

The Gender Advantage

Women on the front line of climate change

"At IFAD, we believe in people-centred solutions, including to climate change. This means adaptation solutions that build on the diverse knowledge, priorities and capacities of both women and men. We know from experience that the active engagement of women leads to better rural development programmes and policies in the face of climate change."

Kanayo F. Nwanze, IFAD President



Acknowledgements

This review was prepared by the IFAD Environment and Climate Division based on project documentation.

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ISBN 978-92-9072-471-1 Printed March 2014

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Abbreviations and acronyms

ASAP Adaptation for Smallholder Agriculture Programme

(IFAD-implemented with support from partners)

FAO Food and Agriculture Organization of the United Nations

GEF Global Environment Facility

PAPAM Fostering Agricultural Productivity Project in Mali

Introduction

During IFAD's more than 35 years of existence, gender equality and women's empowerment have gained increasing importance, both as objectives and as instruments for poverty reduction. IFAD has long recognized that as primary collectors of fuel and water in most developing countries, women are on the front line of climate change impact (IFAD 2010a). Experience has shown that "women are central to permanently improving the lives of their families and communities, and therefore must play a pivotal role in community-based adaptation initiatives" (CARE 2009). Yet in the countries most reliant on rainfed agriculture and natural resources, poor rural women, who have fewer assets and less decision-making power than men, are even more exposed.

Over the past few years, IFAD has paid close attention to both climate change dimensions and closing the gender gap, and in some cases, through cooperation with the Global Environment Facility (GEF). In 2012, IFAD launched an innovative Adaptation for Smallholder Agriculture Programme (ASAP). The ASAP has put gender equality and women's empowerment at its heart, not only because it is the 'right thing to do', but also because it means greater resilience for the whole community. The ASAP approach is underpinned by IFAD's Gender Equality and Women's Empowerment Policy (2012), which prioritizes equal economic empowerment, equal voice and access to decision-making, and equal workloads for women and men. Women's increased equality can contribute to improving relationships between men and women in the household.

This publication illustrates IFAD's experience in closing the gender gap and mobilizing the 'gender advantage' in climate change adaptation through ten case studies from across the world. The case studies show that gender-sensitive adaptation results in better livelihood options and incomes, improved yields, more food security and reduced workloads for women and their families. They also show that women and men are better able to make informed decisions about their lives, thus balancing their human development priorities when giving attention to sustainable natural resource management.

IFAD's experience in different thematic areas is presented through projects in the case studies (see Box 1), which build on IFAD's expertise in these areas.

IFAD acknowledges that there are challenges when designing projects and programmes to ensure gender-responsiveness. There is a growing consensus that climate change can exacerbate existing conflicts and gender inequalities. Therefore, a holistic approach should be adopted to ensure that tackling one problem does not lead to another. For example, support for women to diversify their livelihoods can lead to even greater workloads for them. Ensuring that women have access to clean and laboursaving technologies is therefore fundamental. However, these technologies are not always enough; projects need to address power relations through sensitization and advocacy in key institutions and within households.

IFAD has noted that when women's agency is promoted the well-being of women and their families is improved.

Box 1: How to mobilize 'the gender advantage' – what IFAD has learned

- Building on women's knowledge and experience creates opportunities for the whole community
- Promoting equitable access to adaptation knowledge for women and men is a key practical step for inclusive adaptation
- Investing in women brings economic returns for smallholder farmers
- Supporting women's equal voice in decision-making about adaptation strategies is needed in the home, in the community and at the national and global levels
- It is important to tackle women's workloads, which are often greater than that of men's and tend to increase as a result of climate change.



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Valuing women's knowledge and experience creates opportunities for the whole community

Women, men and young people use different smallholder farming systems. For example, gender-based farming systems where men and women cultivate separate fields are common in many parts of sub-Saharan Africa. Similarly, poor rural women and men experience climate variability differently and cope in diverse ways in the face of climate change (FAO 2010). Given their responsibilities to manage critical household assets and as stewards of natural resources, women are potential agents of change. Therefore, it is essential to draw on the local knowledge of female as well as male smallholders to develop adaptation strategies for families and communities to cope with changing climates.

