

# SUSTAINABLE LAND MANAGEMENT AND INNOVATIVE FINANCING IN BHUTAN

*This study aimed to assess the effectiveness of Sustainable Land Management (SLM) activities in strengthening the communities' adaptability to climate change by gathering baseline data from nine existing Sustainable Land Management Project (SLMP) sites in Bhutan. It sought to identify and incorporate best practices into plans, policies, and programs for further expansion, as well as to introduce experiences learned from SLM site visits in other countries. The study also conducted a feasibility assessment for setting up long-term financing mechanisms for SLM activities to enhance their resilience to climate change.*

## CONTEXT

For Bhutan, a landlocked country nestled in the Himalayan mountains, which renders only 7 percent of its total land usable, land degradation has become a major threat for local communities. More than 70 percent of its population relies on subsistence and mixed farming for their livelihoods, with a paucity of alternative employment opportunities.

Although environmental policies have been instituted to tackle land degradation, this issue has persisted due to a combination of natural and human-made factors. First, global warming is predicted to cause temperatures to rise by 3.5°C by the 2050s, thus resulting in unpredictable rainfall — factors that will undermine soil quality and structure. Second, arable land and forests have been increasingly utilized for the construction of farm roads and electricity transmission/distribution lines. Finally, the relentless pace of industrial and urban development in recent years has further destabilized the ecological system. The socioeconomic consequence of rural poverty has led to the flight of young generations from villages into cities, despite poor job prospects there. Concomitantly, villages suffer from labor shortages, resulting in lands being left fallow.

This is why SLM interventions, implemented by the government, with the support of Bhutan Trust Fund for Environmental Conservation (BT FEC) and external donors such as the World Bank and the Global Environment Facility (GEF), have been so pivotal. They have helped to build up the villages' resilience to climate change by introducing climate smart agricultural techniques. However, to exert a long-term impact on the environment and the lives of the farmers in Bhutan, sustainable financing will be needed for the continuation of SLMPs.



## QUICK FACTS

### PUBLICATION DATE

April 2019

### RELEVANT CIF PROGRAM

Pilot Program for Climate Resilience (PPCR)

### EVALUATION FIRM

Bhutan Trust Fund for Environmental Conservation (BT FEC)

### RELEVANT COUNTRIES

Bhutan (Trashigang, Chuka, and Zhemgang Districts); Tajikistan and Indonesia (study visits)

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## KEY FINDINGS

The following findings were gathered from field visits, interviews and focus group discussions with farmers, meetings with stakeholders from various ministries, along with direct observations from the three pilot sites – the districts of Trashigang, Chukha, and Zhemgang.

- 1 SLMPs have promoted a range of climate-smart agricultural measures which have led to the restoration of 7,684 acres of vulnerable land and productivity improvements.** Apart from raising the farmers' awareness of SLM practices, the positive outcomes of SLMPs have increased the appeal of farming, which could reduce rural-urban migration.
- 2 The coordinated and effective implementation of numerous policies, plans, legislations, and guidelines related to SLM has been hampered by a lack of sufficient resources.** The absence of an endowment fund and the government's lack of provision of sufficient funding for SLM interventions in its Five-Year Plans are contributing factors.
- 3 Factors that have encouraged farmers' participation in SLM activities included:** a) provision of financial incentives for engaging in SLM activities on their lands; b) acquisition of SLM technologies through hands-on training; and c) growing awareness and experience of the benefits of SLM in countering land degradation, boosting productivity, and improving rural livelihoods.
- 4 Farmers reported that their implementation of SLM activities had been affected by** inadequate financial support, a lack of farm labor, the small size of their landholdings, and conflicts with wildlife.

## RECOMMENDATIONS

- Develop a comprehensive and standardized policy towards sustainable land use.** A comprehensive land use policy requires careful planning with both short-term and long-term goals. Short-term goals such as alleviating soil erosion and improving productivity are critical for encouraging widespread adoption. At the same time, the policy must also factor in multiple long-term priorities such as improving horticulture, expanding capacity, and ensuring financial sustainability.
- Promote the widespread adoption of SLM activities at the community level.** Workshops and demonstration sites should be initiated to promote the value of SLM and the revival of traditional labor-sharing practices in all the districts. In the near future, farmers should be encouraged to assume some of the costs of SLM activities on their lands, which would be a key indicator of their growing sense of ownership.



Farmers from Bhutan undertaking Sustainable Land Management.

- Cultivate the commitment and coordination of all key bodies.** To ensure the progress of SLM activities, key decision-making agencies, namely BTFEC, the Royal Monetary Authority of Bhutan, the National Environment Commission, the Gross National Happiness Commission, and the Bhutan Chamber of Commerce and Industry, should work together to formulate the aforementioned land use policy. It can be used to guide the implementation of activities to mitigate land degradation through ecologically-sustainable means. The early foundation of coordinated partnerships can prevent duplication of similar tasks across different agencies.
- Incorporate key SLM indicators in the Five-Year Plans.** National plans and policies such as the Five-Year Plans need to incorporate funding for current and proposed SLM activities. Funding needs can be determined based on the SLM management plan developed by local beneficiaries and partners at all SLM sites.
- Establish a sustainable endowment fund.** BTFEC should seek the support of the government and multilateral donors to establish an endowment fund of USD15 million for implementing SLM activities in the long-term. A comprehensive needs assessment of SLM interventions across the country can provide detailed cost estimates on how the fund can be optimized over a 10-year period.