

## BOOK REVIEW

**Title:** Climate Change and Community Resilience: Insights from South Asia.

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Climate change is a worldwide phenomenon and a global issue. Its effects can be seen on a planetary scale. Some of the effects are persistent heat waves, cyclones, extended droughts, high-intensity rainfall, flooding, landslides etc. According to the Global Climate Risk Index, South Asia faced the most deaths and economic losses due to climate change. This book presents case studies, stories and examples of climate change adaptation initiatives from seven South Asian countries—Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka—highlighting traditional and indigenous knowledge with community engagement. The book has 27 studies (chapters) organized under six themes (Parts): concepts and models; traditional knowledge and sustainable agriculture; technology adoption; disaster risk reduction; urban sustainability; and alternative livelihoods.

The first part starts with concepts and models where an integrated framework known as community-based adaptation is developed to link with UN Sustainable Development Goals (SDGs). It focuses on principles of resilience for poverty reduction, development, growth, and sustainability. India is a large economy with a variety of agricultural products and agriculture is one important sector which will be severely impacted by climate change. This study presents the determinants of farm level adaptation in India but fails to examine the farm-level adaptation decisions across different categories of farmers like large farmers compared to small and marginal ones. The section ends with an example of the application of a MFF (Mangroves for Future) initiative and RAP (Resilience Analysis Protocol) that provides support to communities to manage their resources in sustainable way.

The next theme focuses on the importance of indigenous and traditional knowledge to combat climate change. For example, Paddy growers in Bhutan growing traditional rice varieties to deal with water scarcity; tribal diversity in Pakistan to deal with flash floods; use of innovative local knowledge among farmers to build an agricultural practice to withstand the onslaught of sea waves in Maldives. This section also shows how privatization of common resources has led to widening of social inequalities and

how subsidy on electricity increases the depth of water table. In such case rainwater harvesting technology can be a potential strategy.

Technology adoption section focuses on the use of technology to cope with climate change. It presents how adapting RWH (Rain Water Harvesting) technology in Nepal helps diversify coping system from subsistence cereal crops to high – value commercial vegetables. It provides an example of how ‘Bandalling’ and ‘Baira’, a traditional technology, can be used as the most cost-effective tool to control river bank erosion and stop waterlogging problem in Bangladesh. This section also focuses on the use of LPG to reduce the use of fuel wood.

The part of disaster risk reduction is about how communities have collaborated to reduce the risk of natural disaster. It provides evidence on the importance of mangroves in reducing the damage caused by cyclones on the coast of Odisha in India, and Bangladesh and how afforestation programs, policies to curtail unnecessary gas emissions, reducing the use of fossil fuel and improving the efficiency of energy usage can contribute to manage the risk of drought.

Urban Sustainability section highlights creative approaches to water and waste management as part of climate adaptation in urban areas. It presents the case of Bharatpur Metropolitan City of Nepal, where the revenue from the collection of waste is insufficient to cover the cost of collection and disposal. So, the potential solution for revenue collection could be by increasing tariff on imported plastic, recycling plastic materials and moving towards clean city. Clean city has a positive impact on housing prices and increasing property tax can increase the municipal revenue to manage waste. It also presents the importance of motivation and awareness to women in managing waste through segregation as the best strategy against waterlogging.

Finally, the section on Alternative Livelihood documents alternative livelihood options to diversify income which is threatened by climate change. It shows how community tourism initiatives as an alternative livelihood option to agriculture can contribute towards building household resilience to climate change. It also depicts how crop diversification can improve resilience by enhancing capacity to cultivate different crops at different situations in Pakistan and how migrant labour as an alternative choice for a livelihood in Sundarban helps Sundarban build resilience to climate change.

Moving forward through sections of this book asserts that there is no single solution to ensure adaptation to climate change. Adapting to climate change, on one hand,

can sometimes ensure effective utilization of resources, and on the other hand, might incur costs to the community. However, the combination of factors like traditional knowledge, new innovations, sensitive state intervention and market incentives can ensure that communities can effectively adapt to changing circumstances and challenges.

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