Bolivia: Building on indigenous women's knowledge

A study carried out by the World Bank in the Plurinational State of Bolivia (Ashwill et al. 2011) found that climate change adaptation strategies used by indigenous women and men differ significantly. Men focus on large-scale community interventions (e.g. irrigation), while women focus more on practical improvements such as finding alternative water sources, planting new crop varieties or supplementing traditional revenue with diversified production activities. Indigenous men and women possess different knowledge based on their respective roles in rural communities.

During the design phase of the Economic Inclusion Programme for Families and Rural Communities in the Territory of the Plurinational State of Bolivia, participatory consultations were organized in 20 municipalities using the gender-sensitive Climate Vulnerability and Capacity Analysis (CVCA)¹ framework for guidance. This framework

¹ http://www.careclimatechange.org/cvca/CARE_CVCAHandbook.pdf

emphasizes differential vulnerability within communities and households to identify who is vulnerable and why, and has practical guidelines for how to apply a 'gendered lens'.

Community members explained their difficulties when dealing with current climate variability. They also mentioned the opportunities generated by the change in climate. For example, because of temperature increases in the highlands women farmers are exploring the possibility of growing fruit trees, which have a higher market value than currently grown crops such as potatoes.

The programme aims to recover indigenous environmental knowledge – especially that of women – which, when blended with modern techniques and technology, could contribute to a more effective adaptation response. Based on this knowledge of the whole community, a list of potential adaptation practices will be prepared to deal with selected problems (e.g. drought, frost). This list will also specify practices particularly suited to women and girls.

Mali: Unlocking the capacities of different generations

Mali is one of the hardest hit Sahelian countries in terms of climate change. In recent years it has experienced higher temperatures, less rainfall and an increase in the frequency and magnitude of extreme weather events (droughts, floods, high winds). Agricultural production is set to decrease by about 16 per cent by 2050 unless adaptation actions are taken (Pedercini, Kanamaru and Derwisch 2012).

A new project supported by IFAD² will use participatory methodologies to identify women and men's local knowledge and to understand their adaptive capacities and vulnerabilities to climate change. An approach developed by the World Agroforestry Centre (ICRAF 2012) will be used, among others, to assess the vulnerability of the livelihoods of four different groups (adult men and women; young men and women), to develop strategies for adaptation to climate change. The breakdown by age group is important as the knowledge and capacities of young women and men are likely to be different from those of the older generation. This approach builds on community knowledge of local conditions and involves four main steps:

- Assessing the situation and vulnerability of village-level threats
- Undertaking vulnerability analysis by specific groups of people
- Developing a plan for adaptation to climate change
- Monitoring activities by village communities.

As with many participatory vulnerability and capacity analysis tools, this approach allows communities to analyse their exposure to risks, threats and shocks and to then develop adaptation strategies. This approach not only develops action plans, but it also builds the capacity of communities to work together to respond to adaptation risks and opportunities. Therefore, the process is as important as the resulting adaptation actions.

The project will also help build the capacity of local non-governmental organizations (NGOs) to examine the results of the analysis. The results will be used by the project to develop local knowledge related to climate issues and adaptation strategies. The analysis will be shared and validated in communal workshops, where inter-generational dialogue will also be encouraged.

² Fostering Agricultural Productivity Project in Mali – Financing from the Adaptation for Smallholder Agriculture Programme (PAPAM/ASAP)



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Equitable access to adaptation knowledge

Women and men often possess unique and valuable local knowledge. However, frequently there is a gender gap in terms of access to other kinds of knowledge, such as climate services. Women farmers are overwhelmingly left out of many forms of communication channels that are critical to their ability to adapt to a rapidly changing climate (McOmber et al. 2013). This is due to many factors linked to social norms and work burdens that result in women missing out on key information and education. At best, this means their potential to contribute to household and community responses is not fulfilled and, at worst, this can result in women's markedly greater vulnerability to extreme weather events. Involving women in capacity-building pays off in many ways. For example, it is often women who remain behind to run smallholdings when crop failures and poor fish catches result in out-migration of men to seek employment in cities.

