

## CLIMATE CHANGE: TIME TO ADAPT

### EDITORIAL

It is well known that the effects of climate change particularly impact vulnerable and disadvantaged population groups and, thereby, developing countries. That is why the SDC makes a major investment of around CHF 170 million every year in climate-friendly development projects. In so doing, the benefit is two-fold: poor people are better off and, at the same time, the climate is protected.

For a long time, measures to mitigate the effects of climate change – to stop or at least slow it down – have been first priority, even in development discussions. Since the most recent report of the Intergovernmental Panel on Climate Change (IPCC) published in March this year, it is absolutely clear that the effects of climate change can be noticeably felt and are far greater than expected – such as their impact on water and food security.

Adaptation measures are needed, and the new key words are “adaptation” and “resilience”. The SDC supports smallholder farmers in its partner countries in dealing with the effects of climate change in a beneficial way and in becoming more resistant in general to weather and climate effects. How can we – at the international level – share successful experiences in this field, make them better known and put them to use? The SDC Global Programme Climate Change seeks to have an impact on the policy of international environmental organisations by using practical examples from the real world. You can read about the progress the programme has made and the challenges it has to meet in the enclosed letter.

Christoph Graf  
Deputy Assistant Director General

### LOCAL STUDIES IN SUPPORT OF A GLOBAL VISION

There is no getting away from it: farmers around the world are all describing the same phenomena. With erratic rainfall, rising temperatures, exhausted water supplies and both rapid and unpredictable changes in weather patterns, climate change is making its presence felt and is mainly impacting the world's very poor farmers, who make up the majority of that sector.

More than two-thirds of people in developing countries live in rural areas. The latest report by the Intergovernmental Panel on Climate Change (IPCC), which was published at the end of March, states: “Major future rural impacts are expected in the near term”, which “are expected to disproportionately affect the welfare of the poor in rural areas, such as [...] those with limited access to land, modern agricultural inputs, infrastructure and education.”

### New models

The need to adapt to these developments is becoming urgent, and yet considerable changes in this respect are continuing to be observed. Over the last four years, the SDC's Global Programme Climate Change has conducted a series of local studies in India with a view to applying that knowledge at a wider level. India is an ideal subject, as more than half of its land is used for agriculture and 80% of its farmers are small producers. The programme's local partner is the Watershed Organisation Trust (WOTR), a non-governmental organisation (NGO) focused on the development of watersheds – areas where rainwater collects. The Indian bank NABARD, which specialises in agriculture and rural development, is the third participant in this collaborative initiative, which was described in its external assessment in June 2014 as “experimental and innovative, both conceptually and in practice”.



Planning work on a watershed in the village of Lohesar in the state of Maharashtra, India, involves training the local farmers.

## Swiss manual to be used by the UN

The aim is to test development programmes that include adaptation to climate change, looking at small farmers in four Indian states. These studies, which are documented scientifically, allow the development of new models to be applied at a wider level, as well as feeding into deliberations at the international level.

The first five years of the Global Programme Climate Change have shown that “the combination of innovative projects, knowledge-sharing and political dialogue has achieved significant results, as well as synergies between the various levels of intervention,” explains Jean-Bernard Dubois, head of the SDC’s Global Programme Climate Change Section.

In order to contribute to the implementation of good practices, the SDC has also developed a manual<sup>1</sup> for its staff and partners with a view to evaluating their actions from the point of view of risks relating to climate and natural disasters. That document will be used to produce an online resource. The United Nations Institute for Training and Research (UNITAR) will participate in this project and then use that tool for its own online training, reaching people all around the world.

## Adaptation and resilience

Adaptation has not always been in vogue. In many cases, the people calling for it today were opposed to it 30 years ago: it was considered “defeatist” to prepare for climate change, instead of focusing all

efforts on preventing it. We have now been forced to face the facts: climate change is happening. Such debate has gradually broadened in scope, shifting from the potential impact of such developments to the seriousness of those events and the steps that need to be taken, and it now also includes the establishment of global strategies. Today, the fight against the causes of climate change is more relevant than ever before, but the two new keywords are “adaptation” and “resilience” – in other words, the ability to look ahead and withstand such developments.

The assessment report on the first stage of the partnership between the SDC, the WOTR and NABARD states that the primary objective of that cooperation is to conduct “local studies as a means of ascertaining the social, political and technological innovation that is required in order to adapt to climate change in an effective manner”. With this in mind, the Indian NGO, with the support of the SDC’s Global Programme Climate Change, has shifted its focus, working on a portfolio of projects ranging from a rural advice service to “adaptive, sustainable farming”, via issues such as the saving of water, livestock management, biodiversity, renewable energy, health and nutrition. Particular attention has been paid to educating the beneficiaries of those projects, as well as gender equality. Those projects have been implemented in 49 villages across four Indian states, benefiting a total of 49,000 people, with an annual budget of CHF 900,000 over six years.

