugend)* (2003): Gender Mainstreaming, was ist das? Berlin
- BMZ (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)* (2007): Klimawandel und Entwicklung: Die Entwicklungspolitik setzt Akzente, Bonn
- (2009): Entwicklungspolitische Gender-Aktionsplan 2009–2012, Bonn (Konzepte 173)
- Braidotti, R. et al.* (1994): Women, the environment and sustainable development: towards a theoretical synthesis, London: Zed Books
- Brody, A. / J. Demetriades / E. Esplen* (2008): Gender and climate change: mapping the linkages: a scoping study on knowledge and gaps, Brighton: BRIDGE
- Brunnengräber, A. et al.* (2008): Das Klima neu denken: Eine sozial-ökologische Perspektive auf die lokale, nationale und internationale Klimapolitik, Münster: Dampfboot-Verlag
- Demetriades, J. / E. Esplen* (2008): The gender dimensions of poverty and climate change adaptation, in: *IDS Bulletin* 39 (4), 24–31
- Denton, F.* (2002): Climate change vulnerability, impacts, and adaptation: why does gender matter?, in: R. Masika (ed.), Gender, development and climate change, Oxford: Oxfam, 10–20
- (2004): Gender and climate change: giving the ‚latecomer‘ a head start, in: *IDS Bulletin* 35 (3), 42–49
- Dietz, K. / I. Scholz* (2008): Anpassung an den Klimawandel – eine „neue“ Qualität von Multi-Level Governance im Nord-Süd-Kontext?, in: A. Brunnengräber et al. (eds.), Mit mehr Ebenen zu mehr Gestaltung? Multi-Level Governance in der transnationalen Sozial- und Umweltpolitik, Baden-Baden: Nomos, 182–201
- Eriksen, S. et al.* (2007): Climate change adaptation and poverty reduction: key interactions and critical measures, Oslo: University of Oslo (GECHS Report 1)
- FAO (Food and Agricultural Organization)* (2004): Gender perspectives on the conventions on biodiversity, climate change and desertification, Rome; online: http://www.fao.org/sd/dim_pe1/pe1_041002_en.htm (accessed 13 Jan. 2009)
- (2006): Energy and gender issues in rural sustainable development, Rome; online: http://www.fao.org/sd/dim_pe1/docs/pe1_060501d1_en.pdf (Stand: 13.01.2009)
- (2007): People-centred climate change adaptation: integrating gender issues, Rome; online: <ftp://ftp.fao.org/docrep/fao/010/a1395e/a1395e00.pdf> (accessed 13 Jan. 2009)
- (2008): Gender and equity issues in liquid biofuels production: minimizing the risks to maximize the opportunities, Rome; online: <ftp://ftp.fao.org/docrep/fao/010/ai503e/ai503e00.pdf> (accessed 13 Jan. 2009)
- Gender and Climate Change Network – Women for Climate Justice* (2007): COP 13 Bali – position papers; online: <http://www.genanet.de/fileadmin/downloads/themen/COP13/gender-cc-forest-final.pdf> (accessed 13 Jan. 2009)
- Heinrich Böll Foundation / WEDO (Women’s Environment and Development Organization) / Council of Women World Leaders* (2007): Report of high-level roundtable: how a changing climate impacts women, Washington, DC; online: http://www.boell.org/news/documents/Report_WomenClimateChange2007.pdf
- Heinrich Böll Foundation / WEDO (Women’s Environment and Development Organization)* (eds.) (2008): Gender and climate change finance: a case study from the Philipines, New York, Washington, DC