Bangladesh: Early warning systems

Women are especially vulnerable to natural disasters, yet not always fully involved in disaster risk management initiatives. Disaster fatality rates are much higher for women than for men due, in part, to insufficient access to information and early warnings. For example, women accounted for 91 per cent of fatalities in the 1991 cyclone in Bangladesh. Warning information is transmitted by men to men in public spaces, but rarely communicated to the rest of the family (Röhr 2006).

Flash floods are common and extreme in the Haor region with certain years having heavy impact, such as in 2001 and 2010, where between 80-90 per cent of crop loss was experienced. This situation is expected to get worse as a shift towards pre-monsoon rainfall is being projected to coincide with the paddy rice pre-harvest period. This will severely affect food production in Haor, which contributes 16 per cent of national rice production, as well as the food security of subsistence and smallholder farming families.

Box 2: Gender-sensitive early warning systems

Tools such as the Making Disaster Risk Reduction Gender-Sensitive Policy and Practical Guidelines (UNISDR, UNDP, IUCN 2009) show that there are differences in how men and women access weather-related information and that "a gender perspective should be integrated into all disaster risk management policies, plans and decision-making processes, including those related to risk assessment, early warning, information management, and education and training" (Hyogo Framework for Action, 2005-2015).

The Hyogo Framework sets out concrete measures to make communities in 168 signatory nations more resilient to disasters.

The IFAD-supported Climate Adaptation and Livelihood Protection (CALIP) project will scale up best practices and test new adaptation interventions in the Haor Infrastructure and Livelihood Improvement Project.

An effective early warning system is a high priority for communities. It will be developed by the CALIP project to reflect women's and men's requirements as well as those of the whole community. During the project, men and women will be consulted on the most effective ways for them to receive warnings, taking into account various factors such as literacy levels and access to technology (e.g. mobile telephones).

The Research Programme on Climate Change, Agriculture and Food Security (CCAFS) indicates that "within communities there are certain people and groups who have legitimacy with and trust of others. These individuals or groups may already transmit/share information into and across a community, but they may also serve as untapped resources for dissemination of information, including climate information services" (McOmber et al. 2013). The CALIP project will identify and mobilize women's networks, as well as those of men. To focus on gender, project staff will undergo training to understand why gender makes a difference in project execution and how they can integrate gender concerns.

Mauritania: Men and women working together

Sometimes, a fresh approach to help men and women work together is needed. For example, in Mauritania, the IFAD-supported Oasis Sustainable Development Project, which also benefited from GEF support, brought farming couples from a similar ecological and socio-economic environment in Morocco to work for six months on a Mauritanian oasis. This peer-to-peer exchange enabled families in Mauritania to experience at first hand the potential of women and men working together to develop household strategies for better livelihoods in the face of challenges posed by land degradation. Women and men learned new techniques and skills such as irrigation, water conservation technologies and vegetable gardening. Interestingly, this approach enabled traditional gender roles to be expanded; for example, in Kouya Sadra, men were trained in vegetable gardening despite this being a traditionally 'female' activity.

One of the most interesting and successful aspects of this exchange was the improved status reported by the Mauritanian women, who were fully involved in the new activities and demonstrated that they could contribute in a productive way (IFAD 2010b). They also highlighted that diverse household meals contributed to better family nutrition, especially of children (IFAD 2011).



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Investing in women brings economic returns for smallholder farmers

Ensuring women and men have access to adaptation knowledge and agricultural inputs empowers them to diversify their livelihood options to cope with unpredictable weather, environmental degradation and climate shocks. However, according to the Food and Agriculture Organization of the United Nations (FAO), women face a serious gender gap in accessing productive resources such as land, credit, water and technologies. Closing this gap in agricultural yields alone could lift 100-150 million people out of hunger (FAO 2011).

IFAD has seen that tackling these underlying issues in its adaptation efforts releases women's potential and that their economic empowerment benefits families and communities, bringing food security and improving gender relations. Women have also proved to be a driving force in preserving natural resources and preventing land degradation.

Nigeria: Dedicated support for women and young people

Women are at the centre of the upcoming Climate Change Adaptation and Agribusiness Support Programme in the Savannah Belt (CASP) in Nigeria. Its development objectives are to increase incomes, enhance food security and reduce vulnerability of smallholder farmers, particularly women and young people in the participating states.

