

Helpdesk Research Report: Climate Change and Empowerment

Date: 22.02.2011

Query: How has accountability and empowerment been introduced and conceptualised in climate change mitigation and adaptation policies/interventions (excluding community-based adaptation)?

Enquirer: DFID

Contents

1. Overview
2. Concepts and approaches
3. Guidelines and tools
4. Case studies
5. Additional information

1. Overview

There is limited but growing attention to the ways in which empowerment and climate change policy and interventions interact with and benefit each other. The vast majority of this literature focuses on the empowerment of women, and centres on climate change adaptation. While the links between gender and adaptation and gender perspectives on adaptation have been explored to some extent, the gender aspects of mitigation are still preliminary (UNDP, 2009; Rodenberg, 2009). There is also very limited discussion on concepts of accountability in climate change policy and interventions, outside of climate finance (which was covered in the previous report dated 20/12/10). As such, this report focuses on empowerment, particularly empowerment of women, and climate change adaptation and mitigation.

Climate change affects women and men differently, yet women are often unable to voice their specific needs. The exclusion of women's voices also means that their extensive knowledge of the environment and resource conservation is untapped. It is increasingly recognised that empowering women, children and other marginalised groups is beneficial not only as a policy in itself, but also as a means of strengthening the effectiveness of climate change measures (UNDP, 2009; GTZ, 2010). Women, children and indigenous groups with local knowledge need to be seen as active participants (GTZ, 2010; Tanner, 2010). Children in various communities, such as Cambodia, Kenya, and El Salvador, for example, have already been taking action to reduce disaster risks and adapt to climate change (Tanner et al., n.d.; Polack, 2010). There is also evidence that since women in developing countries have primary responsibility of providing for their families, they are more reliant on natural resources and are thus more careful stewards of them and the environment (PWC, 2008). They have been engaging in various efforts that qualify as climate change mitigation and adaptation activities.

The following are examples of ways in which the empowerment of women can benefit climate change adaptation and mitigation and how women can potentially benefit from existing climate policies and mechanisms.

Mitigation

Natural resource conservation/ carbon capture, fixing or sequestration: women have been actively involved in reforestation, afforestation, regenerating ecosystems and preventing deforestation. Some projects, such as the Greenbelt Movement which empowers women and their families to plant trees throughout Kenya, have received climate financing – providing an example of how the empowerment of women can contribute to climate change mitigation and further improvement in women's quality of life (GBM, 2009; World Bank, 2006; UNDP, 2009; PWC, 2008). In most other cases, however, women have rarely been paid for these 'environmental services'. Instruments such as the Clean Development Mechanism (CDM), 'Reduction of Emissions from Deforestation and forest Degradation' (REDD), emissions trading and climate funds could provide compensation for these services (GTZ, 2010). It is important that women are able to participate fully in climate financing policy-making from the start and in the different applications of CDM, REDD and other climate funds (UNDP, 2009).

Agroforestry: as part of reforestation and afforestation efforts, women could plant trees that not only sequester emissions, but also produce a crop, which may provide them with a source of income (GTZ, 2010)

Energy: producing and using bioenergy and biofuels could benefit women if combined with policies and practices that aim to reduce poverty and gender inequalities. Producing jatropha biofuel, for example, can reduce soil erosion and increase water retention; at the same time, small-scale jatropha community initiatives (such as the production of soap and shea butter cream) have empowered women by providing sources of income (UNDP, 2009). In addition, the use of energy-efficient stoves and ovens could reduce unhealthy emissions and cut down on cooking time, which would allow women more time to devote to possible income-generating activities. The use of solar energy can also provide women with income generating opportunities. In India, for example, women street vendors that use solar lamps spend less on kerosene and can extend the time available to them to sell their products by up to two hours. In addition, since they are unaffected by power outages in the overall grid, they have a competitive advantage (GTZ, 2010).

Adaptation

Adapted agricultural production: this refers to the adoption of cultivation and irrigation methods that allow for crop security even in the event of natural resource depletion or unforeseen weather conditions. Pilot experiences have demonstrated that women have the knowledge to develop and disseminate innovative cultivation methods. In Malawi, for example, women smallholders have been able to develop ecological cropping techniques, which have succeeded in producing a second maize crop and overcoming famine situations. If women were given greater decision-making powers in families and communities and equal access to natural resources and land ownership, they could produce more resistant crops, resulting in greater food security and possible surpluses and income (GTZ, 2010; Rodenberg, 2009; UNDP, 2009).