- Horstmann, B. (2008): Framing adaptation to climate change: a challenge for building institutions, Bonn: Deutsches Institut für Entwicklungspolitik (Discussion Paper 23/2008)
- IUCN (*International Union for Conservation of Nature*) (2007): Gender aspects of climate change: women as agents of change; online: http://cmsdata.iucn.org/downloads/climate_change_gender.pdf (accessed 13 Jan. 2009)
- / WEDO (*Women's Environment and Development Organization*) (2007): Gender equality and adaptation: adaptation funds for climate change must include gender; online: <http://www.wedo.org/files/GenderEqualAdaptation.pdf> (accessed 13 Jan. 2009)
- Kabeer, N. (1999): Resources, agency, achievements, reflections on the measurement of women's empowerment, in: *Development and Change*, 30 (3) 435–464
- Lambrou, Y. / G. Piana (2006): Gender: the missing component of the response to climate change, Rom: FAO; online: <http://www.fao.org/docrep/010/ai020e/ai020e00.htm> (accessed 13 Jan. 2009)
- Levina, E. (2007): Adaptation to climate change: international agreements for local needs, Paris: OECD / IEA
- / D. Tirpak (2006): Adaptation to climate change: key terms, Paris: OECD
- Masika, R. (ed.) (2002): Gender, development and climate change, Oxford: Oxfam
- Moser, C. (1989): Gender planning in the Third World: meeting practical and strategic interests, in: *World Development* 11/1989, 1799–1825
- O'Brien, K. et al. (2007): Beyond semantics: why different interpretations of vulnerability matter in climate change discourses, in: *Climate Policy* 7 (1), 73–88
- OECD/DAC (*Organisation for Economic Co-operation and Development / Development Assistance Committee*) (2006): Declaration on integrating climate change adaptation into development co-operation, Paris
- / – (2008): Statement of progress on integrating climate change adaptation into development co-operation, Paris
- Parry, M. et al. (eds.) (2007): Technical summary: climate change 2007: impacts, adaptation and vulnerability, contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge: Cambridge University Press
- Petit, B. (2008): “Den Vertrauensverlust überwinden”, in: *Entwicklung und Zusammenarbeit* 12/2008, 466–467
- Porter, G. et al. (2008): New finance for climate change and the environment, Washington, DC: WWF, Heinrich Böll Foundation
- Quan, J. / N. Dyer (2008): Climate change and land tenure: the implications of climate change for land tenure and land policy, Greenwich, London: University of Greenwich, IIED (Land Tenure Working Paper 2)
- Rodenberg, B. (1999): Lokale Selbstorganisation und globale Vernetzung: Handlungsfelder von Frauen in der Ökologiebewegung Mexikos, Bielefeld: transcript
- (2004): Gender and poverty reduction: new conceptual approaches in international development cooperation, Bonn: DIE (Berichte und Gutachten 4/2004)
- (2005): Die Berücksichtigung des Oberziels Armutsbekämpfung und der Querschnittsaufgabe Gender in neueren Schwerpunktstrategiepapieren: Querschnittsanalyse für das BMZ und die GTZ, Bonn, mimeo
- (2007): Stakeholder participation in PRS processes: recommendations for practitioners, in: W. Eberlei (ed.), Stakeholder participation in poverty reduction, Duisburg: INEF (INEF Report 86/2007), 49–67
- (2008): Entwicklungsfinanzierung zur Stärkung von globaler Geschlechtergerechtigkeit: Herausforderungen und Chancen im Doha-Prozess, Gutachten für das BMZ, Bonn
- Röhr, U. (2006): Gender relations in international climate change negotiations, genanet; online: http://www.genanet.de/fileadmin/downloads/themen/Themen_en/Gender_climate_policy_en_updated.pdf (accessed 13 Jan. 2009)
- (2008): Genderaspekte des Klimawandels: Ursachen, Auswirkungen, Gestaltungsmacht, in: Friedrich Ebert Foundation (ed.), Klimawandel, Klimaschutz und Gender, Bonn
- et al. (2008): Gender justice as the basis for sustainable climate policies, a feminist background paper, Bonn: Forum Umwelt und Entwicklung, genanet

