Sida, November 2011

Adapting to a Changing Climate

The Swedish Government's Special Climate Change Initiative 2009–2012

Sida

Published by: Sida, 2011

Department: Global

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Printed by: Edita, 2011

Art.no.: SIDA61412en

Cover picture: Islanders cultivating rice in the Jamuna River in northern Bangladesh. The yearly reductions of the sand islands has dramatically increased during the last ten years.

Photo: Espen Rasmussen, Bildbyrån Silver

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The Climate Change Initiative in Brief

Climate change and its negative consequences are becoming increasingly evident on our planet. It is not the poorest countries that are responsible for the changes, although they are the ones that have to pay the highest price, by means of rising sea levels, drought, floods and other extreme weather conditions.

SIDA-FUNDED EFFORTS OF THE CLIMATE CHANGE INITIATIVE FALL UNDER NINE AREAS

- Environmental policy and management (largest focus area)
- Prevention of natural disasters/protection against flooding
- Forestry policy
- Policies concerning water resources
- Research
- Agricultural development
- Education in environmental issues and forestry
- Trade and environment
- Media and the free flow of information

Women and men who live in poverty in rural and urban areas are particularly vulnerable. The negative effects of climate change will further limit their development opportunities and possibilities to provide for themselves, which means it is not possible to draw a sharp line between climate change and development efforts. Assisting the poorest countries to adapt to climate change, is therefore an important aspect of Sweden's policy for global development.

Adaptation means adapting natural and human systems to existing or anticipated climate change and the adverse effects of climate change.

The International Commission on Climate Change and Development stated in its report in 2009, that the adaptive capacity will be crucial in order to maintain development in a changed climate. It requires immediate and up-scaled adaptation measures as the magnitude of the climate change impacts are more serious than previously thought. Adaptation measures should be focused on managing climate risks, building resilience and improving the ecosystem functions, as well as ensuring integration of adaptation into other development and environmental work.

Sweden has invested SEK 4 billion in a special climate change scheme, the Climate Change Initiative, which started in 2009 and will continue to 2012. Its principal objective is to support long-term efforts for climate change adaptation in the poorest countries, but the funding will also contribute to the efforts of developing countries to limit greenhouse gas emissions.

The Climate Change Initiative forms part of Sweden's contribution to "fast-start" climate change finance, a financial pledge which the Heads of State made at the climate change summit COP 15 in Copenhagen in 2009, in support of imme-

diate climate change actions in the developing countries. The total Swedish "fast-start" contribution amounts to SEK 8 billion for 2010-2012.

Just over two-thirds of the Climate Change Initiative is being channelled through multilateral organisations, through the Ministry of Foreign Affairs. These efforts focus not only on climate change adaptation, but also on measures that will lead to a reduction of greenhouse gas emissions, both from sources and sinks, which can store carbon dioxide.

A little less than one third of the Government's support, SEK 1.15 billion will be channelled through Sida (Swedish International Development Cooperation Agency), to bilateral and regional initiatives, primarily within environmental, water and land use areas. The efforts focus on adaptation measures and concentrate on existing partner countries that are exposed to a high climate risk combined with high vulnerability. Africa is in focus with Mali and Burkina Faso as two of the partner countries, together with Bolivia, Bangladesh and Cambodia. In addition, support is also provided to regional cooperation in Africa and in Asia.

The Government's initiative supports a broad range of efforts, most of which are based on a climate change perspective being integrated at sector level in two of the partner countries . The initiatives include awareness-raising and improved capacity for adaptation in Cambodia, investments in sustainable agriculture, forestry and fishing in Mali, a fund for a national ten-year action plan on climate change issues in Bangladesh, and investments in the sustainable management of water catchment areas in order to address water scarcity in Bolivia.

Adaptation to climate change is a complex and long-term effort, involving several sectors and areas of society. Many activities aimed at contributing to overall development objectives are also important from an adaptation perspective, since they reduce the vulnerability of women and men and make them better equipped to cope with changing rain patterns and other effects of climate change. This makes it difficult to assess how the results of individual projects and programmes have contributed to supporting long-term adaptive capacity.

But a series of concrete and immediate achievements can be highlighted already. On the following pages, a selection of examples of the 50 projects and programmes supported by the Swedish Special Climate Change Initiative through Sida are presented; including the purpose of the project/programme and what the support has resulted in, to date.

DISTRIBUTION OF SUPPORT WITHIN THE SPECIAL CLIMATE CHANGE INITIATIVE 2009-2012

In total, the Swedish Government is investing SEK 4 billion in support of climate change related activities 2009-2012.

