

Climate and Development Outlook

Stories of change from CDKN



April 2014

**Climate and Development
Knowledge Network**

Helping developing countries
to design and deliver climate
compatible development

Nepal Special Edition

CLIMATE CHANGE HITS NEPAL'S ECONOMY

In Banke district along the West Rapti river basin, farmers have noticed that floods are coming more often, and with greater intensity. Flooding has always been part of the annual cycle, but the last 40 years have seen 12 major floods that have eroded land and wiped out crops and buildings. Each major flood costs the average household the equivalent of US\$9,000. The floods also bring water-borne diseases, putting lives at risk – particularly of the elderly and children.

Residents of the West Rapti basin have tried to adapt to the increasing flooding. Those who can afford it have reinforced the foundations of their homes or raised them on plinths. Some have changed their farming patterns to grow crops that better withstand the water. But for many, if the situation continues to worsen, they will lose the ability to absorb the impacts of the floods. Some residents are already considering migrating from the area.

The situation in Banke is quite common. In fact, a third of those interviewed by CDKN partners moved to their current home when their previous home was affected by landslides or severe flooding. From the Terai plains to the peaks of the Himalayas, communities are struggling to cope with the impacts of climate change.

Their stories put a human face on CDKN-sponsored analysis – for the Government of Nepal – on the cost of climate change to the country. It is estimated that the direct cost of climate change impacts at present is equivalent to 1.5–2% of GDP per year, rising to 5% or more in years of extreme weather events. In the agriculture and water sectors, the projected impact of climate change could reach the equivalent of 2–3% of GDP by 2050. Impacts of this magnitude would prevent Nepal from achieving its key growth and development objectives.

continued on page 3 >>

Nepal's climate and development

Nepal is one of the poorest countries in the world – 157th out of 187 countries in the human development index – despite recent progress in reducing multi-dimensional poverty rates from 65% in 2006 to 44% in 2011. The economic growth rate has remained at 3–4% over the last couple of decades (reaching 4.6% in 2012) – constrained by poor access to reliable power and weak transport infrastructure. Political instability, a legacy of the 1996–2006 civil war, is an additional impediment to growth.

The country has been categorised as the fourth most vulnerable in the world to climate change. It is a predominantly rural society: 70% of the 27 million population relies on the agricultural sector as their primary source of income, with recent temperature rises and reduction in winter rainfall affecting productivity. Its unique ecosystems, including the Himalayas, and its weak adaptive capacity make it particularly vulnerable to climate change including natural disasters.

There has been some progress in integrating adaptation and mitigation of climate change within development planning and policies, but capacity and resource gaps have limited progress. CDKN aims to strengthen this process through the design and delivery of climate compatible development plans and policies in key sectors such as agriculture, water and energy.



GUEST COLUMN

UNFCCC negotiations: Expectations of the Least Developed Countries (LDC) Group for the year ahead

PRAKASH MATHEMA, NEPAL, CHAIR OF THE LDC GROUP AT UN CLIMATE CHANGE NEGOTIATIONS;
JOINT SECRETARY, MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENT, GOVERNMENT OF NEPAL



COP 19 held in Warsaw at the end of 2013 concluded with a number of positive outcomes. The Warsaw International Mechanism for Loss and Damage and Warsaw Framework for REDD+ provide foundations to build upon in the coming years. Crucially, we also set timelines for when parties should pledge their national-level actions as contributions to the Durban Platform for Enhanced Action.

However, the overall outcomes failed to put the scale of climate change and the expected impacts into perspective, especially in light of recent disasters like typhoon Haiyan.

Therefore the onus on all Parties to the UNFCCC to develop the future global agreement within the next two years is huge. For future UNFCCC frameworks and workplans to match the scale of the actual threat, world leaders need to commit to bold action and the means for implementation. Time is running out for the world's ability to limit the rise in global temperature to below

2°C. The effects of climate change are increasingly being felt around the world, with poor populations suffering the most.

The LDC Group believes that the year 2014 should be the year of climate ambition. The developed countries should show leadership in aggregating strong climate action in 2014. In addition, developing countries that are in a position to do so should also commit to bold and ambitious climate actions. Sub-national governments, municipalities, business, finance, industry and civil society should also catalyse actions that will help the world shift towards a low-carbon development pathway. The LDCs, who are the poorest and the most vulnerable, are doing their part. Many are preparing low-carbon development strategies while implementing projects to address their urgent and immediate adaptation needs.

The LDC Group believes that the UNFCCC sessions in 2014 and the

upcoming climate summit called by the UN Secretary General will spur UNFCCC Parties to move ahead and generate the necessary momentum to achieve a bold climate agreement in 2015.

CDKN's support to the LDC Group – through direct legal and technical support, advisory services, training courses and workshops – has immensely helped to strengthen the capacity and confidence of our negotiators to actively engage in the climate change talks. Also, CDKN support has contributed to stronger coordination within the Group, and enhanced Group profile and influence in the arena of climate change negotiations. We are grateful to all the support received and hope for continued collaboration in the years ahead.