- Schalatek, L.* (2008): Gender and climate finance: "Double Mainstreaming" for equitable development, Vortragsmanuskript (Power Point Präsentation) für Workshop von WEDO und Heinrich Böll Foundation, 6 December 2008, COP 14, Poznań
- (2009): Gender and climate finance: double mainstreaming for sustainable development, Washington, DC: Heinrich Böll Foundation North America
- Scholz, I.* (2008): Versprechen einhalten, in: *E+Z Entwicklung und Zusammenarbeit* 12/2008, 468–469
- / *R. Klein* (2008): Strategische Optionen für das Mainstreaming von Anpassung an den Klimawandel in der deutschen Entwicklungspolitik, Gutachten für das BMZ, Bonn
- Schroeder, A.* (2009): Gerechtigkeit im Wald: Ohne Landrechte keine Schutzerfolge, Bonn: Forum Umwelt und Entwicklung (Rundbrief 1/2009), 18–19
- Skutsch, M. M.* (2002): Protocols, treaties, and action: the climate change process' viewed through gender spectacles, in: R. Masika (ed.), *Gender, development and climate change*, Oxford: Oxfam, 30–39
- Tanner, T. / T. Mitchell* (2008a): „Introduction: building the case for pro-poor-adaptation”, in: *IDS Bulletin*, 39 (4), 1–5
- / – (2008b): Entrenchment or enhancement: could climate change adaptation help to reduce chronic poverty?, in: *IDS Bulletin* 39 (4), 6–15
- United Nations* (1998): Kyoto Protocol to the United Nations Framework Convention on Climate Change, New York
- (2005): Hyogo Framework for Action 2005–2015: building the resilience of nations and communities to disasters; online: <http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>
- (2008): Doha Declaration on Financing for Development, outcome document of the follow-up International Conference on Financing for Development to review the implementation of the Monterrey Consensus, New York, 9 December 2008; online: <http://daccessdds.un.org/doc/UNDOC/GEN/N08/630/55/PDF/N0863055.pdf?OpenElement>
- UNDP (United Nations Development Programme)* (2005): International cooperation at a crossroads: aid, trade and security in an unequal world, New York (Human Development Report 2005)
- (2007a): Fighting climate change: human solidarity in a divided world, New York (Human Development Report 2007/2008)
- (2007b): Den Klimawandel bekämpfen: Menschliche Solidarität in einer geteilten Welt, Bericht über die menschliche Entwicklung 2007/2008, Bonn: DGVN (German Summary)
- (2007c): Poverty eradication: MDGs and climate change: environment and energy; online: <http://www.undp.org/climatechange/adap01.htm>
- UNIFEM (United Nations Development Fund for Women)* (2008): Progress of the world's women 2008/2009: who answers to women?, Gender and accountability, New York
- WEDO (Women's Environment and Development Organization) et al.* (eds.) (2008): Gender, climate change and human security: lessons from Bangladesh, Ghana and Senegal, New York
- Winterfeld, U. von* (2008): What's the justice we're talking about here?, in: U. Röhr et al., *Gender justice as the basis for sustainable climate policies: a feminist background paper*, Bonn, genanet, Forum Umwelt und Entwicklung, genanet, 6–9

Links used

<http://www.gdn.online.org> (Gender and Disaster Network)

<http://www.climateforchange.net>

<http://www.genanet.de>

<http://www.gendercc.net>

<http://www.genderandwater.org/>

<http://www.genderandenvironment.org>

Annexes

Criteria grid used to screen policy instruments

- Are questions involving climate change set in relation to gender?
 - In what problem context?
 - Lack of a water supply; food scarcity?
 - Growing scarcity of resources, especially of land
 - Rising sea levels/environmental disasters: Flight, migration
 - Other?
- What conception of the gender approach do we find? Is reference made to women's (human) rights (to relevant national/international agreements)?
 - Are (poor) women mentioned as a special target group? Men?
 - Are practical or strategic interests addressed? (Assignment of responsibility, affectedness, vulnerability, agency)
 - Advancement of women, empowerment, mainstreaming, or dual strategy?
 - Is there detailed information available on (priority-relevant) gender problems, or are only rhetorical references made to the issue (once or more than once)?
- What concrete measures/instruments of gender mainstreaming and/or women's empowerment are proposed for climate adaptation?
 - Is participation in adaptation measures provided for?
 - In what framework? Phases? On what level: Micro/meso/macro?

Overview: Establishing linkages between MDGs, climate change, and gender

(MDG 3 has been mainstreamed throughout the analysis)