SEK 2.85 billion of the investment is channelled through multilateral organisations, with a focus on both emission reduction and adaptation to climate change. For Sweden, it is important to strive to connect the multilateral assistance with the bilateral, in order to take advantage of synergies at country level. Support is channelled through:

- The World Bank's development branch – IDA International Development Association
- Clean Technology Fund (CTF)
- Global Environment Facility (GEF)
- The Adaptation Fund (AF)
- Least Developed Countries Fund (LDCF)
- UN-ISDR International Strategy for Disaster Reduction
- World Bank Global Facility for Disaster Reduction and Recovery
- CGIAR Consultative Group on Agricultural Research

SEK 1.15 billion is channelled through Sida to bilateral and regional support for climate change adaptation measures in countries where Sida already has existing cooperation. Support is allocated as follows during 2009-2012:

- Bolivia, SEK 200 million
- Bangladesh, SEK 180 million
- Cambodia, SEK 60 million
- Burkina Faso, SEK 125 million
- Mali, SEK 125 million
- Regionally throughout Africa, SEK 350 million
- Regionally throughout Asia, SEK 110 million

Understanding Climate Change Important for Adaptation

The general level of awareness of climate change in Cambodia is extremely low. At the same time, the country is classified as one of the world's most vulnerable with regard to the effects of climate change. Cambodian NGOs are playing an important role in helping villagers to adapt when cultivation conditions change.

Photo: Elisabeth Folkunger

Tree plants.

"There is a lot of prejudice that climate change is very complicated and academic; but through the training courses we have provided, the issue has been brought down to a concrete level. It is simply about being able to support yourself with food," says Åsa Thomasson, Regional Director at Forum Syd in Cambodia, one of the three organisations implementing the Sida-financed project Joint Climate Change Initiative (JCCI).

The JCCI project is about adaptation – to make people better prepared to deal with climate change. In order to succeed, it is crucial to reach out to people in rural areas, and through the local NGOs who are present there.

There are 22 organisations, working primarily with rural development, that participate in the project. The objective is to integrate a climate change perspective in the work the organisations carry out among their members. The first step was to undergo basic training to learn about climate change. Then the participants had to go out and hold workshops among the villagers in the rural districts. Together they discussed the type of changes that villagers see in their local environment and what can be done to adapt to them. After the training course, the organisations were given the opportunity to propose a pilot project to take the work further.

"The pilot projects have dealt with different activities, such as cooperating with the local authorities to develop disaster management plans, integrating adaptation in the local investment plans or improving livelihoods through fish farming and vegetable cultivation", she says.

One of the positive side-effects which several organisations mention is that the sometimes conflicting relationship that previously existed in the cooperation with the municipalities, has now improved significantly.

Photo: Sothira Seng, Forum Syd

Tree nursery in a village in Kampong Speu.

"Unlike corruption for example, climate change is perceived as a neutral problem, and politicians have realised the need to adapt to it," says Åsa Thomasson.

To provide the poor and agriculturally dominated Cambodia with food is dependent on the great Lake Tonlé Sap regularly flooding the plains. But the right type of flooding is required and the right type of drought, in order for the rice plantations to be able to grow well, and for the flooded fields to also serve as an important source for fishing. Over the past five to ten years, the cycles of drought and rainfall have changed considerably, something that has been clearly noticed among people in rural areas.

"When people gain a better understanding of what is happening around them and why, their willingness to become involved increases. I am pleasantly surprised by how much tangible adaptation work has already taken place in the pilot projects," says Åsa Thomasson.

The adaptation projects carried out under JCCI have also been about testing alternative forms of cultivation that are less vulnerable to drought and flooding, reafforestation to stop erostion, or organising local climate change committees that have produced their own action plans on how to respond to drought and flooding.

In addition to the pilot projects, JCCI has produced information on climate change in Khmer, the local language, which was not previously available.

CAMBODIA AND THE PROJECT IN BRIEF

The project Joint Climate Change Initiative (JCCI) is being carried out by the international organisations Forum Syd, Cord and DanChurchAid/Christian Aid (DCA/CA).

A total of 22 local Cambodian organisations make up JCCI; 10 organisations in phase 1, with each of them implementing their pilot projects at the beginning of 2011. An additional 12 organisations are included in a second phase and are in the process of putting together proposals for pilot projects after having participated in the training.

Sida support to the JCCI amounts to 11 MSEK for 2010-2012.

According to research from the International Food Policy Research Institute (IFPRI), agriculture in Asia will be seriously affected by climate change, in particular Cambodia, by the year 2025.

It is estimated that flooding is the cause of 70 per cent of the destruction of agriculture in Cambodia. 20 per cent is due to drought and the remaining 10 per cent is due to pests and diseases.

