



## Climate Change Adaptation in Rural Areas of India - CCA RAI



## Context

The most vulnerable group in Indian society are the rural poor as they often depend on natural resources for their livelihoods, for instance from agriculture, fisheries and forestry. The country's natural resources are already under tremendous pressure as a result of various human activities. Now human-induced climate change poses an additional challenge, increasing the vulnerability of rural communities. The impacts of climate change currently predicted for India include a rise of up to four degrees Celsius in surface air temperature by 2100, a decline by almost a third in yields from certain rain-fed grain crops, and a rising number of extreme weather events, such as droughts, floods and cyclones.

These impacts will vary strongly in their extent and form throughout the country. Customised interventions are therefore required to cope with specific risks in different states and regions. Scientific knowledge of the projected regional impacts of climate change need to be enhanced and combined with best practices from different sectors, and linked to proven coping strategies, local knowledge and innovative ideas.

To prepare for the impacts of climate change, the Indian Prime Minister launched the country's National Action Plan on Climate Change (NAPCC) in 2008. With an advanced institutional landscape providing a good knowledge base and expertise relevant to climate change, India is well prepared to deal with the multi-faceted nature of climate change. The challenge now is to develop a cross-sectoral integrated approach.



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The Indo-German development cooperation project CCA RAI aims to enhance capacities of vulnerable rural communities in India to live with climate variability and change. The Ministry of Environment and Forests (MoEF), Government of India, four of India's federal states and GIZ are using a multi-level approach involving several different components to work towards this goal, guided by India's National Action Plan on Climate Change.

Madhya Pradesh, Rajasthan, Tamil Nadu and West Bengal were chosen for the implementation of CCA RAI, as these states represent India's differing agricultural-climatic zones. Through the project a strong network of partners in the four states will be built relying on existing institutions from the public and private sector.

## State Action Plans on Climate Change (SAPCC)

The Ministry of Environment and Forests has requested all Indian states to develop action plans to define how they will undertake activities and programmes aimed at adaptation and mitigation in consonance with the objectives of the National Action Plan on Climate Change (NAPCC). GIZ and other organisations, such as the United Nations Development Programme, UK Department for International Development and the World Bank are providing technical assistance to interested federal states in the development of their State Action Plans on Climate Change (SAPCC). The state-level plans are not only important for the implementation of the NAPCC, but also for the inclusion of particular regional and local characteristics and specific concerns of vulnerable sectors and communities within each state.

## State-level vulnerability and risk assessments

Although various methodologies exist for vulnerability and risk assessment, there is a gap between global scenarios and local risk assessments. This component focuses on developing and testing a structured approach to climate change vulnerability and risk assessment at the state level. These analyses provide the scientific basis for decision making at the policy level. Through CCA RAI the governments of the four participating states are being assisted to complete this task, using expert contributions from relevant stakeholders. The component should result in a simple and reliable approach to vulnerability and risk assessment that can also be used by other federal states.

## Developing and testing adaptation measures

So far, very little detailed empirical knowledge exists on how to deal with the risks of climate change or exploit the opportunities it may bring. MoEF and GIZ are supporting the governments of the four federal partner states, as well as local communities and other relevant stakeholders in identifying, developing and carrying out adaptation measures in pilot regions. Once tested, the adaptation measures can be fine-tuned and implemented in other regions with similar agricultural-climatic conditions.

## Climate proofing government programmes

Policy planners need to gauge the sustainability of public sector programmes in the face of climate change. The climate proofing tool developed by GIZ can be useful to analyse whether the objectives of government projects might be threatened by climate change, and how the planned measures can be adapted accordingly. The project is the first of its kind to carry out climate proofing of public investments. The experiences gained here will be made available to other interested ministries and federal states.

## Developing financial instruments for adaptation

The rural poor often have just limited access to financial products which could help to reduce the impacts climate change has on their livelihood. Through CCA RAI a number of financial instruments that already exist are being assessed, including insurance and credit schemes that might be suitable for promoting adaptation to climate change. Close links with international and national actors from both the public and private sectors are being established in order to design, test and market affordable financial products assisting adaptation in rural areas.

## Information and knowledge management

It is still necessary to heighten the awareness and expert knowledge regarding adaptation to climate change, particularly at the local level. For this reason, another focus of the project is on communicating relevant approaches, technologies and lessons learnt. A network of stakeholders for future activities and exchanges of information is being built up. Involvement will be promoted at different scales, from rural communities to federal states, as well as at national and international levels.



## Project Partners

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