The programme will draw on the lessons learned from the Community-Based Agricultural and Rural Development Programme (CBARDP). It will scale up the CBARDP approach to women's economic empowerment, which involved:

- providing access to credit and seed capital for income-generating activities
- raising women's voices in domestic and community decision-making as a result of economic success.

Box 3: Women's income improves family businesses, education and workloads (Nigeria)

"I am one of the very first groups that benefited from the IFAD programme. I am now a successful rice farmer with improved technologies. I was part of the revolving goat scheme and I received seed support from the programme. I now have six goats, after selling seven and giving one to my daughter. I have four fowls, two turkeys and I bought a motorcycle for my son to run a taxi service...my last daughter is in private secondary school. I supported my husband with N20,000 for his business and I bought a bicycle for myself."

Hajia Nafisa, woman leader, Jigawa State

Women made up over half of around 2.3 million people who benefited from the CBARDP's income-generating activities across the seven states. Women who were interviewed during an impact study highlighted that they could now pay medical bills, send their children to school and contribute to better housing for their families as a result of programme activities. The programme promoted community leaders' and local government officials' awareness of the important roles women play in agriculture. It also trained women's organizations in negotiation and advocacy. As a result, women confirmed that they now enjoyed greater voice in community meetings (IFAD 2013).

"Now we can sit with our husbands, sons and brothers and share our views during community meetings. I am happy...my voice counts."

Hajia Bilikisu Mohammed, Katsina State

IFAD and its partners are aware that targeted investments for women are often needed alongside gender mainstreaming in projects. The CASP therefore will have a component to support women and young people setting up enterprises: the Enterprise Development Fund for Women and Youth. The programme will support the creation of job opportunities around value chain points in a number of commodities: (a) village-based input supply enterprises; (b) post-harvest handling enterprises; and (c) produce marketing enterprises. This will be done through training in business plan development, operations and management, and in the technical aspects of the selected enterprise. The provision of starter packs of inputs will also be provided to trainees after satisfactory completion of the course to help them set up businesses.

Women will be targeted as priority beneficiaries for enterprise development training, with at least a 40 per cent participation. This will help to ensure that a focus on young people will not inadvertently overshadow women. Gender-specific obstacles and opportunities will be documented during training on leadership, marketing and business skills.

Kyrgyzstan: Alternative income sources

Kyrgyzstan is one of the most vulnerable countries in Central Asia to climate change impacts. Hazards such as drought, landslides and mudslides, floods and river erosion are all common occurrences, and are becoming more frequent and intense.

Livestock production is critical to rural livelihoods and household food security, but productivity is low and likely to be made worse by decreased pasture carrying capacity and climate change. A deterioration in infrastructure has also meant that smallholders are not able to fully utilize the more remote summer pastures.

During the programme design phase of the IFAD-supported Livestock and Market Development Programme II (LMDP II), a vulnerability assessment was carried out, which identified women as being among the most vulnerable in the programme areas – in particular households headed by women. Traditional gender roles are deeply entrenched and women lack access to productive assets and have little or no voice in local decision-making. Women also have limited mobility because of household work and their lack of physical safety, which limits their coping strategies in the face of climate change. IFAD's experience in Kyrgyzstan confirms women's strong interest and potential in income-generating activities, given adequate support.

A market/value chain assessment indicated that the programme should concentrate on the milk value chain, where there is strong market demand, interested partners and the capacity to profitably produce quality milk and milk products. The LMDP II will help establish milk collection and cooling centres and, given the mobility constraints faced by women, it will also provide support to women's groups to set up more accessible climate-resilient small-scale milk processing facilities, focused primarily on high-quality traditional products. These facilities will enable women to work together and thereby strengthen their voice in a supportive institutional set-up. IFAD's experience in many countries has shown that women's groups often pave the way for participants to gain skills and confidence before engaging more actively in the wider community in other areas.

Livelihood diversification is an important adaptation measure and support will be given to women for alternative income-generating activities. Potential investments include:

- solar greenhouses for the production of vegetable and horticulture products to meet a growing demand from the communities themselves, as well as from the fast-growing national and international tourism sector
- multi-purpose solar dryers or electricity-powered dryers for drying fruits, herbs and aromatic plants.