Soil and water conservation: many women, in their roles as primary producers of food for subsistence, have adopted cropping methods and taken other actions that protect and conserve soil and water (PWC, 2008). There are various instances where women's knowledge and activism have helped to control erosion, prevent flood damage, and improve access to water. Including women in decision-making would allow for their knowledge to benefit entire communities (UNDP, 2009).

The linkage between climate change and empowerment poses challenges for the design of projects. There are various ways in which to promote empowerment while also counteracting climate change. The two themes can be successfully combined only if they are thought of together from the very start of a measure and are translated into an integrated project design (GTZ, 2010). The incorporation of rights analysis, participation and the perspective of marginalised groups has been and should be included in planning documents, such as National Adaptation Programmes of Action (NAPAs) and national climate change strategies or programmes (Polack, 2010; N.O. comments). This requires increased capacity for

conducting rights analysis, and the greater involvement of rights experts in climate change programme planning (Polack, 2010).

Multi-level networks can also play a role in increasing the voice of vulnerable groups. In Canada, for example, indigenous groups have been empowered in recent decades through the recognition of indigenous rights. This has allowed them to develop new horizontal links that allow for knowledge exchange and coordination among communities; and vertical links that make it possible for local voices to be heard in national, regional and international fora and for inclusive deliberation. Governance systems that facilitate such links contribute to more effective monitoring and responsiveness such that decisions are not made by centralized agencies with little knowledge of the local (O'Brien et al., 2009, p. 10). Elsewhere, various civil society organisations came together in a workshop in Brazil to develop social and environmental safeguards for REDD programmes. These safeguards, the 'REDD+ Social and Environmental Principles and Criteria' are to be used as a reference for the development, application and monitoring of forest carbon projects and REDD+ government programmes. The aim is to strengthen forest governance; to improve information transparency, coordination among stakeholders and public participation in decision-making; and to recognise and respect the rights of traditional populations and Indigenous Peoples (Members of the Committee, REDD, 2010).

2. Concepts and approaches

O'Brien, K., Hayward, B., and Berkes, F., 2009, 'Rethinking Social Contracts: Building Resilience in a Changing Climate', *Ecology and Society*, vol. 14, no. 2, 12
<http://www.ecologyandsociety.org/vol14/iss2/art12/ES-2009-3027.pdf>

This paper explores social contracts and the evolving relationship between states and citizens in the face of climate change and multi-level networks. It argues that issues of climate change involve recognition of the rights and responsibilities of distant people and future generations, yet such vulnerable groups often have little voice in current social contracts. The lack of critical analysis in efforts to address climate change and forge a new environmental contract means that existing power relations are rarely challenged.

The paper discusses case studies from northern Canada, Norway and New Zealand (resource-dependent economies with indigenous populations and a tradition of strong liberal social contracts) in order to demonstrate how multi-level networks can play a role in increasing the voice of vulnerable groups. In Canada, for example, indigenous groups have been empowered in recent decades through the recognition of indigenous rights. This has allowed them to build their own capacities and find new partners. They have been able to develop new horizontal links that allow for knowledge exchange and coordination among communities; and vertical links that make it possible for local voices to be heard in national, regional and international fora and for inclusive deliberation. "Governance systems that facilitate horizontal and vertical links build resilience in social-ecological systems because they provide the potential for a tighter coupling of monitoring and response, so that decisions are not made by centralized agencies with little knowledge of the local" (p. 10).

Approaches to empower women

GTZ, 2010, 'Climate Change and Gender: Economic Empowerment of Women through Climate Mitigation and Adaptation?', Working Paper, Governance and Democracy Division, GTZ Governance Cluster
http://www.climatehealthconnect.org/sites/climatehealthconnect.org/files/resources/17353_diskussionspapierenlayoutgc12941558.pdf

Climate change affects women and men differently, yet women are often unable to voice their specific needs. The exclusion of women's voices also means that their extensive knowledge of the environment and resource conservation is untapped. This paper argues that women need to be seen as actors with

specific needs in climate in climate mitigation and adaptation measures, and that the large potential of integrating women's economic empowerment in such measures must be recognised. "In addition to all that is generally required to ensure a gendered approach, the linkage between climate change and economic empowerment also poses challenges to the design of the project. The two themes can be successfully combined only if they are thought of together from the very start of a measure and are translated into an integrated project design. [...] Added value can then be achieved for climate mitigation, for the economic participation of women, their empowerment, gender equality and economic growth in the partner countries" (p. 17).