>> continued from page 1

The Government of Nepal has recognised that resilient and sustained economic growth requires adapting to the current and future impacts of climate change. Its 2011 Climate Change Policy sets the high-level vision for adaptation; the challenge now is to mainstream this within development policies and programmes.

CDKN is working with the Ministry of Science, Technology and the Environment (MoSTE), to coordinate such mainstreaming efforts across government, and with line ministries, to turn policy into action on the ground. CDKN is also helping to build the Government's capacity to engage strategically in the international negotiations on climate change.

The results of CDKN's four years of technical assistance to the Government of Nepal, and more than £1 million (US\$1.5 million) investment are outlined in this special Outlook edition.

In partnership with the Government, research institutes and others, CDKN is helping to build the resilience of the poorest and most vulnerable in society by integrating climate-related risk management and opportunities into the design and delivery of development plans.

"CDKN is trying to address the critical capacity and governance gaps in Nepal that limit the country's ability to respond to the risks posed by climate change and take advantage of the opportunities of climate compatible development."

RAM CHANDRA KHANAL,
CDKN COUNTRY ENGAGEMENT LEADER,
NEPAL

MAKING THE ECONOMIC CASE FOR CLIMATE COMPATIBLE DEVELOPMENT

The current and future economic cost of climate change in Nepal make a powerful statement about the vulnerability of the country's growth and development and the need for climate compatible development. An international-local consortium of IDS-Nepal, Practical Action Consulting Nepal and GCAP has spent the last year working with the Government to produce an economic impact assessment of climate change in the key sectors of water and agriculture in Nepal.

The headline figures of the direct future and current costs of climate change mask the complicated picture of costs and benefits across different regions and sectors of the country. Firstly, if wider indirect and macro-economic costs (for example health impacts of increased diseases) are also considered then the estimates of current impacts could increase substantially (by 25–100%). There is a huge amount of uncertainty in the projections of future climate change, making it impossible to say for certain what the impacts and costs will be. For example using climate modelling the team has estimated that in the agriculture sector there will be significant losses at lower altitudes but mixed results and potentially increased productivity in higher regions. However, overall, after 2050,

net agriculture losses of around 1% of current GDP are projected.

The Government has already taken action on adapting to the impacts of climate change but this assessment found that it is not enough. After screening existing policies and analysing current investment flows, the team concluded that an additional US\$2.1 billion (total present value) is needed to address the adaptation needs up to 2030 in just three sectors: agriculture, hydro-power and water-induced disasters.

This research was led by a steering committee of all relevant Government departments and will be launched by the Government in April 2014. Discussions will then start on how to progressively address the existing adaptation deficit.

GOVERNMENT OF NEPAL BECOMES GLOBAL LEADER IN CLIMATE NEGOTIATIONS

At the end of 2012 the Government of Nepal was appointed as Chair of the LDC Group in the UNFCCC, a challenging role that requires speaking on behalf of 49 diverse countries. This position is testament to the effort the Government has put in over recent years to engage with and participate pro-actively in the negotiations. CDKN has also contributed by building the professionalism and expertise of the



“[CDKN’s support has] provided international exposure to our negotiators and strengthened their negotiating capacity...and increased our awareness and enthusiasm to be involved in climate negotiation continually”.

KESHAB BHATTARAI,
FORMER SECRETARY, MoSTE

Nepal delegation, and in their new role, supporting the chair with technical assistance to find consensus within the LDC group.

Raising Nepal’s voice in the negotiations

Prior to becoming LDC Chair, the Government of Nepal was focused on getting the critical issues for Nepal on the agenda of the UNFCCC. CDKN assisted them to achieve this through 18-months of advice and support delivered by IDS-Nepal to strengthen the capacity of the delegation to engage strategically with the negotiations. This included training, facilitating planning meetings and providing advice to the delegation that resulted in the Government being better prepared and more coordinated when they participated in the negotiations. Some results included: setting up a core negotiating team for the COP to prevent horse-trading for delegation spots; producing high-quality UNFCCC submissions; and leading an initiative of interested governments to advocate for special attention to mountain regions.



Graduating to leaders in the negotiations

CDKN has been supporting the LDC Group as a whole for several years, including Nepal’s chairmanship since 2013. This includes real-time legal advice, communication and secretarial support, and the facilitation of preparatory and working meetings of the group. As Prakash Mathema, who represents the Government as Chair has stated: “CDKN support has contributed to stronger coordination within the Group, and enhanced the Group profile and influence in the arena of climate change negotiations.”