LMDP II will support services to improve animal health and strengthen community-based pasture management to address challenges posed by climate change.

Swaziland: Women, unity and water

"If spiders' webs can unite, they can tie up a lion." This saying became a reality in the Vikizijula Chiefdom, a small community in Swaziland's Lubombo region. For one month, women of all ages came together in the chiefdom and built water harvesting tanks to provide potable water for their families.

Vikizijula is in the project development area of the Lower Usuthu Smallholder Irrigation Project (LUSIP-GEF), an IFAD-supported initiative. The LUSIP-GEF aims to reduce land degradation, preserve biodiversity and mitigate the impact of climate change through the application of sustainable land management practices – including water conservation, conservation agriculture, rangeland management, forestation and increased capacity for biomass energy production.

One of the greatest challenges faced by communities in the project area is water scarcity. It is common for people to walk long distances to fetch drinking water, and in some instances they share water sources with livestock. This poses significant health risks and means that women spend a lot of time walking to water sources. Sometimes they find the rivers dry and have to dig in the sand to get to the water.

The project has trained women in the practical skills required to construct waterharvesting tanks for their own households. This is a lifelong skill that some are now using to supplement their household income by building tanks for others. Moreover, the tanks are fitted with overflow pipes that can divert water to backyard gardens. Many women anticipate growing extra vegetables that will improve the health and food security of their homesteads, as well as potentially generating income.

"I want to start a vegetable garden so I can grow vegetables for sale," said Gertrude Gadlela, a single parent of seven. "With the money I get I will buy a few basic commodities and raise more money to build another tank, because my aim is to have at least three of them."

Assuming that one person uses 25 litres of water per day, at full capacity, these tanks can supply one person with all their potable water needs for 68 days, or a family of seven – the average family size – for 10 days. The success of the water-harvesting tanks has stimulated other communities to embark on similar activities; over 400 women and men will have benefited from a better water supply as a result of the initial month's investment in building the tanks.

LUSIP-GEF thereby facilitates responsible stewardship of the natural resource base to build resilience to climate change and improve food security.

Source: Rural Poverty Portal, May 2013.

See also: http://www.operations.ifad.org/web/ifad/operations/country/project/tags/swaziland/1159/project_overview



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Equal voice, equal access to decision-making

The adaptation benefits of giving women equal voice in their homes, communities and at the national level include more resilient livelihoods options and better incomes, reduced workloads, improved health and education and improved management of their natural resources.

IFAD has seen how informal women's groups can often help to build the confidence and skills of women to take part in more formal and mixed groups, such as producer organizations, in order to contribute their ideas on adaptation efforts. IFAD recognizes that the family is a key rural institution, and supports equal voice and decision-making within the household as an important way to mobilize the potential of all its members in coping strategies.

India: Women's self-help groups heard at climate policy forum

The completed Andhra Pradesh Participatory Tribal Development Project strengthened the institutional capacity of tribal women's self-help groups (SHGs) to manage carbon and other funds generated through environmental services. In Adilabad, in Andhra Pradesh, over 13,000 SHGs were developed under a previous IFAD initiative. These were then supported to start working together to strengthen their institutional capacities and bargaining power vis-à-vis government agencies and other actors.

With 700,000 hectares of mixed teak forests, the district has immense potential for forest protection/regeneration and environmental services. This initiative strengthened the capacity of women's SHGs to manage natural resources, develop livelihood-enhancing activities and broker environmental services. A working group was established to oversee the initiative; this knowledge management platform facilitated

learning about SHGs and policy implications as well as scaling out possibilities across the state. The voices of the federation of SHGs was even heard at the eighth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in India.

"We are losing our forests and crop productivity is declining. If we get together we can organize ourselves and deal with these problems. Together we have a lot of strength, so together we can represent ourselves better."

Parvatibhai, a woman project participant

Source: (CFI 2002).