Common Donor Fund Will Assist Bangladesh to Adapt

To meet the threat of climate change, Bangladesh launched a national strategy and action plan 2009. A multi donor climate change fund will help the government to implement the ten-year plan and Sweden will be contributing SEK 90 million.

Photo: Therese Arnstorp

A man fishing in a water reservoir.

Bangladesh is among the countries that are most vulnerable to climate change. 160 million people live on a surface which is one third the size of Sweden and the floods, tropical cyclones, storm surges and the droughts that affect the country are expected to become worse and more frequent in the future. In order to strengthen the country's capacity and resilience, the Government of Bangladesh has developed a ten-year Climate Change Strategy and Action Plan.

Together with three other donor countries, Sweden and the Government of Bangladesh have created a common trust fund which is called the Bangladesh Climate Change Resilience Fund (BCCRF). The fund currently consists of USD 125 million, and will be used to finance the implementation of the national strategy and action plan, within the following six pillars: (1) food security, social security and health, (2) disaster management, (3) infrastructure, (4) research and knowledge management, (5) reducing greenhouse gas emissions and a conversion to low-carbon development, (6) capacity development.

The uniqueness of the fund is that it is based on a coordinated donor effort which is aimed at maximising the outcome of the efforts that are required; something that is not often the case for development cooperation with Bangladesh in the area of environment and climate change.

The Government of Bangladesh manages the fund, where a special climate change unit of the Ministry of the Environment will deal with project applications from other departments and authorities throughout the country. The World Bank is currently the trustee of the fund, but the intention is that the Government of Bangladesh, in due course, will take over that responsibility through strenghtened capacity in the Ministry. In addition to the projects that will be implemented by line Ministries and other governmental institutions, 10 per

Photo: Elisabeth Lorenz, Sida

Bangaldesh, one of the world's most vulnerable countries to climate change is often affected by floods.

cent of the fund will be able to support project proposals from the civil society.

After an initial phase of establishing the structure and management of the climate change fund, applications have begun to be received in 2011. The need for assistance is vast, and so far, USD 93 million of the fund's total USD 125 million has been allocated to the project applications that have been received, together with financial resources reserved for the civil society and some support for capacity development and administration.

Some of the projects under approval include cyclone protection in cyclone-sensitive areas, agricultural adaptation and an afforestation project in coastal and hilly areas to create natural protection against cyclones and erosion, but also to improve livelihood for people.

Bangladesh's Climate Change Strategy and Action Plan is a comprehensive document and one of the challenges for the country's climate change efforts is is to strengthen the implementation capacity of the government institutions. Providing the World Bank with the role of trustee is not only a way of managing the risks of corruption, but is also good from a capacity development perspective. This is according to Johan Willert, programme director at the Swedish Embassy in Dhaka:

"The World Bank has immense knowledge in the climate change area, which is useful in the evaluation and further development of the project proposals received from the various line ministries, to ensure they are in line with the climate change strategy. At the same time, they contribute to strengthening the knowledge and capacity on climate change issues in the civil service of Bangladesh."

BANGLADESH AND THE PROJECT IN BRIEF

The Bangladesh Climate Change Resilience Fund (BCCRF) is a multi donor trust fund established by Sweden, Denmark, the United Kingdom and the EU in 2010, together with the Government of Bangladesh and the World Bank. Later, Switzerland agreed to provide funding. To date, donors have contributed USD 125 million to the fund.

The aim is to contribute to the implementation of Bangladesh's Climate Change Strategy and Action Plan.

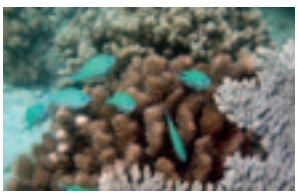
The Climate Change Resilience Fund is managed by the World Bank and is a complement to Bangladesh's own national fund for climate change adaptation.

Sweden is contributing with a total of SEK 90 million to the fund throughout the period 2010-2015.

Marine Research Will Provide New Knowledge About Climate Change

Our current knowledge of how climate change affects the terrestrial environment is relatively well-developed. But when it comes to the oceans and coastal areas, information is still lacking about the effects of climate change. A marine research project in the Western Indian Ocean, will therefore fill in the gaps and develop a joint plan on how the problems should be addressed.

Photo: I. Bryceson



Healthy Corals at Mafia Island, Tanzania.

WESTERN INDIAN OCEAN AND THE PROJECT IN BRIEF

For almost 20 years, Sida has supported marine research in East Africa and has contributed to the development of the Marine Research Council WIOMSA, (Western Indian Ocean Marine Science Association), based on Zanzibar.