During Mr Mathema’s first strategic meeting of the LDC Group he delivered an inspiring speech advocating for a mind-shift: “We should adopt a new

continued on page 5 >>

New evidence emerging on climate change impacts in Koshi River Basin

A team of local experts led by the Nepal Development Research Institute are assessing the impacts of climate change on current and future development in the Koshi River Basin, which connects with China and India, due to increased variation of extreme climate and hydrological events. After a year of data collection, analysis and consultations they are soon to present their findings and propose adaptation measures and policy innovations for disaster risk reduction and climate change adaptations in this area.

Find out more about CDKN’s programme in Nepal

This publication shares some of the key highlights of CDKN’s work in partnership with the Government of Nepal, research and knowledge management organisations, media and civil society. For more in-depth information about our projects and programme in Nepal, please visit: www.cdkn.org/regions/nepal

“Most of the impacts of climate change are visible in the rural, high altitude area of Nepal, such as melting glaciers...The communities in these areas are extremely vulnerable and most in need of information on how to adapt to the impacts. This poses a challenge to the NCCKMC. How to reach these areas, report back to the policy-makers as well as provide information to the affected communities? We are confident that by working with the Government, academic institutes and civil society, we can meet this challenge.”

DR DINESH BHUJU,
NCCKMC



>> continued from page 4

mantra in the international climate arena. In our quest to secure a future of climate safety, we must move from an ‘after you’ mentality to a perspective that says, ‘follow us’”. This new ‘mantra’ motivated the LDC core team and has been well received by governments and stakeholders.

A STRONG KNOWLEDGE MANAGEMENT SYSTEM UNDERPINS NEPAL’S CLIMATE PLANNING

The Nepal Climate Change Knowledge Management Centre (NCCKMC) is showing signs of a bright future. When in 2010 the Government asked CDKN to support the centre, it had been newly created out of the National Adaptation Programme of Actions (NAPA) process and lacked the funding and capacity to become operational. CDKN provided support to make it a visible and effective centre for connecting policy-makers and stakeholders to the latest evidence and information on climate change.

While many challenges remain, the NCCKMC’s involvement with CDKN

has brought them into the national and regional climate change arena, as well as strengthened their links with communities. For example, the centre has partnered with local universities, as well as leading academics in the UK and elsewhere, to commission and mentor young grantees carrying out research that will fill ‘blind spots’ of how climate change is affecting Nepal’s mountain region.

The centre’s future is now on track to be sustainable. The Government has committed its own resources to allow services to continue now that CDKN’s support is completed. Under the Climate Investment Funds’ programme in Nepal, the NCCKMC has also been selected to manage both knowledge management and research activities for the next two years. The NCCKMC will remain a key partner for CDKN in Nepal and has the potential to play an important role in connecting research to policy.



CLIMATE-RELATED FOOD SECURITY DATA SYSTEM IN PLACE

The Ministry of Agricultural Development's food security data collection system (NeKSAP) has been collecting data on climate change. CDKN supported ISET-Nepal and the World Food Programme to develop and pilot a set of climate change indicators that provide the Government with valuable new evidence on where and how climate change is affecting development.

For example, through household surveys, individuals are asked about changes observed in crop diseases and pests, land affected by climate hazards and the extent to which income has been affected by agricultural productivity. Investments can now be prioritised in the districts and on the issues where they will have most impact. These indicators have been well received and there is interest in replication by stakeholders elsewhere.

Written by Elizabeth Gogoi, with support from Mairi Dupar, CDKN

Design and layout: Green Ink (www.greenink.co.uk)

Photos: p. 4: Jason Larkin/Panos Pictures; all other images: Neil Palmer/CIAT

This document is an output from a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID or DGIS, who can accept no responsibility for such views or information or for any reliance placed on them. This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, the entities managing the delivery of the Climate and Development Knowledge Network do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it. Management of the delivery of CDKN is undertaken by PricewaterhouseCoopers LLP, and an alliance of organisations including Fundación Futuro Latinoamericano, INTRAC, LEAD International, the Overseas Development Institute and SouthSouthNorth.

The Climate and Development Knowledge Network (CDKN) aims to help decision-makers in developing countries design and deliver climate compatible development. We do this by providing demand-led research and technical assistance, and channelling the best available knowledge on climate change and development to support policy processes at the country level. CDKN is managed by an alliance of six organisations that brings together a wide range of expertise and experience.

Sign up to CDKN's monthly e-newsletter and Roster of Experts on www.cdkn.org

WATCH OUT FOR:

- *Launch of the Economic Impact Assessment of Climate Change in Nepal in Kathmandu, April 2014.*
- *Documentary film on the vulnerability of the Koshi River Basin to climate change, mid 2014.*
- *International conference on community-based adaptation in Kathmandu, April 2014.*

CDKN Global

7 More London Riverside
London
SE1 2RT
+44 (0) 207 212 4111
www.cdkn.org
enquiries@cdkn.org

Regional contacts

africa@cdkn.org
asia@cdkn.org
lac@cdkn.org



Funded by:



Ministry of Foreign Affairs of the Netherlands