See also: http://www.ifad.org/english/indigenous/pub/documents/indigenouswomenReport.pdf



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Tackling women's worsening workloads

It is now widely recognized that climate change is increasing the workload of women. They spend longer hours gathering fuelwood and fetching water. As well as safety and health problems, lack of time is a major constraint in mobilizing women to contribute to livelihood diversification strategies.

IFAD tackles these pressing concerns in two main ways:

- Improving women's access to water and clean energy
- Transforming gender relations in the home through household methodologies and support for women's income-generating activities and increased decision-making.

China: Access to clean energy

In China, population pressure and growing demand for food is straining the productive capacity of the 10 per cent of China's land area that is suitable for sustained cultivation. An increasing number of livestock compete for fodder on fragile rangelands. Flood-prone areas and deteriorating irrigation systems result in waterlogging and salt contamination. Encroaching deserts threaten formerly productive land. Box 4 outlines the energy needs of women and men, as well as the benefits of biogas.

In the IFAD-funded Guangxi Integrated Agricultural Development Project rural communities are encouraged to install biogas converters. "We used to cook with wood," said Liu Chun Xian, a farmer involved in the project. "The smoke made my eyes tear and burn and I always coughed. The children, too, were often sick.... Now that we're cooking with biogas, things are much better."

Families, especially women, save 60 working days each year by not having to collect wood and tend cooking fires. This additional time is invested in raising pigs

Box 4: Biogas benefits for women and men

Rural communities need energy for a variety of purposes including cooking, lighting, heating, and powering farm and other production tools and equipment. In rural areas in developing countries, many people use indoor wood fires for energy, which can cause chronic respiratory diseases and increase mortality rates – not to mention the time spent in collecting firewood, a burden that falls more heavily on women and children.

Biogas is a type of fuel produced from organic waste such as dead plant and animal material, or human and animal waste. This methane gas can be used for lighting and cooking and provides benefits to the environment, as it helps reduce deforestation by reducing the need for fuelwood. In addition, capturing methane from waste reduces the damaging effects of global warming.

and producing crops. In addition, the project has resulted in better sanitary conditions in the home.

Forests are protected, reducing greenhouse gas emissions through deforestation. A large amount of straw, previously burned, is now put into biogas tanks to ferment. This further reduces air pollution from smoke and helps produce high-quality organic fertilizer.

With more time to spend improving crops, farmers in Fada, a village in the project area, increased tea production from 400 to 2,500 kilograms a day over a five-year period. Average income in the village has quadrupled to just over a dollar per day at the end of the project. This is significant in a country where the poverty line was 26 cents per day. And as a result of the project, 56,600 tons of firewood can be saved in the project area every year, which is equivalent to the recovery of 7,470 hectares of forest. *Source: IFAD social reporting blog, November 2013.*

Peru: Reduced workloads and transformed gender roles

The native people of the Andean high plateau region (altiplano) have always had to contend with an inhospitable environment. High winds, sparse ground cover, frozen water and extreme temperature variations are the norm. As a result of climate change, these temperature variations have become even more pronounced, and water shortages have been exacerbated. The IFAD-supported Market Strengthening and Livelihood Diversification in the Southern Highlands Project helps communities become more resilient to climate change impacts and improve their management of natural resources.

In response to soil erosion, water loss, high production costs and social, organizational and economic conflicts in the target areas, the project has targeted 360 peasant communities in the Southern Highlands, including 26,400 rural women, to use both traditional and modern techniques for technology and knowledge transfer in irrigation methods. The project organizes gender sensitization training sessions for both men and women.

The project has a strong impact on families, stimulating a rethinking of the roles of men and women, older people and youth and fostering new opportunities for dialogue, negotiation and planning among all family members. There has been a reduction in women's workloads due to increased help from men, who recognize women's roles within the family and in the community. Incomes and livelihoods have also improved.

Source: (IFAD 2012b).



Conclusions

The case studies give some concrete examples of how IFAD integrates gender concerns into its projects and programmes to increase the resilience of rural communities to climate change impacts. Underpinning IFAD's work are important project basics such as gender-sensitive indicators, monitoring and evaluation systems, and gender training and sensitization of project staff and beneficiaries.