WIOMSA supports research in all countries, except Somalia, in the Western Indian Ocean region, (WIO). WIO is comprised of 10 countries: Somalia, Kenya, Tanzania, Mozambique, South Africa and the island nations Mauritius, the Comoros, Reunion-France, the Seychelles and Madagascar.

Sida's support for research on climate change in the region's coastal and marine environments, amounts to a total of SEK 13 million for the period 2009-2011. An assessment on the extension of the support is in progress.

For nearly 20 years, WIOMSA, the Marine Research Council for the Western Indian Ocean has contributed to a better understanding of the region's marine and coastal environment; a region covering Africa's entire East Coast, as well as five of the Western Indian Ocean's island nations. Climate research however, is a relatively new area. WIOMSA, with the support of a three-year grant from Sida, is studying how climate change affects the seas and coastal zones, and what adaptation measures will be most beneficial.

"We have funded 12 different research projects in the region. For example, we have studied where the coral reefs are least affected when the temperatures rise, depending on how the warm water currents move along the coast. These areas have the greatest chance of survival, and therefore need to be prioritised as regards protection from overfishing and destructive fishing practices," says Julius Francis, at WIOMSA's secretariat on Zanzibar, outside Tanzania.

The mangrove trees' ability to cope with floods or increased sedimentation is another research project. This is aimed at identifying which species of mangrove have the greatest resilience to being planted in the most sensitive and vulnerable areas.

Climate change means long-term change. But the people in the poor coastal villages are more focused on how to cope with tomorrow than the situation in five years' time, according to Julius Francis. One of the projects will therefore look at the short-term fluctuations of the climate, and see how they relate to long-term change.

"Researchers have studied how the changed rainfall patterns are linked to the rising sea temperatures. Based on that, they will develop a model that can inform farmers if the rains will arrive on time. The impact of sea temperatures on monsoon winds is also being studied as many fishermen say that

Photo: J. Bosire, Kenya Marine & Fisheries Research Institute (KFMRI).

Marine researchers from Kenya and Mozambique investigating the effects of a cyclone in Guvuro, Mozambique.

the periods with strong winds increase, reducing the number of days to go fishing."

The policy work is an equally important component, and at a conference held in Mauritius in 2011, politicians and researchers from the entire region gathered for the first time for an open discussion on how climate change affects marine and coastal environments.

"All countries in the region have their priorities, but many of the climate change challenges are of transboundary nature. That is why we are working to develop a common regional strategy for the whole of the region's oceans and coastal environments, together with UNEP and the *UN's Nairobi Convention," says Julius Francis.

In order for climate change research to make a real difference, a long-term perspective is required. And ensuring improved cooperation between researchers and policymakers, so that the knowledge generated informs decision-making, says Julius Francis:

"We say to the scientists receiving funding, that they must think further ahead than simply having their results published in a magazine. In some of our projects we have been successful in doing this, and we receive recognition for being the region's leading research council with the largest portfolio of climate change-related projects."

EXAMPLES OF ACHIEVEMENTS

- 12 research projects on various aspects of climate change have been financed. Projects involve at least 20 institutions in nine of the WIO-regions countries.
- Development of a regional strategy in order to assess the impact of climate change in the WIO region. (Climate Change Assessing Implications in the WIO region.)
- Organisation of the conference on Climate Change Impacts, Adaptation and Mitigation in the Western Indian Ocean in March 2011
- WIOMSA's scientific round table "Climate change: Implications for human health, the environment and the economy", in August 2009. A document was prepared that summarizes current knowledge on above issues to be used for policymaking.

* UNEP's Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean region (Nairobi Convention)

Better Agricultural Support to Enhance Farmers' Livelihoods

The small-scale farmers in Bolivia's arid regions are very vulnerable to climate change. To meet the farmers' needs and teach them new agricultural methods, the local authorities need to develop their capacity. This will be done through the three-year project PROAGRO 2.

Photo: GIZ-PROAGRO

Farmers planting vegetables using water from a reservoir using the technique "water harvesting" in Norte de Potosi.

As the rain periods are becoming shorter and the climate warmer, it will be even more difficult for the small farmers in Bolivia's arid highland regions and semi-arid regions to provide for themselves. The water issue is central, and since 2009 Sida has supported the population through the agricultural project PROAGRO 1, which, among other things, has resulted in improved water access to farms and new irrigated areas. In addition, more than 10,000 farmers have improved their incomes with the help of new agricultural technology.

As the project enters its second phase, PROAGRO 2, it is with a clear focus on the impact of climate change on agriculture and the capacity of the authorities to assist farmers with service. With its German partner, GIZ, Sida will be supporting the municipalities in the three regions where the project is being implemented: Chaco, Norte de Potosí and Valle. The municipalities will also be helped by using the models for new agricultural methods that GIZ has developed, on the basis of past experience.

