

whether voluntarily or involuntarily, poses a threat to their values and belief systems.

Regular public discussions are a source of information exchange and cooperation amongst islanders. These dialogues are a forum for expressing any community concern and finding inclusive solutions – but climate change is not a topic that has found a prominent place in these discussions. While islanders of Lakshadweep are ostensibly vulnerable to climate change, their way of life on the island can have a positive bearing for adaptation to the effects of climate change. Their attachment to place and their traditional knowledge in managing environmental stressors can motivate them for climate change adaptation activities. Meanwhile, the high level of reciprocity amongst islanders, both on the island and between islands, could be used to disseminate information and awareness.

Climate induced-migration, if it occurs, is likely to erode exactly the identity, local culture and traditional knowledge that can be useful in making them resilient. This kind of loss cannot easily be assigned a value. There needs to be a constructive debate on how to compensate for loss of homeland, culture and values – and what the criteria will be for distributing resources when it is so challenging to establish what the loss is and how much the damage is.

Himani Upadhyay *Himani.Upadhyay@teri.res.in* and Divya Mohan *divya.mohan@teri.res.in* are Associate Fellows at the Earth Sciences and Climate Change Division in TERI, New Delhi, India. www.teriin.org

Ilan Kelman *ilan_kelman@hotmail.com* is a Reader at University College London www.ucl.ac.uk and a Senior Research Fellow at the Norwegian Institute of International Affairs. www.nupi.no

Building adaptive capacity in Assam

Soumyadeep Banerjee, Suman Bisht and Bidhubhusan Mahapatra

A starting point for adapting to longer-term climate change could be adaptation to short-term climate variability and extreme events. Making more informed choices about the use of remittances can enhance the adaptive capacity of remittance-receiving households.

Assam state in north-eastern India experiences annual floods which displace people, destroy crops, kill livestock and damage infrastructure. Dependence on natural resource-based livelihoods in an area that is also less developed makes local households vulnerable to floods. Lakhimpur district of Assam is among the worst flood-affected districts in the state. Remittances are increasingly becoming a vital component of household income in Lakhimpur and can be a potential financing mechanism to fulfil the unmet adaptation requirements of recipient households.¹

The migrant workers from this district who send back the remittances are generally male and work in the informal sector in urban

centres within Assam or across India. This out-migration of men exposes women to new tasks related to disaster preparedness, food security and farm management, for which they are often unprepared. Women will not have had the same opportunities to access markets, extension services and government programmes as men do. Out-migration of men therefore requires women to acquire new skills, capacities and knowledge to deal with new challenges.

Remittance inflow increases in the aftermath of the floods that occur in this area and is used to procure provisions, rebuild livelihoods and repair houses. The recipient households' flood responses are primarily focused on coping during the flood (e.g. temporary shelter for

May 2015



livestock and people, storing food or drinking water) and on recovery in the immediate aftermath of the flood. Flood preparedness is sporadic and constrained by: uncertainty about the benefits of building household-level adaptive capacity while basic needs (e.g. food, health care, shelter) remain unaddressed, low volume of remittances, lack of financial literacy and access to financial services (particularly among women who are often the recipients and managers of remittances), and lack of understanding and access to technical inputs on how to invest remittances in 'low-cost' disaster preparedness and livelihood diversification options.

Financial literacy

In action research conducted by the International Centre for Integrated Mountain Development's Himalayan Climate Change Adaptation Programme with the Institute of Integrated Resource Management, and Swayam Sikshan Prayog, women recipients of remittances are envisaged as the household level 'change-makers'. Financial

literacy and flood preparedness trainings are envisaged to enhance the human capital of the recipient households whom this action research identifies as a special interest group in the rural communities.

Financial literacy training in particular aims to maximise the financial returns, avoid unnecessary expenses and support saving in the recipient households. The training on flood preparedness envisages training the women in aligning flood preparedness with the savings plan. The investment of remittances in high-priority and low-cost flood preparedness measures (e.g. emergency food storage, safe drinking water and improved cook stoves) will build the adaptive capacity of recipient households – the first step towards adaptation. These training sessions are complemented by community-level extension services for the beneficiary households (e.g. regular meetings and household visits, support to access financial institutions, dissemination of information on government schemes) that are provided by the village coordinators.

While some of these interventions may be commonplace in poverty reduction, disaster risk reduction or development, their linkages with adaptation, adaptive capacity and remittances are new. Women from the selected recipient households have shown a lot of enthusiasm for the training and extension services. This highlights that these women are, probably for the first time, considering flood preparedness as a feasible long-term activity for the household, and not just leaving it to the government and NGOs.

Soumyadeep Banerjee is a DPhil candidate at the University of Sussex, and Migration and Population Specialist, Suman Bisht is Senior Gender Specialist and Bidhubhusan Mahapatra is Survey Research Specialist, all at the International Centre for Integrated Mountain Development (ICIMOD), Kathmandu.
www.icimod.org
Soumyadeep.Banerjee@icimod.org

Suman.Bisht@icimod.org
Bidhubhusan.Mahapatra@icimod.org

The assistance of the following in formulating this article is also acknowledged: Sanjay Sharma of ICIMOD; Dhattatreya Hosagrahar of the Institute of Integrated Resource Management, Tezpur; Rajesh Badakh, Laxmikant Malvadkar and Chandran Puthiyottil of Swayam Shikshan Prayog, Pune; and Parthajyoti Das of Aaranyak, Guwahati. The authors also thank Professor Dominic Kniveton from the University of Sussex for his continued support.

This research was undertaken under the Himalayan Climate Change Adaptation Programme (HICAP). HICAP is implemented jointly by ICIMOD, CICERO and GRID-Arendal in collaboration with local partners and is supported by the Governments of Norway and Sweden.

1. Based on a joint study by ICIMOD and Aaranyak.

Mixed motivations and complex causality in the Mekong

Jessica Marsh

Many climate change-affected communities have already been using migration as a means to adapt to and withstand the challenges to their livelihoods and security. Strengthening of existing protections for all migrants is clearly advantageous in the context of climate change.

In the Greater Mekong Subregion¹ there is a strong correlation between people's perception of negative environmental changes and decisions about migration. However, it is also clear that other factors are equally if not more important in decisions about migration, and that economic and environmental factors are inextricably linked.

In Ma Gyi Chay Htaut Village in Myanmar's central dry zone, conditions are arid all year round, with limited rainfall. Residents report experiencing lower average rainfall and more extreme warm weather. Research partners ECODEV and the Foundation for Education and Development found that

environmental changes are affecting lives, in particular in relation to increasing debt and decreasing income, increasing food insecurity, negative health impacts, and decreasing quality and quantity of crops.

Low income means that it is difficult for residents to accrue savings which could act as a buffer during periods of climatic variability, water stress and environmental change. Currently out-migration – mostly to nearby towns, with smaller numbers migrating further afield – is occurring primarily as a result of a lack of jobs, environmental changes and health hazards. A majority of people cited environmental changes