## Innovation

The projects’ innovations include the use of tiny weather stations in individual villages (a first for India), with text message alerts where possible. In combination with sustainable farming methods, these have allowed harvests to be improved by between 30% and 80%, as well as limiting losses. Another example is the implementation of local risk reduction measures using maps (sometimes 3D maps) to help people visualise those measures, and a calendar of activities that shows where most of the villagers are during any season so that they can be located quickly in an emergency. There is also scientific monitoring of farming techniques, as well as studies of indigenous plant species that are more resistant and require less water and fertiliser than hybrid plants which are not native to the region.

“One of the difficulties,” Jean-Bernard Dubois notes, “was the absence of benchmarks against which to measure our progress. We have now amassed a volume of data that you won’t find anywhere else.” The other difficulty, which is inevitable when dealing with climate issues, lies in combining starkly differing time frames in a single initiative, thinking long term in order to develop sustainable measures, but also thinking short term in reacting to sudden shocks. Farmers are typically used to dealing with changing conditions, but such changes are now happening very quickly and on a large scale.

## Political dialogue

The various studies conducted in the course of this first phase have piqued the interest of several Indian authorities, thanks to the WOTR’s connections. Madhya Pradesh wants to work on the issue of biodiversity at the state level, while several districts in Maharashtra are interested in the rural advice model. Contact has also been made with institutions such as the International Council for Research in Agroforestry (ICRAF).

Those studies have also allowed the SDC to begin devising a new methodology with a view to sharing it with others. The studies have benefited from favourable conditions in terms of the degree of focus and investment, which are difficult to reproduce. The time has now come to look at the most promising elements and implement them at a wider level. The

1 Climate, Environment and Disaster Risk Reduction Integration Guidance (CEDRIG)



Drip irrigation saved water and ensured the crops of farmers in the village of Gunjalwadi, in the state of Maharashtra, India, during the 2013 drought.



### THREE QUESTIONS TO...



**Sally Fegan-Wyles**, UN assistant secretary-general and acting head and executive director of the United Nations Institute for Training and Research

(UNITAR). UNITAR, the main training institution within the UN system, focuses primarily on assisting developing countries. It hosts a climate change programme entitled “UN CC:Learn”, which was launched in 2009 and is supported by Switzerland.

#### **What does UN CC:Learn do, and how is it financed?**

UN CC:Learn helps to disseminate the knowledge and expertise that developing countries need – now more than ever – to promote low-carbon growth which is resilient from the perspective of climate

change. It is a partnership involving more than 30 international organisations, with UNITAR performing the secretariat function. All of those partners have knowledge to share, be it the UNDP in the area of adaptation or UNESCO regarding teaching methods. The challenge is to disseminate that knowledge in the most effective manner possible. UN CC:Learn specialises in just that, focusing on three different areas: knowledge-sharing, training material for the UN as a whole, and direct support for individual countries. Its financing comes from its partners, national budgets and bilateral donors.

#### **Is there strong demand for training about climate change?**

UN CC:Learn has received requests from a total of 50 countries, many of which are among the world’s least advanced. Thus far, the programme has been activated in five countries, and that will soon become eight thanks to Switzerland’s

support. However, demand far exceeds supply. The support provided to countries is complemented by free online courses, which are available to all. A total of 5,000 people have registered for the introductory course on climate change, and that is increasing day by day.

#### **UNITAR will be helping Switzerland to adapt its environmental and risk reduction manual (CEDRIG) in order to turn it into an online training resource. Does that manual fill a hole, and will you use it?**

CEDRIG helps people on the ground to analyse climate change, environmental developments and the risk of natural disasters in an integrated manner. Our cooperation with the SDC will ensure that it is used more widely. It meets the need for a simple, intuitive and adaptive analytical tool. We envisage it being freely accessible via the SDC as of October. We are also interested in using it for future UNITAR training.

initiative as a whole will also feed into political dialogue – in other words, the ability to influence both regional and international actors (see below), which is the true purpose of a global programme. And specifically? “It is very often the case that either you work on the ground but have no political vision, or you have grand ideas but have never set foot on the ground,” Jean-Bernard Dubois explains. “We try to bring together the people responsible for these different elements and make them speak the same language. And that political dialogue needs results on the ground in order to be credible.”