"During the first few years we worked with PROAGRO, we helped out by building water reservoirs and irrigation systems. Now in PROAGRO 2, we are strengthening and educating the municipalities' environmental departments so that they themselves can offer farmers the help they need," says Peter Asmussen at GIZ.

The overall objective of PROAGRO 2 is to increase farmers' incomes from their crops, and this is where access to water is an important aspect. These problems look different in the country's various regions, so it is important to involve farmers in the whole process and conduct a risk analysis.

"If the problem is that the water in a water reservoir is not sufficient for everyone, better irrigation systems with a sprinkler system may be a solution. We can give farmers advice about how they can raise funds for new irrigation systems, or

Photo: GIZ-PROAGRO

Woman with her harvest of onions in Valle Alto, near Cochabamba.

speak with the local authorities and suggest they support our proposals."

Experience has shown that it can be risky to introduce something completely new, it is often better to improve the methods already being used.

"The chances of a new irrigation system providing good results is 50 per cent higher if there is an irrigation system already in place. If we take Potosí as an example, people did not know how a water reservoir worked when we talked about their problems. So the first thing we did was to organise a bus trip for the population of Aiquile where farmers are using it, to study techniques and exchange experience with the others," says Peter Asmussen who himself has been working in Bolivia for eight years.

Bolivia is one of Latin America's poorest countries and their farmers have always adapted to climatic change, according to Peter Asmussen. Many of them have developed their own risk management strategies, where measures, among other things, may include crop diversification, that are better able to withstand droughts, floods or hail in different ways.

"We have already worked with many of the problems related to climate change. What we are doing now is more systematically highlighting the adaptation measures that are needed, and developing strategies on how best to act if the temperature rises by 2 degrees, hailstorms occur more often, the rainy season gets shorter or rainfall decreases by 200 mm per year."

BOLIVIA AND THE PROJECT IN BRIEF

PROAGRO 2 is an agricultural development project financed by Sida and the German Development Ministry BMZ. The German aid agency GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit Gmb) is responsible for its implementation and providing technical support together with Bolivia, through their environment, water, and rural development ministries.

PROAGRO 2 is the second phase of the project and is being implemented during the period from 1 January 2011 to 30 June 2014. The total budget for the project is SEK 200 million, of which Sida will contribute SEK 80 million.

The overall objective of PROAGRO 2 is to improve living conditions among small farmers in Bolivia's arid and semi-arid areas, by improving their management of water resources, increasing their incomes and strengthening their resilience to climate change, which is clearly affecting the fragile region. 66 municipalities are participating in three regions: Chaco, Potosí and Valle.

Another important objective of the project is to develop capacity among those concerned at all levels (farmers, municipalities, regional and national authorities, universities).

Beekeeping As a Way of Saving Mali's Ecosystem

In order to preserve Mali's threatened forests, people need to find new ways of supporting themselves. Instead of cutting down trees, villagers are given the opportunity to invest in beekeeping, animal husbandry or horticulture. The extra incomes make women and men less vulnerable when drought strikes, at the same time as forest resources are not overexploited.

Photo: Julia Björne, Global Reporting

A sorghum plant.

In Mali which is dominated by desert landscape, there is a lot of pressure on the forest, pasture land and arable land. Sorghum and millet, which forms the basis of the Mali diet is entirely dependent on the rain periods, but as climate change affects rainfall, crop yields decrease. To compensate for the reduced incomes, deforestation increases, bringing with it other major problems. The Sida-financed GEDEFOR programme will help preserve the forest by decentralising its administration and providing people with alternative livelihoods. In this way they can improve their ability to adapt to changing climatic conditions.

"We need to make people aware that the forest will disappear if the pressure on it increases. But as long as people are dependent on an income between the rain periods, they will cut down trees to sell as firewood," says Mamby Fofana, programme director at the Swedish Embassy in Bamako.

Horticulture provides a new source of income that villagers are learning to invest in, where drilled wells provide the opportunity to irrigate small cultivations with lettuce, carrot, cabbage and occra, between the rainy periods.

Beekeeping is another way to earn a living. In addition to providing the beekeeper with a good income, it has several positive side-effects.

"The bees need trees to gather nectar which means that those who invest in beekeeping develop a concern for the forest and try to ensure that it is not cut down. The forest also grows better as the bees help in the pollination of the trees" says Mamby Fofana.

In six months, a beekeeper can harvest up to 15 kg from a beehive, resulting in a profit of about USD 60 when sold on the market which is a considerable amount of money in a country where the average income is USD 300 per year.