Millennium Development Goals	Threats due to climate change	Gender implications
<p>MDG 1: Eradicate extreme poverty and hunger</p>	<ul style="list-style-type: none"> • Reduction of agricultural production for survival and commercial ends • Food security at risk • Less access to safe water 	<p>Loss of domestic species of plants and animals used by women to ensure food security of their families.</p> <p>Reduction, mobilization, or extinction of marine species used by women for household consumption or for productive activities.</p> <p>Increase in women's workload due to decline in availability of water and other resources.</p>
<p>MDG 2: Achieve universal primary education</p>	<ul style="list-style-type: none"> • Increases the workload needed for agricultural production and subsistence activities • Environmental changes are likely to drive migration 	<p>Generally, girls and women are responsible for the collection of water and fuelwood. If the time they invest in these tasks increases, their capacity to attend school is at risk.</p> <p>According to UNHCR, 80 % of refugees in the world are women and children. Migration of populations, given extreme changes and disasters, could interrupt and limit the opportunities for education.</p> <p>Men are more likely to migrate, either seasonally or for a number of years. Female-headed households left behind are often the poorest. The workloads of these women, their children and the elderly increase significantly as a result of male emigration.</p>
<p>MDG 4: Reduce child mortality</p> <p>MDG 5: Improve maternal health</p>	<ul style="list-style-type: none"> • Environmental effects can aggravate the risk of contracting serious illnesses • Increased prevalence of some vector-borne diseases 	<p>Increase in women's workload due to their role as primary caregivers in the family.</p> <p>Loss of medicinal plants used by women.</p> <p>Pregnant women are particularly susceptible to water-borne diseases. Anaemia – resulting from malaria – is responsible for a quarter of maternal mortalities.</p>

Millennium Development Goals	Threats due to climate change	Gender implications
<p>MDG 6: Combat HIV/AIDS, malaria and other diseases</p>	<ul style="list-style-type: none"> • Increase in temperatures (heat waves) 	<p>Women and children are fourteen times more likely to die than men during a disaster. The high mortality rates of mothers/women/spouses during disasters result in an increase in: the numbers of orphans and mortality rates; early marriages for young girls (new spouses) causing them to drop out of school; trafficking and prostitution which in turn increase exposure to HIV/AIDS.</p> <p>Migration enhances the risk of getting HIV/AIDS, given that families are separated and they are forced to live in overpopulated spaces.</p> <p>In developing countries, the poorer households affected by HIV/AIDS have less resources to adapt to the impacts of climate change. The need to adopt new strategies for crop production (such as irrigation)</p>
<p>MDG 7: Ensure environmental sustainability</p>	<ul style="list-style-type: none"> • Extinction of species, changes in species composition, disruption of symbiotic relationships, changes in trophic cascades, among others. • Changes in the quantity and quality of natural resources could reduce the productivity of ecosystems. • Floods, droughts, rising sea levels, melting of glaciers and polar icecaps 	<p>Without secure access to and control over natural resources (land, water, livestock, trees), women are less likely to be able to cope with climate change impacts.</p> <p>Less available drinking water means women have to expend more effort to collect, store, protect and distribute water.</p> <p>Adaptation measures, related to anti-desertification, are often labour-intensive and women often face increasing expectations to contribute unpaid household and community labour to soil and water conservation efforts.</p> <p>Decrease in forest resources used by women.</p> <p>Women often rely on a range of crop varieties (agro-biodiversity) to accommodate climatic variability, but permanent temperature change will reduce agro-biodiversity and traditional medicine options.</p> <p>Lack of representatives and women's participation in the decision-making spheres related to climate change at all levels (local, national and international).</p>

Millennium Development Goals	Threats due to climate change	Gender implications
MDG 8: Create a global development partnership	<ul style="list-style-type: none"> • Climate change increases the challenge of complying with the MDG. • There is a need to increase financial resources for adaptation and mitigation initiatives. 	<p>Incorporate the gender approach when transferring technology and promoting programmes and projects in order to improve mitigation and adaptation.</p> <p>The response to climate change to support national adaptation and mitigation efforts must include principles of gender equality and ethnicity. Building capacities, management of South-South and North-South assistance and cooperation are vital in developing adequate responses.</p> <p>Investment in preventive infrastructure with a gender approach will lower rehabilitation costs.</p>
<p>Source: IUCN (2007): Gender and Climate Change (www.genderandenvironment.org) and www.un.org/womenwatch/downloads/Resource_Guide_English_FINAL.pdf</p>		