The paper explores the meaning of empowerment and highlights the definition: "the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them" (p. 7). It lists the following elements commonly cited in development policy literature as necessary in the integration of women in economic and development processes (see p. 7). Women must:

- have access to education, training and upgrading
- have access to and control over productive resources including access to land and ownership rights
- have access to markets (land, labour, financial and product markets)
- have access to services
- draw benefit from the use of public funds, particularly for infrastructure, and enjoy access to public goods
- enforce claims for unpaid (reproductive) work and be able to benefit from re-distribution and remuneration for such work
- be able to generate income from the use of their own labour.

The paper goes on to supplement this list to include elements that are particularly relevant for issues of climate change (see pp. 8-9). It stresses that there are various ways in which to promote women's economic participation while also counteracting climate change. It outlines possible approaches to economic empowerment of women through adaptation and mitigation in the following areas:

Mitigation – greenhouse gas reduction

Natural resource conservation: women have been at the forefront of conservation efforts, including conservation of forests, reforestation and afforestation of cleared land; however, they have rarely been paid for these 'environmental services'. Instruments such as the Clean Development Mechanism (CDM), emissions trading and climate funds could provide compensation for these services. In addition, mechanisms such as the 'Reduction of Emissions from Deforestation and forest Degradation' (REDD) could potentially be used to pay women for forest conservation. It is important when designing such mechanisms that local communities that have much knowledge of forest conservation and natural resource management are included in the planning and implementation of REDD projects.

Agroforestry: as part of reforestation and afforestation efforts, women could plant trees that not only sequester emissions, but also produce a crop (agroforestry), which may provide them with a source of income. Additionally, these projects could be connected to emissions trading.

Energy: the promotion of renewable energies that contribute to emissions reduction is a key component of mitigation. In developing countries, women are often responsible for providing energy and usually resort to energy-inefficient, time consuming open burning of biomass. The use of energy-efficient stoves and ovens could reduce unhealthy emissions and cut down on cooking time, which would allow women more time to devote to possible income-generating activities. The use of solar energy can also provide women with income generating opportunities. In India, for example, women street vendors that use solar lamps spend less on kerosene and can extend the time available to them to sell their products by up to two hours. In addition, since they are unaffected by power outages in the overall grid, they have a competitive advantage.

Adaptation

Adapted agricultural production: this refers to the adoption of cultivation and irrigation methods that allow for crop security even in the event of natural resource depletion or unforeseen weather conditions. Pilot experiences have demonstrated that women have the knowledge to develop and disseminate innovative cultivation methods. If women were given greater decision-making powers at the family and community level with regard to agricultural production, they could produce more resistant crops, resulting in greater food security and possible surpluses and income.

Soil and water conservation: besides adapting production methods, it is also important to conserve soil and water sources as the basis of agricultural production. Women play a key role here too and are often keen to address the problem as it affects their agricultural productivity and access to water. Both are necessary to improve production and generate income.

Rodenberg, B., 2009, Climate Change Adaptation from a Gender Perspective: A Cross-cutting Analysis of Development Policy Instruments, German Development Institute, Bonn

[http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/%28ynDK_contentByKey%29/ANES-7ZLHXG/\\$FILE/DP%2024.2009.pdf](http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/%28ynDK_contentByKey%29/ANES-7ZLHXG/$FILE/DP%2024.2009.pdf)

This paper outlines and discusses various problems areas of climate change from a gender perspective:

Agricultural production and food security: women's limited decision-making powers in family and communities make it difficult for them to use their adaptation knowledge or to try it out in small areas. In Malawi, women smallholders have been able to develop ecological cropping techniques, which have succeeded in producing a second maize crop and overcoming famine situations. Thus, "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" (p. 17).

Water scarcity and uncertain water supply: growing scarcity of freshwater and sources of clean drinking water also mean greater workloads for women and girls, given the division of labour. Having to walk longer distances also subjects women and girls to the risk of sexual assault and harassment. Adaptation strategies need to factor in these vulnerabilities and inequities.

In order to conduct gender-sensitive adaptation research, the paper recommends that development research institutions adopt a multi-level approach that incorporates micro- and meso-levels of society. In addition, the data collected and analysed must be broken down for gender-related factors. The paper also recommends that research institutes should seek to look beyond adaptation and to establish a visible gender perspective in studies on mitigation, such as low-carbon development and climate and forest protection.

