



Ali Taugeer Sheikh Asia Director

In Asia, we are scaling up successful approaches to climate compatible development that we have already piloted at the local and subnational levels – focussing particularly on climate-related disaster risk management. Here, we are also supporting governments to become 'climate finance ready'.



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Most roads from Paris to Marrakech go through Delhi, as India offers knowledge solutions on climate compatible development.



Helping Nepal's smallholder farmers to become 'climate smart'

Nepal's agriculture sector, which accounts for around three-quarters of employment and one-quarter of the country's gross domestic product, is strongly affected by climate variability, uncertainty and extremes. Many farmers operate at small scale; they are already poor and extremely vulnerable to climate change.

Young men have migrated to jobs elsewhere, and so many farmers are women and the elderly, and suffer increased workloads. Women and smallholder farmers also have the least access to natural resources and public services, and limited livelihood options.

In 2015–2016, CDKN supported a project by Local Initiatives for Biodiversity, Research, and Development (LI-BIRD) Nepal to pinpoint climatesmart agricultural technologies and practices that could sustain crop productivity, promote climate resilience and contribute to climate change mitigation.

The project assessed the vulnerability of the dalit (lower caste) community and the janajati (ethnic minority) communities to climate change in three agro-ecological zones. This helped to identify

the vulnerabilities of specific social groups and appropriate adaptation activities.

Innovations such as an improved cardamom dryer in one district showed how new technologies could save energy and fuel, reduce workloads and improve cash incomes. The improved cardamom dryer uses less fuel-wood, lowers carbon emissions and reduces deforestation; it also improves the quality of dried cardamom, which fetches a better price at market. In the past year, the project has worked closely with the District Agriculture Development Office, District Development Committee and District Chamber of Commerce and Industries in Lamjung to plan and promote cardamom production and drying as a strategy.

In Kaski district, consultations with the District Agriculture Development Office led to the idea of improving cattle sheds and linking this with collection of manure. Farmers said they favoured such packages of complementary measures. The project has shown that climatesmart agriculture can be integrated with other development measures and offers a good chance of being sustainable after the project ends.

Climate resilience gains prominence in Indian planning

Gorakhpur is a highly flood-prone district in Eastern Uttar Pradesh, India. In the past century, floods have increased markedly: they now recur every 3-4 years, and sometimes annually. One-fifth of the mostly rural population is affected. The floods cause huge loss of life, health, food security and livelihoods for the poor inhabitants, and extensive damage to public and private property.

A research programme in Gorakhpur, delivered jointly by the Gorakhpur Environmental Action Group (GEAG), the Institute for Social and Environmental Transition (ISET) and the National Institute of Disaster Management, and supported by CDKN, aims to address these issues and is now creating broader ripples in terms of climate related disaster risk management across India.

The programme focuses on better integrating climate change into district disaster management plans. Until recently, India's disaster management planning at district level was heavily geared towards post-disaster relief and reconstruction, rather than reducing risk and building resilience to future disasters. The CDKN-supported programme helped the Gorakhpur District Disaster Management Authority (GDDMA) understand where people

were most vulnerable to floods and how disaster management actions could incorporate greater climate resilience.

In 2013, with support from the research project, GDDMA facilitated a multi-sectoral planning process which led to the preparation of a new climate-smart district disaster management plan, aligned to different departments' needs, priorities and capacities. This is considered by the National Institute of Disaster Management to be a model for such plans. The process was repeated, and the plan upgraded, in 2014 – this time without external support.

GEAG worked with CDKN to produce an 'Inside Story on Climate Compatible Development' about how they achieved results, and a film about their experience. All these resources, available on www.cdkn.org and translated also into Hindi, have been used in trainings to spread the word about the 'Gorakhpur model' to more than 600 districts in India. Now, the Government of Uttar Pradesh has directed all 75 districts in the state to follow Gorakhpur's process. During 2015, the Gorakhpur model for disaster risk reduction was rolled out by regional governments in seven new districts.





Taking renewable energy seriously in Pakistan's industrial heartland

Pakistan's energy sector is in crisis, with inadequate electricity supply costing the country US\$14 bn annually. In 2015, Pakistan's Ministry of Climate Change and the Punjab Power Development Board asked CDKN to assess whether a Nationally Appropriate Mitigation Action (NAMA) would be an appropriate tool to support renewable energy solutions for Sialkot City.

Sialkot is an emblematic industrial hub in Pakistan: its factories supply 40 million footballs a year, an estimated 70% of the global production of hand-sewn footballs. NAMAs were introduced in 2007 under the UNFCCC as a mechanism for enabling mitigation action in developing countries, with financial and technical backing from developed nations.

With CDKN support, Ecofys (Netherlands) and PITCO (Pakistan) assessed Sialkot industries' demand for energy – and which renewable energy technologies could meet their needs. The partners convened more than 100 representatives from the leather, sports and surgical industries in mid-2015 to discuss energy needs and the potential for renewable energy options to produce both cost and emissions savings.

The project showed that if Sialkot City's industries adopt photovoltaic panels to generate electricity, they could reduce emissions by up to 377,000 tonnes of carbon dioxide equivalent per year and each save an average of US\$27,400 per year on electricity costs. The proposal gained traction among industrialists and the Sialkot Chamber of Commerce and Industry. Based on keen interest from industry representatives in the feasibility study, and the strong economic case for solar PV, it is likely that some industries will consider shifting to renewable energy options.

