



## Madhya Pradesh State Action Plan on Climate Change

### Sector Policy Brief: RURAL DEVELOPMENT

**A**ccording to the 2011 census, about 72% of the residents of Madhya Pradesh live in rural areas, where they rely on agriculture, forestry, livestock and fisheries for their livelihoods. This amounts to 52.5 million people living in about 55,000 villages. Their low levels of income and dependence on natural resources makes rural people particularly vulnerable to environmental degradation: unsustainable harvesting practices, marginal lands that preclude advanced agricultural practices, deforestation and deteriorating soil and water quality make the livelihoods of landless labourers, small farmers, forest product collectors, construction workers and household-based artisans ever more insecure. The rural areas of Madhya Pradesh contribute about 30% to State Gross Domestic Product.

### Rural development in Madhya Pradesh: Challenges and solutions

Access to proper health services, coupled with poor sanitary and hygienic conditions, are major challenges for remote areas. Infant and neonatal mortality rates are considerably higher than in urban centres.

About 10% of rural households have access to in-house sanitation facilities and just 62% of rural households have safe drinking water. Vector- and waterborne diseases, such as malaria and dengue, are widespread.

The reduced availability of clean surface water in rural areas – a persistent problem in recent years – has led to a dependence on groundwater and a consequent reduction in groundwater levels. Water shortages, particularly during the summer, are having negative impacts on irrigation and the raising of cattle.

A number of existing government projects and programmes aim to improve livelihoods and create employment opportunities for the rural population. These include initiatives such as the National Rural Employment Guarantee Scheme, the Mid-Day Meal Scheme and the Madhya Pradesh Livelihood Programme. Yet, distress migration to urban areas, due to crop failures and a perceived lack of alternative livelihood options, poses a challenge for implementation of these rural development schemes and activities.

## What does climate change mean for rural development?

Studies suggest that climate change will have major impacts on the rural sector. Shifting cropping patterns, changing vegetation types, the disturbed distribution of rains and longer dry spells are just some of the challenges to be faced by communities that depend on agriculture for their livelihoods; this includes 70% of the population of Madhya Pradesh. The level and intensity of environmental events associated with climate change – extended drought, flooding and spread of accidental fire – will particularly affect small-scale and marginal farmers, who have little access to the technologies and services that might help them to adapt.



A dying tradition of lac farming has been revived in the eastern parts of Madhya Pradesh. Tribal communities had previously grown Palash trees and cultivated the lac seeds that are used for purposes such as producing paint, cosmetics and adhesives. For various economic and social reasons, the practice stopped. However, with farmers facing repeated crop failures they were interested in whether lac farming could provide a sustainable new source of income. Support was provided by the Madhya Pradesh Rural Livelihoods Project (MPRLP) and resulted in 3300 Palash trees being distributed to selected villages in Mandla district as well as training given to farmers.

The project's success has since encouraged the practice to spread to other districts. Madhya Pradesh is already the third largest producer of lac in the country and is poised to become a major agri-business hub internationally.

Source: <http://www.mprlp.in/new/Stories/Story10.htm>

Ecosystem changes and higher temperatures are also likely to stimulate the migration of disease vectors into rural areas. A lack of education and information among communities about the risks posed by climate change and the ways to address them means that already vulnerable people are unlikely to be able to cope with the challenges that climate change will bring.

Opportunities need to be explored to engage rural communities in mitigating climate change as well as adapting to its effects. Capacity building, the adjustment of existing rural development programmes to include climate change concerns, and greater inter-departmental collaboration will be fundamental to building the resilience of rural communities to climate change.

## Adaptation and mitigation strategies set out in the SAPCC

Rural communities are particularly vulnerable, given their direct and heavy dependence on the natural resources threatened by climate change. This vulnerability means that there is no margin for error in the planning and implementation of adaptation strategies. Climate change is expected to take a heavy toll on forests, water, agriculture, energy and health. Getting it right means ensuring that rural adaptation strategies are integrated with climate change action plans across the relevant state departments. The key strategies are to:

- ▶ Evaluate existing rural development programmes from the perspective of climate change and modify them to ensure they



- are fully supportive of any efforts by rural communities to adapt to and mitigate the impacts of climate change.
- ▶ Build capacity and develop skills among the rural population for alternative income-generating activities so that communities can diminish their dependence on the natural resources that may be threatened by climate change and reduce the vulnerability of their livelihoods. Raising community awareness of existing government rural development programmes, schemes and benefits would enable people to make better informed decisions about their livelihood options. There is also a need to document indigenous knowledge about local biodiversity, ecosystem services and cultural landscapes. Such knowledge may help to provide insights that support community-based adaptation and mitigation strategies.
  - ▶ Build into local government planning the strategies and actions needed to enable rural communities to adopt new technologies for adapting to and mitigating climate change. For example, measures to ensure water and energy efficiency and the use of biogas and solar energy applications should be reflected in annual local government plans.
  - ▶ Make credit available to rural communities for infrastructure development and insurance against climate induced vulnerabilities. This would enable people to invest in the technologies and capacity building they need to be able to cope with climate change. It would also protect them from economical insecurities, particularly in times of natural calamities and crop failures.

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The Madhya Pradesh State Action Plan on Climate Change (SAPCC) has been prepared by the Climate Change Cell, Environmental Planning and Coordination Organisation (EPCO), Housing & Environment Department, Government of Madhya Pradesh. The Plan outlines the strategies required to strengthen development planning and build a more climate-resilient State. It aims to promote the integration of appropriate adaptation/mitigation strategies into the State's development policies and programmes. It is based on secondary data and promotes 'no regret' measures.

In order to share the results of the Madhya Pradesh SAPCC and begin to address climate change concerns through development policies and programmes, the Climate Change Cell of EPCO commissioned a series of policy briefs. CDKN was tasked with producing these, based on the Madhya Pradesh SAPCC, as a Communications Project. This brief is one of a series of ten sector policy briefs, designed to inform stakeholders about the strategies and commitments established in the SAPCC that are of relevance to their sector. Further information can be found in the full SAPCC, available at [http://www.epco.in/pdf/Draft\\_MP\\_SAPCC.pdf](http://www.epco.in/pdf/Draft_MP_SAPCC.pdf)



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