Knowledge management and policy advocacy are increasing in importance to address longer-term issues. For example, the upcoming ASAP-supported climate adaptation component of the PAPAM in Mali has a specific indicator to help reduce women's workloads and support farmers organizations to advocate for the inclusion of their adaptation concerns – including gender dimensions – into national policy processes.

To integrate both a climate adaptation and gendered lens into development investments can be challenging, especially when combined with other 'game-changers' such as civil conflict. IFAD works to overcome these challenges; investing in adaptation for poor rural women and men is the right, smart and only viable way forward.

References and documents consulted

- Ashwill, M., M. Blomqvist, S. Salinas, and K. Ugaz-Simonsen. (2011). Gender Dynamics and Climate Change in Rural Bolivia. (Washington, D.C.: The World Bank).
- CARE. 2009. Climate Vulnerability and Capacity Analysis Handbook. (Atlanta: CARE).
- CFI. (Community Forestry International). 2002. Environmental Service-Based Funding: Participatory Approaches to Forest Carbon Projects. (Washington, D.C.: Community Forestry International).
- FAO. 2010. (Food and Agriculture Organization of the United Nations). Farmers in a changing climate: Does gender matter? Food security in Andhra Pradesh, India. (Rome: FAO).
- FAO. 2011. The State of Food and Agriculture. Women in agriculture: Closing the gender gap for development. (Rome: FAO).
- FAO. 2012. Training Guide: Gender and Climate Change Research in Agriculture and Food Security for Development. (Rome: FAO).
- FAO. 2013. Climate-Smart Agriculture Sourcebook. (Rome: FAO).
- ICRAF. (World Agroforestry Centre). 2012. Participatory analysis of vulnerability and adaptation to climate change: a methodological guide for working with rural communities. Occasional paper 19. (Nairobi: ICRAF).
- IFAD. 2009. Policy on Engagement with Indigenous Peoples. (Rome: IFAD).
- IFAD. 2010a. Climate Change Strategy. (Rome: IFAD).
- IFAD. 2010b. Gender and Desertification. Expanding roles for women to restore dryland areas. (Rome: IFAD).
- IFAD. 2011. Concept note: Poverty Reduction Project in Aftout South and Karakoro Phase II (PASK II).
- IFAD. 2012a. Environment and Natural Resource Management Policy. (Rome: IFAD).
- IFAD. 2012b. Gender and Water. Securing water for improved rural livelihoods: The multipleuses system approach. (Rome: IFAD).
- IFAD. 2012c. Gender Equality and Women's Empowerment Policy. (Rome: IFAD).
- IFAD. 2013. CBARDP Impact Assessment of Gender and Vulnerable Groups.
- McOmber, C., A. Panikowski, S. McKune, W. Bartels, and S. Russo. 2013. *Investigating Climate Information Services through a Gendered Lens*. CCAFS Working Paper no. 42. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Copenhagen. Available online at: http://www.cgspace.cgiar.org/bitstream/handle/10568/27887/CCAFSWorkingPaper42.pdf?sequence=1.
- Pedercini, M., H. Kanamaru, and S. Derwisch. 2012. *Potential impacts of climate change on food security in Mali*. Natural Resources Management and Environment Department, FAO, Rome.
- Rohr, U. 2006. Gender and climate change. Tiempo, Issue 59, p. 3.

UNISDR, UNDP and IUCN. (United Nations International Strategy for Disaster Reduction, United Nations Development Programme, International Union for Conservation of Nature). 2009. *Making Disaster Risk Reduction Gender-Sensitive Policy and Practical Guidelines*. (Geneva: UNISDR, UNDP, IUCN).

World Bank. 2011. Gender & Climate Change: 3 Things You Should Know. (Washington, D.C.: World Bank).

Websites

IFAD Rural Poverty Portal. Women, unity, water: Adapting to climate change and improving livelihoods in Swaziland. May 2013.

Available at http://www.ruralpovertyportal.org/country/voice/tags/swaziland/swaziland_climate

IFAD social reporting blog. Climate Conversations – Turning waste to energy in China. 28 November 2012.

Module 17: Gender, Agriculture, and Climate Change. Gender in Agriculture. Available at http://www.genderinag.org/sites/genderinag.org/files/Module%

2017_web.pdf



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