The paper also provides various recommendations for donors. These include:

- A shift in the perception of women: women should be viewed not solely as "helpers" but as decision-makers in environmental protection.
- Attention to gender justice in climate financing: climate adaptation-financing mechanisms need to be designed with due consideration to gender-specific interests and social disparities within societies. Gender-specific indicators are required to monitor and assess the effects of climate funds, programmes and projects. In addition, there need to be measures in place to ensure equal involvement of women and men in negotiations on the implementation of financing mechanisms.
- Greater cooperation with civil society: more cooperation with the Gender and Climate Change Network would be beneficial with a view to strengthening independent civil society organisations that reflect the voices of vulnerable groups.

PWC, 2008, 'What is Success in a Connected World? Empowering Women to Empower the Earth', PriceWaterhouseCoopers

http://www.pwc.com/en_GX/gx/women-at-pwc/assets/empoweringwomen.pdf

This paper explores four pathways to progress involved in the empowerment of women: choice; stewardship; economic development; and human and capital resources. Each of these pathways represents a complex mix of social, cultural, political and economic relationships. The paper cautions that there is no easy link between any kind of empowerment and ecological benefits.

Choice: empowering women could have an impact on sustainability through a reduction in fertility rates that would lessen the demands on the environment from population growth. Various aspects of empowerment, such as access to income and credit; clear land title; education and decision-making authority, are considered to result in women's decisions to have fewer children. Education seems to be the most powerful factor; there is a strong correlation between women's educational achievement and total fertility rates.

Stewardship: there is evidence that since women have primary responsibility of providing for their families, they are more reliant on natural resources and are thus more careful stewards of them and the environment. In their roles as primary producers of food for subsistence, for example, many women in developing countries have adopted cropping methods that protect the soil and its fertility. The Greenbelt Movement, whereby women have planted millions of trees (reversing deforestation), is another example of how empowering women to act on their appreciation of the value of natural resources can impact on sustainability.

As a result of their responsibilities, women are often also most impacted by environmental degradation and climate change. Degradation of forest resources and scarcity of water means that women have to walk further to collect wood and water. Women are often not involved in decision-making processes, however, concerning how these natural resources are governed.

Economic development: while female empowerment may speed economic activity, there is some evidence that it could also mitigate the impact of economic growth on the environment. Female empowerment in business and political realms correlates with reductions in energy intensity in middle- and low-income countries.

Human and capital resources: the potential environmental impact of the empowerment of women is amplified when women gain more access to education, more secure land titles and greater opportunities to earn higher incomes. In India, for example, a rise in household incomes and better education of women about alternative methods of cooking, heating and disposing of waste contributed significantly to the use of cleaner burning fuels.

Child rights-based and child-centred approaches

Polack, E., 2010, 'Child Rights and Climate Change Adaptation: Voices from Kenya and Cambodia', IDS and Plan International

http://www.childreninachangingclimate.org/database/CCC/Publications/Polack_VoicesFromKenyaAndCambodia_2010.pdf

This article adopts a rights-based approach to the protection of children from climate change and the participation of children in adaptation. It outlines a number of Articles on the Convention on the Rights of the Child are particularly pertinent to a changing climate (see pp. 11-13). Children in Kenya and Cambodia themselves have identified various violations of their rights stemming from the effects of climate change.

The article outlines that adaptation planning and delivery should include (see p. 17):

- Climate vulnerability and capacity analysis disaggregated by age, gender, urban and rural.
- Engagement with and support for participatory spaces created by, with, and for children.
- Child-centred resilience projects and programmes with dedicated support and resources (dealing particularly with underlying causes of vulnerability).
- Child rights-based indicators for monitoring and evaluation.
- Strengthening local institutions and tackling gender inequality, which is relevant to increasing the adaptive capacity of children and their communities.

The paper stresses that children need to be considered in a way that acknowledges their rights, capacities and agency. Children in both research locations, Cambodia and Kenya, have experienced cycles of drought and floods and are capable of contributing to the identification of community-based adaptation strategies. Positive examples of local strategies for sustaining participation of children include: school clubs in Kenya and the inclusion of children at local level Disaster Management Committees (CCDM) in Cambodia. Through the school clubs, children have been empowered to collaborate and are informed of the mandates of various actors such that they can engage as citizens and seek to have their voice heard. The patron of the club is knowledgeable about agroforestry and shares this expertise with the children. Dialogue between children and local authorities is facilitated through the CCDM, although it is unclear how much of a voice the children will have.