Overview: Human security, climate change, and gender“

Human Security	Security Aspect	Climate Change	Gender aspects	Adaptive strategies women	Opportunities (policy, etc.)
Security of survival	Mortality/injury	<ul style="list-style-type: none"> * Mortality through different extreme weather events 	<ul style="list-style-type: none"> * More women than men injured or die 	<ul style="list-style-type: none"> * Looking for safe shelter; improving homes and houses * Disaster risk reduction 	<ul style="list-style-type: none"> * Disaster preparedness * Early warning systems * Gender-specific (women's participation and access/control)
	Health	<ul style="list-style-type: none"> * Increased infectious diseases vectors * Physical and mental stress 	<ul style="list-style-type: none"> * Women bear the brunt of taking care of the sick, disabled. * HIV/AIDS increases due to early marriage, forced prostitution, etc. * Women lack access to (reproductive) health services * Loss of medicinal plants/ biodiversity 	<ul style="list-style-type: none"> * Medicinal plants and application of other preventive or alternative methods * Increase in caring tasks 	<ul style="list-style-type: none"> * Access to health facilities and services (for women) * Monitoring health situation * Reproductive health facilities
Security of Livelihood	Food security	<ul style="list-style-type: none"> * Agricultural production changes * Fishery stocks decrease 	<ul style="list-style-type: none"> * More time and energy needed for food production * Increased work-burden * Calorie-deficiency/hunger * Budgetary problems 	<ul style="list-style-type: none"> * Adapting the agricultural practices: switching to other crops, animals, or to other methods * Saving food, seeds and animals * Adaptation diets * Buying food 	<ul style="list-style-type: none"> * Agricultural extension in adaptive strategies, e. g. mixed cropping, better adapted crops/livestock * Affordable and ecologically-sound agricultural inputs * Better nutrition * Land rights for women * Marketing facilities
	Water security	<ul style="list-style-type: none"> * Lack of water * Pollution and salination of water * Flooding 	<ul style="list-style-type: none"> * More time and energy needed for water provision (household/ agriculture) * Increased work-burden * Health problems 	<ul style="list-style-type: none"> * Water-saving practices, including rainwater harvesting * Purchasing water from water-vendors 	<ul style="list-style-type: none"> * Safeguarding of affordable drinking water * Safe sanitation facilities * Preservation of wetlands

	Energy security	<ul style="list-style-type: none"> * Lack of biomass fuel * Dysfunctioning hydropower 	<ul style="list-style-type: none"> * More time and energy needed for fuel collection * Increased workburden. * Inferior energy-sources: indoor pollution 	<ul style="list-style-type: none"> * Switching to other energy-sources * Use of energy saving devices * Advocacy 	<ul style="list-style-type: none"> * Provision of fuel sources * Provision of (and training in) energy-saving devices * Ecological regeneration
	Environmental Security	<ul style="list-style-type: none"> * Environmental processes and services jeopardized 	<ul style="list-style-type: none"> * Poorest women living in insecure environments most affected 	<ul style="list-style-type: none"> * Building more secure houses * Cleaning up the environment * Regenerating the environment 	<ul style="list-style-type: none"> * Ecological restoration * Safe shelter areas
	Shelter security	<ul style="list-style-type: none"> * Housing, infrastructure and services destroyed 	<ul style="list-style-type: none"> * Limited land rights * Excluded from land planning * Male out-migration 	<ul style="list-style-type: none"> * Building more secure housing * Seeking shelter: migration 	<ul style="list-style-type: none"> * Safe shelters and solid housing
	Economic security	<ul style="list-style-type: none"> * Decreased income generating and credit opportunities 	<ul style="list-style-type: none"> * Women working in informal sector most affected * Costs for household budget increase (e. g. buying water) * Male out-migration: increase female headed households 	<ul style="list-style-type: none"> * Saving on expenses or money for lean times * Selling of assets and services * Alternative income generating activities 	<ul style="list-style-type: none"> * Affordable credit and financial facilities for women * Provision of alternative livelihood options
Dignity	Basic human rights	<ul style="list-style-type: none"> * Triggers violation of basic human rights: stress factor increases 	<ul style="list-style-type: none"> * Violence against women: at household level, in conflicts 	<ul style="list-style-type: none"> * Organization of women * Social networks 	<ul style="list-style-type: none"> * Supporting facilities (including counseling, community based organizations (CBOs)) * Defense of women's rights
	Capacity	<ul style="list-style-type: none"> * Lack of education and income generation opportunities 	<ul style="list-style-type: none"> * Girls dropping out of schools * No time left for education, training, income generation 	<ul style="list-style-type: none"> * Self-training, support groups and networks 	<ul style="list-style-type: none"> * Education * Skills training

Climate change adaptation from a gender perspective

	Participation	* No/limited part in decision-making; lack of information	* Lack of women's participation in climate change adaptation activity * Priorities neglected	* Organization * Advocacy * Participation	* Access to information * Ensure women's participation (in planning and decision-making) * Involvement of men in gender training
Source: WEDO et al. 2008, 14					