Photo: Birama Diabaté

Beekeepers in Kassela, Mali.

The GEDEFOR programme is being implemented in the regions of Kayes and Koulikoro, Mali's southern and western parts. Decentralisation, which is a part of the programme, involves moving the management of forest resources from the central authorities, who have been responsible up until now, to locally elected municipalities that represent the local people.

The training itself is conducted in cooperation with local players in so-called Farmer workshops. Besides being able to discuss their own experiences, the villagers learn about climate change and its negative effects and how deforestation leads to soil erosion and a loss of biodiversity, which makes the production systems even more vulnerable.

Mamby Fofana has visited several of the farmer workshops that have been held, and met many positive participants; "they say that the programme should have started earlier." The positive impacts of the programme come from the villagers being able to see the results of their investments so quickly – horticulture provides a harvest within a period of one month.

When the villagers stop cutting down trees to sell as firewood in the capital, apart from preserving the forest this also leads to a reduction in the supply on the markets, pushing up the price of firewood.

"As long as wood is cheap, people will use their old wood-burning stoves. But when the price of fuel rises, there is an incentive to buy more energy-efficient stoves, which in turn results in reductions in CO2 emissions," says Mamby Fofana.

MALI AND THE PROGRAMME IN BRIEF

The programme GEDEFOR will be implemented in Mali between 2009-2012 with Mali's National Directorate for Water and Forestry (DNEF) as the leading national counterpart. The other cooperating partners are village cooperatives, local authorities and some NGOs.

Sida is providing technical assistance and funding for the programme (SEK 19.5 million).

An extension of the programme is planned with a further SEK 6 million, in addition to funds from the climate change initiative. This is to ensure that the programme is integrated and expanded to other areas and to ensure that the results are disseminated.

Some of the achievements so far:

- In one of the municipalities affected, the integrated project has provided incomes for 200 people through agriculture and beekeeping.
- In another municipality, 200 farmers (including 180 women) have received an increase in their income and 250 hectares of agricultural land has been rehabilitated. Tax collection from agro-forestry has increased.
- Increased capacity e.g. through following the training of officials in areas such as results-based management and the use of enhanced equipment such as GPS devices and motorcycles used for the effective implementation of controlling efforts and surveillance.

New Water Reservoirs Will Help Prevent Drought and Famine

In order to ensure food production in the arid Burkina Faso you need to be able to store water between the rain periods. The small-scale water reservoirs are therefore important for people in rural areas and more drain-off reservoirs will be repaired and new ones will be built under the Sida-funded water reservoirs project.

Photo: AUREC-AFRIQUE

Meeting between the project managers (left side), the Mayor of ZANRE and the Sida team.

"As the rain periods are affected by climate change, it is becoming increasingly important to ensure the availability of food. Therefore, we need more dams as water reservoirs to irrigate the crops," says Albert Compaore, Programme Officer of the Sida-funded support for the construction and restoration of water reservoirs in Burkina Faso.

Today there are approximately 1200 artificial water reservoirs throughout the country. The rainwater that is collected there is extremely important, and is used to provide water for the livestock or the crops of tomatoes, beans, onions and other types of "cash crops" which can be sold on the market to earn some extra income. The project funding will restore ten broken dams and build two new ones.

When Burkina Faso was hit by heavy rainfall and floods in 2009 and 2010, many of the country's dams were destroyed along with the livelihoods of thousands of people. As the dams and irrigation systems are being rebuilt, it is important that they are better equipped to be able to withstand the flooding that has been occurring due to climate change.

The 12 dams that are to be ready by 2012 will provide around 1000 families with water. This figure may seem low considering the fact that there are 8000 villages in Burkina Faso with the same demand for dams. But the investment can be regarded as a small part of a larger national adaptation programme of action, (NAPA). The government's objective is that each individual household will be able to build its own small pond which will cover their needs; a pond which is much smaller than the water reservoirs the project is financing.

"These individual small ponds should be able to store water for a few months during the rainy season," says Albert Compaore. "The cultivation of millet, sorghum and maize form the staple diet among the population and they can usu-

Photo: AUREC-AFRIQUE

The spillway and the dissipation basin of the newly built dam of Selmiga.

ally cope with the rain, but they could be irrigated from the small pond if there is a drought during the irregular rain period thus avoiding ruined harvests and famine. I am pleased that Sida has been able to support this idea."

To reduce the poor populations' exposure to drought when the climate is changing is an important objective of the project. The poorest provinces have therefore been given priority when choosing where the reservoirs will be built. Just small and medium-sized water reservoirs have proven to be important for reducing poverty and contributing to local development in several ways, such as an increased local business market in which vegetables are sold, or fish production, continues Albert Compaore.