The paper provides recommendations for child sensitive adaptation planning. It should include (see p. 32):

- Child rights analysis and perspective in planning documents, such as National Adaptation Programmes of Action (NAPAs) and national climate change strategies or adaptation programmes. This requires increased capacity for conducting child rights analysis, and therefore greater involvement of child rights experts in adaptation planning.
- Climate vulnerability and capacity analysis disaggregated by age, gender, urban and rural. This would include analysis of children's knowledge and capacity relating to risk reduction and adaptation. Tools such as participatory vulnerability and capacity assessments can be oriented towards children and climate change.
- Participatory spaces created by, with, and for children locally and nationally. Children are part of civil society and different platforms for children's voice to be heard in any policymaking that affects them will strengthen adaptation planning.
- Child-centred resilience projects and programmes with dedicated support and resources (dealing particularly with underlying causes of vulnerability). This could involve delivering targeted assistance that has incorporated likely climate scenarios.
- Child rights-based indicators for monitoring and evaluation – both for broad 'enabling environment' frameworks and more targeted programmes. A degree of participatory monitoring and evaluation is essential, and inclusion of process indicators to assess children's empowerment and participatory governance.

Tanner, T.M., 2010, 'Shifting the Narrative: Child-led Responses to Climate Change and Disasters in El Salvador and the Philippines', *Children and Society*, vol. 24, pp 339–351

http://www.iiep.unesco.org/fileadmin/user_upload/Cap_Dev_Technical_Assistance/pdf/2010/Tanner_Children_and_Society_2010.pdf

Linkages between children, climate change and disasters have generally viewed children as passive and focused on their vulnerability and need for protection. This article adopts a different perspective, viewing children as active participants, and seeks to explore the ways in which children can prevent, respond and adapt to disaster and climate change impacts. Children have been involved in various activities, including disaster preparedness and monitoring; rescue and rehabilitation of the population in the event of a disaster (children have provided practical and creative ideas for rehabilitation); and preventative risk reduction actions (e.g. promoting general risk awareness in the community, collecting plastic waste to avoid pollution and flooding, and reforestation programmes).

The paper emphasises that risk perception and communication are key concepts in defining the ability of children's groups to mobilise other actors and resources to reduce climate change and disaster risks facing their communities. "Improved understanding of the cultural construction of risk, and of key actors, channels, messages and media within communities will therefore need to play an increasingly important role in future programmes aimed at increasing child voice and agency to tackle climate change and disaster risks" (p. 348).

Tanner, T. et al., n.d. 'Children's Participation in Community-based Disaster Risk Reduction and Adaptation to Climate Change'

<http://pubs.iied.org/pdfs/G02813.pdf>

This article discusses new, ongoing research on the role of children in the policy and practice of climate adaptation and disaster risk reduction. This research demonstrates that children and young people can participate in climate change and DRR activities in the following ways (see p. 56):

- as analysers of risk and risk reduction activities;
- as designers and implementers of projects;
- as communicators of risks and risk management options (especially communications to parents, other adults, or those outside the community);
- as mobilisers of resources and people; and
- as constructors of social networks and capital.

In many of the study communities, children were already taking community-based action to reduce disaster risks and adapt to changing climate. In El Salvador, younger children focused more on preventative measures, particularly passing on to others information and knowledge from training received from outside agencies. Older children developed guidance from training sessions further and took initiative to undertake activities to mitigate risks (e.g. building barriers, improving waste disposal containers, and trimming trees).

In some areas, the organisation Plan has supported the development of mini-projects conceived, managed and implemented by children's groups. This has increased awareness among children of their role as agents of change.

3. Guidelines and tools

UNDP, 2009, 'Resource Guide on Gender and Climate Change', UNDP

http://content.undp.org/go/cms-service/download/asset/?asset_id=1854911

This resource guide aims to inform practitioners and policy makers of the linkages between gender equality and climate change and their importance in relation to the achievement of the Millennium Development Goals. It stresses the necessity of including women's voices, needs and expertise in climate change policy and programming in order to support gender equality and women's empowerment. It also demonstrates how women's contributions can strengthen the effectiveness of climate change measures.

Chapter 4 of the guide links climate change mitigation and adaptation strategies to gender equality and women's empowerment strategies, and presents experiences and initiatives of integrating actions.