Overview: Evaluation of NAPAs⁴⁹

NAPAs	Gender / GM referred to?	Women / women's rights / family / (MR)	Vulnerability
Ethiopia	Yes	Yes	Yes
Benin	No	Yes	No
Burkina Faso	No	Yes	Yes
Burundi	Yes	Yes	Yes
Mali	No	Yes	Yes
Mauritania	No	Yes	No
Sambia	Yes	Yes	No
Tanzania	Yes	Yes	Yes
Dem. Rep. Congo		Yes	Yes
Djibouti	No	Yes	Yes
Eritrea	Yes	Yes	Yes
Gambia	Yes	Yes	Yes
Guinea	No	Yes	Yes
Guinea-Bissau	No	Yes	Yes
Lesotho	Yes	Yes	Yes
Liberia	Yes	Yes	Yes
Madagascar	No	No	Yes
Malawi	Yes	Yes	Yes
Mozambique	No	Yes	(No)
Niger	Yes	Yes	Yes
Rwanda	No	Yes	Yes
Samoa	Yes	Yes	Yes
Sao Tomé	Yes	Yes	Yes
Senegal	No	Yes	Yes
Sierra Leone	Yes	Yes	Yes
Sudan	No	Yes	Yes
Uganda	Yes	Yes	Yes
Central African Republic	No	Yes	Yes

49 Prepared by Simone Dohms.

NAPA Priority Projects by Sector			
NAPA	Gender	Women	Vulnerable
Coastal Zones	No	Yes	No
Cross Sectoral	Yes	Yes	Yes
Early Warning	No	Yes	Yes
Education and Capacity Building	No	Yes	No
Energy	No	Yes	Yes
Food Security	Yes	Yes	Yes
Health	Yes	Yes	Yes
Infrastructure	No	No	No
Insurance	No	No	No
Terrestrial Ecosystems	No	Yes	Yes
Tourism	No	No	No
Water Resources	Yes	Yes	Yes

Publications of the German Development Institute

Nomos Verlagsgesellschaft

Messner, Dirk / Imme Scholz (eds.): *Zukunftsfragen der Entwicklungspolitik*, 410 p., Nomos, Baden-Baden 2004, ISBN 3-8329-1005-0

Neubert, Susanne / Waltina Scheumann / Annette van Edig, / Walter Huppert (eds.): *Integriertes Wasserressourcen-Management (IWRM): Ein Konzept in die Praxis überführen*, 314 p., Nomos, Baden-Baden 2004, ISBN 3-8329-1111-1

Brandt, Hartmut / Uwe Otzen: *Armutorientierte landwirtschaftliche und ländliche Entwicklung*, 342 p., Nomos, Baden-Baden 2004, ISBN 3-8329-0555-3

Liebig, Klaus: *Internationale Regulierung geistiger Eigentumsrechte und Wissenserwerb in Entwicklungsländern: Eine ökonomische Analyse*, 233 p., Nomos, Baden-Baden 2007, ISBN 978-3-8329-2379-2 (Entwicklungstheorie und Entwicklungspolitik 1)

Schlumberger, Oliver: *Autoritarismus in der arabischen Welt: Ursachen, Trends und internationale Demokratieförderung*, 225 p., Nomos, Baden-Baden 2008, ISBN 978-3-8329-3114-8 (Entwicklungstheorie und Entwicklungspolitik 2)

Qualmann, Regine: *South Africa's Reintegration into World and Regional Markets: Trade Liberalization and Emerging Patterns of Specialization in the Post-Apartheid Era*, 206 p., Nomos, Baden-Baden 2008, ISBN 978-3-8329-2995-4 (Entwicklungstheorie und Entwicklungspolitik 3)

Loewe, Markus: *Soziale Sicherung, informeller Sektor und das Potenzial von Kleinstversicherungen*, 221 p., Nomos, Baden-Baden 2009, ISBN 978-3-8329-4017-1 (Entwicklungstheorie und Entwicklungspolitik 4)

[Books may be ordered only through publishing house or bookshops.]