The building of dams always involves a certain negative impact on the environment, although it is far less for small dams compared to large ones. The preparatory studies that have been conducted have taken into consideration the people living nearby, as well as the sensitive natural environments.

"We can provide financial compensation to the people who have to move, but we can never replace their emotional loss for the land they have lived on for many generations. But when comparing the disadvantages of a dam with the advantages, the latter far outweigh the former. The people in Burkina Faso regard the dams as something extremely positive, something which can ensure that they will have food on the table and avoid suffering," says Albert Compaore.

BURKINA FASO AND THE PROJECT IN BRIEF

The aim of the project which is part of Burkina Faso's National Adaptation Programme of Action, NAPA, is to enhance the dams' resistance to the threat that climate change brings with it.

The Burkina Faso Water Directorate, in the Agricultural, Hydraulics and Fisheries Ministry will implement the project that will finance two new water reservoirs and restore ten others. So far, three dams have been completed.

Sweden is contributing with a total of SEK 93 throughout the project period 2010-2012.

Climate-friendly technologies were used for the restoration and new construction of the dams.

Local user committees will be established at each of the water reservoirs to allocate equal access to water. The stakeholders of the project will seek to integrate women, migrants and young girls in the user committees.

Shared Knowledge Provides Better Climate Change Adaptation

In order to strengthen the work on climate change adaptation in Asian countries, more knowledge is required and a better exchange of experiences. A newly created regional platform will provide those who work with climate change adaptation with the correct tools so that they can better develop the capacity at all levels of society.

REGIONAL ASIA AND THE PROJECT IN BRIEF

The Regional Climate Change Adaptation Knowledge Platform for Asia is funded by Sida and is a collaboration between Sweden's Environmental Secretariat Asia (SENSA), Stockholm Environment Institute (SEI), and the UN's Environment Programme Regional Resource Centre for Asia and the Pacific (UNEP-RRC.AP), in which the latter two carry out the activities. An additional cooperating partner in parts of the project is Asia-Pacific Adaptation Network (APAN).

The purpose of the platform is to more effectively share information about climate adaptation efforts and develop adaptive capacity in Asian countries.

Project period: 2009-2011. 13 countries are involved in the first phase of the platform work: Bangladesh, Bhutan, Cambodia, China, Indonesia, Laos, Malaysia, Burma, Nepal, Sri Lanka, the Philippines, Thailand, and Vietnam.

The Regional Adaptation Knowledge Platform for Asia was launched in 2009. Its objective is to develop a regional capacity for adaptation and it focuses on three different parts: 1) sharing knowledge, 2) developing new knowledge and 3) applying knowledge.

The first phase of the work has been to visit the 13 Asian countries involved in the platform.

"We have visited the countries to find out what is being done in the adaptation area, what knowledge is available and what is needed. Through the various national partners we have selected, we have received help in getting in touch with the right stakeholders. After that, we put together a scoping report for each country." This is according to Roopa Rakshit, the coordinating team leader for the platform at UNEP.

Sharing knowledge and experiences and disseminating this to participants at various levels, is an important aspect of the work for the platform in the region. The exchange of information takes place, among other things, through the thematic seminars which are held in Bangkok every other month. The regional organisations involved have an office in Bangkok and they can then in turn disseminate the information from the seminars and in that way reach out to even more people.

The seminars take up different subjects, from adaptation at a local level and the challenges facing coastal societies in terms of gender equality and health, to the role of the private sector and that of the media. Just as important as the actual lecture are the participatory group exercises that are held during the seminar, where various recommendations are put forward for publication.

The web portal www.asiapacificadapt.net serves as an important gathering point for all of the adaptation information generated by the platform, which is available to experts, policymakers and other national and local participants.

Photo: SEI

Representatives of the provincial government, NGOs, political parties and civil society discusses climate change issues in Tabanan, Bali.

Roopa Rakshit says that the feedback she has received as regards the results has been very positive. They constantly receive many invitations from different places to share their work with the platform.

"We have also received extremely positive feedback regarding the good examples of adaptation measures, which we have written about in the newsletter. And many people write and tell us about their own experiences that we can pass on," says Roopa Rakshit.

The culmination of the platform's first two years of operation has been the two-day forum, held in October, the Asia-Pacific Climate Change Adaptation Forum. In 2010, more than 800 of the world's foremost climate adaptation experts came to the forum, from various international NGOs, donor organisations, authorities, research institutes and universities in order to share their knowledge and experiences. In 2011 the Forum was cancelled due to severe flooding in Bangkok.