Adaptation

The guide emphasises that adaptation strategies for climate change will be more effective if made with a participatory decision-making process. Women must be included in these processes as they use and manage resources differently than men and are affected differently by the degradation of natural resources. Women in rural areas in developing countries, for example, are the principle producers of

basic foods and have thus taken action to conserve soil and water. Various examples in different countries are provided where women's knowledge and activism have helped to control erosion, prevent flood damage, and improve access to water. Including women in decision-making would allow for their knowledge to benefit entire communities.

The guide draws on seven principles for including a gender perspective in reconstruction and recovery:

1. Think big: gender equality and the principles of risk reduction must guide all disaster mitigation aspects, responses to disasters and reconstruction. The window of opportunity is quick to close.
2. Know the facts: gender analysis is imperative to directly helping victims and planning an equitable recovery.
3. Work with women in base organizations: in communities, the women's organizations have information, knowledge, experiences, networks and resources that are vital to increasing resilience in the face of disasters.
4. Work with and build the capacities of already existing women's groups.
5. Resist stereotypes: base all initiatives on knowledge of the specific contexts and differences of each culture, economic situation, as well as politics and gender, and not on generalizations.
6. Use a human rights approach: democratic and participatory initiatives help women and girls more. Both men and women have a right to the conditions they need to enjoy their fundamental human rights, as well as simply to survive.
7. Respect and build women's capacities. Avoid overburdening women, who already have a very heavy workload and many family responsibilities.

(Source: Gender and Disasters Network, 2005, p. 59 of the Guide)

Mitigation

Actions associated with mitigation are grouped into two areas: 1) the reduction of GHG emissions and 2) the capture, fixing and sequestration of carbon. The guide notes that while the links between gender and climate change adaptation have been explored to some extent, the gender aspects of mitigation are still preliminary.

Carbon capture, fixing or sequestration: the guide cites various examples of women's involvement in reforestation, afforestation, regenerating ecosystems and preventing deforestation. Some projects have received climate change financing. As such, they can serve the dual purpose of climate change mitigation and improving women's quality of life. Other case studies have demonstrated that excluding women or ignoring their needs has resulted in failure of projects.

REDD is a measure designed to provide positive incentives to developing countries to slow their rates of deforestation and forest degradation. It provides an opportunity to compensate women for their biodiversity stewardship. There are concerns, however, that since REDD is a market mechanism, it could exacerbate gender inequalities. Since women have less access to formal education than men and have fewer formally acquired skills, it may be more difficult for women to benefit from REDD projects. It is important that women are able to participate fully in policy-making from the start and in the different applications of REDD.

Reducing new emissions with bio energy: producing and using bioenergy and biofuels could benefit women if combined with policies and practices that aim to reduce poverty and gender inequalities. Producing jatropha biofuel, for example, can reduce soil erosion and increase water retention; at the same time, small-scale jatropha community initiatives have empowered women by providing sources of income. In Ghana, women used the biofuel to produce karate (shea butter cream), and in Mali its seeds are used to produce soap. The involvement of women in acquiring new types of energy systems allows them to develop new skills and livelihoods and to be active participants in the transition to environmentally sustainable energy production and consumption.

Adaptation and mitigation strategies: actions on gender equality

The guide outlines a range of strategies to incorporate attention to gender equality and empowerment in adaptation and mitigation (see pp. 65-67):

- Carrying out national and global studies about sex-differentiated impacts, with emphasis on capacities to assimilate urgently needed adaptation and mitigation measures.
- Identifying gender aspects of the technology and financing of climate change projects.
- Developing and applying gender-sensitive criteria and indicators in all UNFCCC and Kyoto Protocol instruments and mechanisms.
- Incorporating gender equality in the Clean Development Mechanism (CDM) of the UNFCCC.
- Promoting the inclusion of gender criteria in international environment markets. Some countries and communities have used money obtained as payment for environmental services, such as initiatives to fix carbon, to promote equity and equality.
- Understanding and working with different patterns of using natural resources, and the gender-differentiated impacts and effects of climate change.
- Promoting women's equal access to land ownership and other resources needed for effective socio-economic participation, such as capital, technical assistance, technology, tools, equipment, markets and time.
- Recognizing the importance of domestic work and the knowledge it brings to matters concerning climate change, and to promote men's participation in this sphere.
- Training both women and men in methods for increasing their productivity with new silviculture technologies that may allow for greater productivity in a changing climate.
- Training women how to reduce and prevent fires.
- Using a "bottom-up" model when preparing plans and programmes to assess marginalized people's knowledge, instead of applying a model that favours only opinions that come from above.
- Carrying out studies with a gender approach to consumption and transport patterns, in both developed and developing countries, based on the questions, "Who? How? And why?"
- Analyzing the traditional technology-masculinity link and how it affects the discourse and work priorities on mitigation.
- Investigating how machismo also disempowers men and working with them to find a new definition of masculinity that has to do with self-mastery rather than with power over others – "others" being understood as women, other men, children, and nature.
- Adopting principles of gender equality in international negotiations on climate change and regional, national and local climate policies at all stages of the negotiating process, from research, analysis, and design to the implementation of mitigation and adaptation strategies.
- Basing climate change mitigation and adaptation strategies on gender strategies already practised in agriculture, livestock raising, water resources management, coastal zones management and disaster risk management.
- Developing national and local government strategies to improve natural resources and to ensure women have access to and control of them; to create educational and training opportunities in areas related to climate change; to encourage the development of technologies that take women into account; and to foster the transfer of technology to women.
- Including the gender approach in bioenergy policy-making and planning so as to ensure that the concerns and needs of men and women are given equal attention.
- Giving women access to credit, information and carbon fund markets so that they can learn about and decide which resources and technologies can satisfy their needs.
- Ensuring that women and men have capacities built on methods that increase carbon retention through the use of new forestry technologies. Access to and equal distribution of the economic benefits derived from forestry services must be promoted.