### **SWITZERLAND’S INTERNATIONAL PRESENCE**

The SDC has established considerable expertise in the general field of climate change, with a particular focus on the issue of adaptation and the financing of developing countries’ efforts. Its presence in a series of international forums allows it to share its experience, as well as influence both the policies and the financing mechanisms of multilateral programmes relating to climate change.

The “soft power” of such political dialogue is both an extension and a result of its actions on the ground.

#### **Adaptation Fund**

The Adaptation Fund is a financing tool for “projects and programmes in developing countries that are parties to the Kyoto Protocol” – particularly those countries that are most vulnerable to the harmful effects of climate change. The Kyoto Protocol foresees a reduction in greenhouse gas emissions through a trading scheme for emissions certificates. A special feature of the Adaptation Fund is the fact that developed and donor countries are in the minority, while recipient countries have direct access to it (without necessarily going via a UN agency) if they present fiduciary guarantees. The Adaptation Fund, which has spent more than USD 225 million to date across 34 countries, is supervised by the 16-member Adaptation Fund Board, which meets twice a year. Switzerland sits on that board, representing what the UN terms “Western European and other states”. There, it applies its knowledge of the situation on the ground.

#### **Green Climate Fund**

This fund forms part of the financial mechanism of the United Nations Frame-

work Convention on Climate Change. Proposed by more than 100 heads of state at the conference in Copenhagen in 2009, it was set up in 2010. It is to become the primary multilateral financing instrument for developing countries. It will help them not only to limit or reduce their greenhouse gas emissions, but also to establish adaptation solutions. Its financing mechanism is in the process of being set up. Switzerland is helping to establish the fund and will participate in its financing. There are 24 seats on the Green Climate Fund Board, with each being shared by two countries. Switzerland shares a seat with Russia.

#### **OECD**

Within the Organisation for Economic Cooperation and Development (OECD), the SDC is represented in two expert groups on climate change. Those groups are made up of delegates from the governments of OECD countries. Their aim is to foster knowledge-sharing regarding development projects involving climate issues, and also to promote dialogue and understanding of technical aspects relating to negotiations in this field. Switzerland is an active participant, providing both substantive contributions and financial support.

## KEY POINTS

**1** Climate change has a disproportionate impact on the poorest people in rural areas of developing countries. It has a direct impact, affecting the availability of water, damaging harvests and destroying natural habitats. It also has knock-on effects on both food prices and food security.

**2** For a long time, mitigating the effects of climate change – i.e. preventing it from occurring – was the main priority for experts, governments and development agencies. Where climate change is observed in practice, there is a need to adapt to it, as well as seeking to mitigate it. Adaptation is a complex issue, as it combines the need for swift action with medium and long-term considerations.

**3** Studies such as those carried out in India between 2009 and 2013 by the SDC and its local partner the WOTR (with the support of the bank NABARD) allow innovative development projects involving adaptation to climate change to be trialled. These are aimed at poor rural populations and provide a wealth of valuable scientific data.

**4** The aim of this first phase is to identify measures which can be developed further at a wider level, which is the *raison d'être* of the Global Programme Climate Change.

**5** The results on the ground feed into the political dialogue being conducted by Switzerland. Its ability to intervene at the level of international organisations allows it to present its case in such forums, acting in accordance with the needs of recipient countries.



**Field research in the village of Karjule Pathar (Maharashtra, India) in 2013. The projects take into consideration the needs of women.**

## INNOVATIVE PROJECTS

(under [www.sdc.admin.ch/projects](http://www.sdc.admin.ch/projects))

### Gathering data on different climates

The SDC is committed to improving the quality of information on the climates of countries in Asia, Africa and South America, where such data are scarce. Information on greenhouse gases, aerosols and melting glaciers is collected and fed into global databases, before being used at the local level. Such data help to ensure that policies are appropriate. This project is coordinated by Switzerland's meteorological office, MeteoSwiss.

### Tackling challenges caused by shrinking glaciers

The speed at which Andean glaciers are shrinking has increased significantly. This increases the risk of natural disasters and is having an impact on the availability of water supplies. The SDC is committed to helping Peruvian authorities and research institutions to adapt to climate change, so that they are better equipped to respond to such challenges. Monitoring of the glaciers also provides key information, which is vital for decision-making.

### Agriculture which is resistant to climate change

In 2012 the International Fund for Agricultural Development launched its Adaptation for Smallholder Agriculture Programme (ASAP). The objective of this programme is to help communities to develop a form of agriculture which is capable of adapting to climate change. The programme aims to help a total of 8 million small farmers by 2020. Switzerland has contributed CHF 10 million for the period 2013–14.

## IMPRESSUM

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