"If you can gather together 800 people representing a wide range of organisations, you can disseminate a lot of knowledge by getting them to take the information home with them. For many people, the issue of climate change is still a new concept and it is important to increase people's awareness at all levels," says Roopa Rakshit.

EXAMPLES OF ACTIVITIES IMPLEMENTED

- The web portal www.asia-pacificadapt.net created for an efficient two-way flow of information.
- A large number of policy summaries, desktop studies and briefs have been produced. Completed scoping reports from Bangladesh, Cambodia, Nepal, Thailand, Vietnam, Sri Lanka, Laos and Malaysia. The work of compiling reports from Indonesia, China and the Philippines is in progress.
- Country-specific activities for the application of new knowledge in all 13 countries.
- A newsletter entitled E-communiqué is sent out every month to 4000 recipients and encourages the sharing of experiences and the dissemination of information on new initiatives and events.

Photo: A Salamanca, SEI-Asia

The grandson of a traditional leader listening attentively during a scoping study meeting in Lombok, Indonesia.

Findings

The four-year Special Climate Change Initiative includes some 50 programmes and projects to date in the five selected countries and two regions within the field of climate change adaptation. A number of experiences and lessons-learnt have been generated by the Initiative and challenges have been pin-pointed. Many of these are probably relevant to any short-term, earmarked funding initiative. While not necessarily representing conclusions for the entire Swedish fast-start climate change portfolio, some initial findings are worth underlining:

WORK METHODS:

Adaptation is not necessarily about doing new things, but doing things differently and being more strategic, more aware, and better at managing risks. What makes adaptation so challenging is its cross-cutting nature that requires the involvement of many different sectors as well as stakeholders. Given that adaptation is a relatively new concept for many governments and organisations, capacity development, awareness-raising and broad participation have proven to be crucial aspects of any successful adaptation project or programme. In some countries, the Climate Change Initiative has put an increasing focus on climate change adaptation issues and has thereby enabled a better dialogue between Sweden and the national government. In this sense, short-term initiatives with targeted funding can provide political momentum to highlight climate change issues and find new entry points for policy dialogue at the national and regional levels.

CAPACITY AND OWNERSHIP:

Working with government partners on climate change adaptation requires long-term commitment and predictable funding. While it often will take longer to achieve results, it is likely to be more effective in the long run, with respect to long-term societal impacts. At the country level, it has proven important that the core functions at the ministries work well already. Otherwise not, there is a large risk that the institutions will not be able to sustain the efforts once the project has finished. Given that the capacity is limited in many developing countries and few adap-

tation activities have been ready for implementation, delays have occurred in identifying initiatives to support. This has in turn resulted in certain difficulties in disbursing the funds. In addition, the strong focus on disbursements during a short time span has in some cases resulted in quicker and not as thorough preparations, selecting programmes and projects that are available even though not necessarily the most strategic or innovative ones.

PARTNERS:

It is evident that Civil Society Organisations as implementing partners have in many cases found it easier to adjust to the short time-frame and the need to spend funds quickly. This in comparison to government agencies that may have less possibility to take on temporary staff and divert focus from ongoing reforms and other operations. Regional programmes implementing through multilateral and regional organisations have in some cases also been able to absorb funds quicker than national governments. While partnering with other donors may be more time-consuming initially, regarding agreeing on procedures and structures, etc., pooled efforts are likely to lead to greater impacts. In addition, dealing with only one set of requirements will imply lower transactions costs for the cooperation country or organization.

SUMMARY:

In summary, it is clear that short-term and ear-marked funding initiatives could bring both negative and positive effects. The extra funds could work as an important catalyst in terms of putting more focus on climate change issues in the cooperation with a country or a region. The disadvantage could be that the strong focus on disbursement results in suboptimal choices, less well-designed and primarily supply-driven interventions. In this context, the findings from the Climate Change Initiative to date point at the importance of, on the one hand, striking a balance between demonstrating fast, targeted action related to climate change adaptation and on the other hand ensuring that the process is country-led, participatory and integrated into national and sectoral planning.

A great deal remains to be done to ensure that vulnerable women, men and children in developing countries are better equipped to deal with the negative effects of climate change. Yet, the Climate Change Initiative is an important learning opportunity and it provides a step forward in the right direction.

Sida works according to directives of the Swedish Parliament and Government to reduce poverty in the world, a task that requires cooperation and persistence. Through development cooperation, Sweden assists countries in Africa, Asia, Europe and Latin America. Each country is responsible for its own development. Sida provides resources and develops knowledge, skills and expertise. This increases the world's prosperity.

Adapting to a Changing Climate

GLOBAL ISSUES

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