The guide also discusses a number of programmes and projects that have successfully considered gender when analyzing adaptation to disasters and risk reduction. They demonstrate that the inclusion of a gender perspective is possible and effective (see pp. 72-75).

See also:

Aguilar, L. et al., 2009, 'Training Manual on Gender and Climate Change', the International Union for Conservation of Nature (IUCN) and the UNDP in partnership with the Gender and Water Alliance, ENERGIA International Network on Gender and Sustainable Energy, UNESCO, FAO and the Women's Environment and Development Organization (WEDO) as part of the Global Gender and Climate Alliance (GGCA).

<http://www.gender-climate.org/pdfs/Training%20Manual%20on%20Gender%20and%20Climate%20Change.pdf>

Members of the Committee of Elaboration and Review of the Social and Environmental Principles and Criteria of REDD+, 2010, 'REDD+ Social and Environmental Principles and Criteria'

http://www.imaflora.org/upload/repositorio/PC_redd_imaflora_english.pdf

Mechanisms for the 'Reduction of Emissions from Deforestation and forest Degradation' (REDD) combined with conservation actions, sustainable forest management and the enhancement of forest carbon stocks (REDD+) have become an important part of international debate about climate change. "However, governance mechanisms necessary to translate these opportunities into effective deforestation reduction, biodiversity conservation benefits, social benefits and respect for the rights of indigenous peoples, small land owners and local communities are not yet in place. This creates a risky situation where carbon projects, as well as government programs may negatively impact traditional populations and biodiversity, or simply not effectively reduce deforestation rates" (p. 3). In order to address this, various civil society organisations came together at a workshop in Brazil in 2009 to start a process of developing social and environmental safeguards for REDD+ programmes in Brazil. The main objective of this initiative is to strengthen forest governance; to improve information transparency, coordination among stakeholders and public participation in decision-making; and to recognise and respect the rights of traditional populations and Indigenous Peoples.

These safeguards, the 'REDD+ Social and Environmental Principles and Criteria' are to be used as a reference for the development, application and monitoring of forest carbon projects and REDD+ government programmes. In order to gain buy-in for the document, the process of developing the principles and criteria was transparent, involved all affected stakeholders and sectors and included public participation. A Steering Committee was set up comprised of thematic experts and representatives of various sectors, including social movements, small land owners, private sector (rural producers and forestry producers), environmental NGOs and research institutions. The first version of the document was produced by this multi-stakeholder group and was subsequently revised after extensive public consultation during which it received hundreds of comments that were incorporated.

There are numerous provisions in areas such rights recognition, benefit sharing, participation, monitoring and transparency, and governance (see pp. 7-8). These include:

- REDD+ actions shall recognize and value the socio-cultural systems and traditional knowledge of Indigenous Peoples, small landowners and local communities.
- There shall be formal mechanisms for conflict resolution associated with REDD+ actions, through dialogs that include the effective participation of all involved stakeholders.
- Benefits generated by REDD+ actions shall be accessed in a fair, transparent and equitable form by those who hold the rights to the use of land and/or natural resources and promote activities related to conservation, sustainable use and forest restoration⁴.
- Conditions for the participation of the beneficiaries shall be ensured in all phases of REDD+ actions and in the decision making processes, including the identification, negotiation and distribution of benefits.
- Beneficiaries shall have free access to information relating to REDD+ actions, in simple language, so they can participate in the decision making process in a previously informed and responsible manner.