Book Series with Routledge

Brandt, Hartmut / Uwe Otzen: *Poverty Orientated Agricultural and Rural Development*, 342 p., Routledge, London 2007, ISBN 978-0-415-36853-7 (Studies in Development and Society 12)

Krause, Matthias: *The Political Economy of Water and Sanitation*, 282 p., Routledge, London 2009, ISBN 978-0-415-99489-7 (Studies in Development and Society 20)

[Books may be ordered only through publishing house or bookshops.]

Springer-Verlag

Scheumann, Waltina / Susanne Neubert / Martin Kipping (eds.): *Water Politics and Development Cooperation: Local Power Plays and Global Governance*, 416 p., Berlin 2008, ISBN 978-3-540-76706-0

Berichte und Gutachten

[Price: 9,63 Euro; books may be ordered directly from the DIE or through bookshops. This publications series was terminated and superseded by the new publications series "Studies", starting November 2004.]

Studies

- 51 *Wiemann, Jürgen et al.*: Laos on its Way to WTO Membership: Challenges and opportunities for developing high-value agricultural exports, 186 p., Bonn 2009, ISBN 978-3-88985-487-2
- 50 *Makhan, Davina*: Linking EU Trade and Development Policies: Lessons from the ACP-EU trade negotiations on Economic Partnership Agreements, 184 p., Bonn 2009, ISBN 978-3-88985-486-5
- 49 *Rhys Jenkins / Enrique Dussel Peters*: China and Latin America: Economic relations in the twenty-first century, 397 p., Bonn 2009, ISBN 978-3-88985-485-8
- 48 *Zimmermann, Roukayatou*: Agricultural Policies in Sub-Saharan Africa: Understanding CAADP and APRM policy processes, 178 p., Bonn 2009, ISBN 978-3-88985-484-1
- 47 *Gänzle, Stefan*: Coping with the 'Security-Development Nexus': The European Community's Instrument for Stability: rationale and potential, 86 p., Bonn 2009, ISBN 978-3-88985-483-4
- 46 *Richerzhagen, Carmen et al.*: Zhongguo-jianzhu-jieneng: zhengce, zhang'gi he jiyu 141 p., Bonn 2009, ISBN 978-3-88985-482-7 (Chinese edition of Studies 41 – ISBN 978-3-88985-377-6)
- 45 *Grimm, Sven et al.*: The African Peer Review Mechanism (APRM) as a Tool to Improve Governance: Experience in Ghana, 161 p., Bonn 2009, ISBN 978-3-88985-481-0

[Price: 10,00 Euro; books may be ordered directly from the DIE or through bookshops.]

Discussion Paper

- 23/2009 *Pegels, Anna*: Prospects for Renewable Energy in South Africa: Mobilizing the private sector, 33 p., Bonn 2009, ISBN 978-3-88985-473-5
- 22/2009 *Krause, Philipp*: A Leaner, Meaner Guardian? A qualitative comparative analysis of executive control over public spending, 28 p., Bonn 2009, ISBN 978-3-88985-472-8
- 21/2009 *Rodenberg, Birte*: Anpassung an den Klimawandel aus Geschlechterperspektive: Eine Querschnittsanalyse entwicklungs- und klimapolitischer Instrumente, 58 p., Bonn 2009, ISBN 978-3-88985-471-1
- 20/2009 *Stamm, Andreas et al.*: Sustainability-oriented Innovation Systems: Towards decoupling economic growth from environmental pressures? 42 p., Bonn 2009, ISBN 978-3-88985-470-4
- 19/2009 *Grimm, Sven / Nils-Sjard Schulz*: International Division of Labour – Towards a Criteria-Led Process?, 49 p., Bonn 2009, ISBN 978-3-88985-468-8
- 18/2009 *Das, Ram Upendra*: Regional Trade-FDI-Poverty Alleviation Linkages: Some analytical and empirical explorations, 21 p., Bonn 2009, ISBN 978-3-88985-468-1
- 17/2009 *Schorlemmer, Priska*: Herkunft der ODA-Mittel, der Einzelplan 23 und das BMZ – eine Analyse der deutschen Entwicklungsfinanzierung, 32 p., Bonn 2009, ISBN 978-3-88985-467-4
- 16/2009 *Hackenesch, Christine*: China and the EU Engagement in Africa: Setting the stage for cooperation, competition or conflict? Bonn 2009, ISBN 978-3-88985-466-7

[Price: 6,00 Euro; books may be ordered directly from the DIE or through bookshops.]

A complete list of publications available from DIE can be found at:

<http://www.die-gdi.de>

