# **Climate Change Adaptation (CCA)**

#### Introduction:

Climate change has become real and tangible, affecting people's lives worldwide. It is a major challenge for agriculture, food security and rural livelihoods. Agriculture is the sector most vulnerable to climate change due to its high dependence on climate parameters. As majority of agriculture in India is rainfed, the impact of Climate Change is further predominant. Proactive measures to deal with climate variability and change can substantially reduce many of the adverse impacts of climate change on human beings and natural systems.

In this direction NABARD has sanctioned a pilot project on Climate Change Adaptation (CCA) in Akole and Sangamner Taluka, Ahmednagar district, Maharashtra State. The CCA project seeks to develop the knowledge, strategies, approaches, measures and processes that enable vulnerable communities to cope with Climate Change and adapt to the impending impacts. The overall objective/ goal of the Project is to enhance the capacities of rural communities to adapt to climate change effects. The project is the first of its kind and is adoptable, replicable and upscalable. NABARD is collaborating with **Swiss Agency for Development and Cooperation (SDC)**in this pilot project.

#### **Project outcome**

The outcomes envisaged from the project are as under

- Communities sustainably manage enhanced ecosystems in the project area.
- Increased productivity of natural and other resources that contribute to improved quality of life of the target group especially the poor.
- Local institutions are in place for effective governance mechanisms to sustainably manage regenerated ecosystems.
- Increased awareness and understanding of Climate Change issues amongst children, the wider public, opinion and policy makers.

#### Key outputs envisaged

- i. Revitalized local ecology and environment due to watershed based conservation and management of natural resources.
- ii. Local biodiversity is documented and promoted.
- iii. Vulnerability and capabilities of target communities assessed and monitored.
- iv. Project communities aware of alternate, clean and renewable energy sources.
- v. Design of a model / pilot for carbon neutral village / cluster developed.
- vi. Target group communities are aware of and capable of using sustainable agricultural practices including livestock management.
- vii. Communities aware of localised climate change information and have access to advisories

- viii. Services. tools and methods to assess the potential of ecologically sustainable and economically viable income generation activities.
- ix. Women and children are benefited from activities that promote health and reduce malnutrition and drudgery.
- x. Local communities are well informed about CC impacts and Disaster Reduction strategies.
- xi. Dovetailing and convergence of village level CCA measures with Govt Programme.
- xii. Knowledge Products systematically generated, documented and disseminated amongst communities, wider public, policy makers & implementing agencies.

# **Project Area**

The project area consists of 25 villages in Akole and Sangamner Taluka of Ahmednagar district. Ahmednagar district that lies in the direct rain- shadow of the Western Ghats is the largest district of Maharashtra covering 5.66% of the area of the State. It is most vulnerable to climate change having known frequent droughts. The average annual rainfall in the district is 578.8 mm. The district is drained by two main rivers, the Godavari and Bhima which is a tributary of the Krishna.

The main source of income is from agriculture and allied activities. Seventy Nine percentage of the household depend on agriculture as the primary livelihood source and about 7 % on non agri labour. The majority of the households depend on agriculture which is totally subjected to vagaries of weather.

## **Project Implementing Agency**

Watershed Organisation Trust (WOTR) is Project Implementation Agency (PIA) for the project. WOTR is a not-for-profit NGO founded in 1993 and registered at Ahmednagar under Bombay Trust Act 1950 having registration no E-476/AH dated 20 December 1993.

## WOTR CCA Project Web page

## **Project Components :**

Project aims to development adaptive capacities of communities for climate change. The project includes components such as agro-meteorology for tracking weather patterns at the village level leading to generation of advisories to farmers on what steps to take in emergency conditions. This is also linked to water budgeting, crop planning, adaptive and sustainable agronomic practices and irrigation management. Project integrates biodiversity concerns in all its activities and encourages alternate energy (solar, biogas, etc.) to meet some of rural energy requirements. Overlaying these initiatives is a native focus on securing sustainable livelihood opportunities together with market linkages for people in these areas.

# **Climate Proofing of Watershed Projects :**

The sustainability of public programmes, investments, or agricultural value-chains may be at risk due to climate change. GIZ has developed the tool Climate Proofing for Development to analyse

whether intended benefits of investments and government schemes or agricultural production levels are threatened by the impacts of climate change. Additionally, opportunities of reducing climate risks through investments and programmes, or of increasing the capacities of communities and institutions to deal with climate change are explored through Climate Proofing.

NABARD is applying these climate proofing tools in watershed projects on pilot basis in collaboration with GIZ and KfW.

The watersheds identified for the implementation of Climate Proofing tools are:

Tamil Nadu (Dindigul District):

- Appiyampatti watershed
- Poosaripatti watershed

Rajasthan (Udaipur District):

- Anjeni Watershed
- Ravatpura Watershed

# NABARD as National Implementing Entity (NIE) of Adaptation fund

The Kyoto Protocol of the United Nations Framework Convention on Climatic Change (UNFCCC) stated that *parties to the Protocol shall ensure that a share of the proceeds from the certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the cost of adaptation*. In line with this decision (Article no. 12.8 of Kyoto Protocol), at the seventh session of the Conference of the Parties to the UNFCCC, held at Marrakesh, Morocco, in Oct-Nov 2001, the Adaptation Fund has been set up. To supervise the operation of the Fund and to approve projects for adaptation activity in eligible developing country has access to Adaptation Fund and can seek financial support to undertake adaptation activities at national and regional level.

As per the '*Operational policies and guidelines for parties to access resources from the Adaptation Fund*' (copy enclosed), projects can be prepared and submitted by *National Implementing Entities (NIEs)* to the designated authority of the national government for endorsement to the AFB Secretariat for consideration and sanction.

The NIEs will bear full responsibility for the overall management of the projects and programmes financed by the Adaptation Fund and will bear all financial, monitoring, and reporting responsibilities. The roles and responsibilities of NIEs is enclosed as Annexure I. The NIEs may appoint Executing Entities to execute projects and programmes under its oversight.

NABARD has been accreditation by the Adaptation Fund Board of UNFCCC as <u>National</u> <u>Implementing Entity (NIE)</u>.