- Transparency of information about REDD+ actions shall be guaranteed, including at least those related to the methodology, location and size of the area, definition and participation of involved and affected stakeholders, activities to be executed, time length of the project and conflict resolution mechanisms.
- There shall be periodic monitoring of the socio-environmental, economic and climate related impacts and benefits of REDD+ actions, while respecting the traditional way of life and practices of Indigenous Peoples, small landowners and local communities, and results of this monitoring shall be made publicly available.

4. Case studies

Green Belt Movement International, 2009, 'Responding to Climate Change from the Grassroots: The Green Belt Movement Approach'

http://greenbeltmovement.org/downloads/2009_climate_change_report_short_GBM.pdf

The Green Belt Movement (GBM) provides support to communities in Kenya to plant trees, which contributes to reforestation and environmental regeneration and improvements in community livelihoods. By empowering women in particular, GBM has demonstrated the important role that women can play as key protectors and advocates of the environment. To date, women and their families have planted over 45 million trees across the country.

GBM's model creates a linkage between conservation, sustainable livelihoods and peace. Community groups actively engage with climate change in three ways:

- Adaptation: once groups are formed, participants are sensitised to environmental issues and trained in tree planting and sustainable agriculture techniques, including growing indigenous food crops to enhance food security, harvesting rain water and curbing soil erosion. They also learn alternative income generating activities.
- Mitigation: by caring for existing trees and planting new ones, participants contribute to carbon sequestration, hindering of emissions, ecosystem conservation and management.
- Promotion of sustainable development: participants receive training and capacity building in food production, processing and marketing; diversification of livelihoods and education to become more economically resilient.

World Bank, 2006, 'World Bank and Green Belt Movement Project to Reforest Regions of Kenya'

<http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:21133046~pagePK:34370~piPK:34424~theSitePK:4607,00.html>

This press release from 2006 reports that the World Bank and GBM signed an Emission Reduction Purchase Agreement under which the World Bank's BioCarbon Fund pledged to buy the GBM emission reductions that resulted from the cultivation of trees on land in Kenya. The founder of GBM, Professor Maathai stated, "The project will inform grassroots movements and governments on the potential of the carbon market for community-based reforestation and forest protection".

APFED, 2010, 'APFED II Final Report', Asia Pacific Forum for Environment and Development (APFED)

http://www.apfed.net/apfed2/APFED_II_Final_Report_for_CD.pdf

The Asia-Pacific Forum for Environment and Development (APFED) was established in 2001 as a regional group of eminent experts from Asia and the Pacific. Members and partners have sought to promote innovation in policy, technology and social mobilisation to achieve sustainable development in

Asia and the Pacific. This report presents the achievements, challenges and future actions based on the empirical analysis of APFED activities. Social mobilisation and stakeholder empowerment are two of key themes that run throughout this report.

All programmes have involved direct interaction with a wide range of stakeholders. Dialogues has included individuals, civil society groups, experts, policy makers, private sector and governments; and have taken the form of meetings, round-tables, workshops and conferences. APFED has also developed an ongoing education processes aimed at inculcating good values on environment and development. At the grass-root level, the term “APFED” has gained popularity in covered areas.

In addition to this report, other APFED documents are available at:
<http://www.apfed.net/publications/index.html>

6. Additional information

Author:

This report was prepared by Huma Haider, huma@gsdrc.org

Experts consulted:

Ruth Butterfield (Stockholm Environment Institute)

Marisa Goulden (Univeristy of East Anglia)

Kristy Graham (ODI)

Natasha Grist (ODI)

Sabine Gürtner (GIZ)

Naomi Oates (ODI)

Birte Rodenberg (Consultant)

Thomas Tanner (IDS)

Anna Taylor (Stockholm Environment Institute)

About helpdesk research reports: This helpdesk report is based on two days of desk-based research. Helpdesk reports are designed to provide a brief overview of the key issues; and a summary of some of the best literature available. Experts are contacted during the course of the research, and those able to provide input within the short time-frame are acknowledged.

Need help finding consultants? If you need to commission more in-depth research, or need help finding and contracting consultants for additional work, please contact consultants@gsdrc.org (further details at www.gsdrc.org/go.cfm?path=/go/helpdesk/find-a-consultant&