



ADAPTATION  
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PLATFORM

ASIA PACIFIC  
ADAPTATION  
NETWORK

# e-communique

Issue 15  
February 2012

## 2ND ASIA PACIFIC ADAPTATION FORUM

12 & 13 MARCH 2012

UNITED NATIONS CONFERENCE CENTER  
BANGKOK, THAILAND

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Welcome to the one platform, which gives you all the information you require or may want to share in the field of adaptation to climate change. This monthly newsletter is brought to you by the Regional Climate Change Adaptation Knowledge Platform for Asia (AKP) and Asia Pacific Adaptation Network (APAN).

We will be happy to spotlight your Climate Change Adaptation (CCA) activities, announcements, events and new initiatives. All you have to do is to send your submissions to [info@climateadapt.asia](mailto:info@climateadapt.asia)

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## CALENDAR OF ACTIVITIES

### Pacific Climate Change Focal Points and Experts Consultation Meeting, 28-29 Feb, Apia, Samoa

A consultation meeting of the Pacific climate change focal points and experts is organized by APAN in collaboration with the Secretariat of the Pacific Regional Environmental Programme (SPREP). It aims to meet the following objectives: i) introduce UNEP networking approach, including APAN's sub-regional node and thematic nodes to the key stakeholders working on climate change adaptation in the Pacific; (ii) introduce to member countries the role of SPREP as APAN's Pacific Sub Regional node; hold discussion on major challenges to address climate change (e.g. types of capacity gaps, knowledge and information gaps, gaps in policies and legislation etc.) from the country's point of view; (iii) identify priority regional issues, support needs to overcome those challenges, and roles of national institutions to respond in collaboration with APAN; and (iv) further identify the needs of Pacific users, of the Pacific Island Climate Change Portal and introduce the APAN web portal as a potential tool for the Pacific countries.

### 2nd Asia-Pacific Climate Change Adaptation Forum Pre-event Briefing and Panel Discussion, 6 March, Bangkok

Climate change is no longer a global threat but a global reality. The recent floods in Thailand have driven home the devastating impact of climate change in dislocating families, communities, schools and disrupting business. It is in this regard that the Climate Change Adaptation Forum 2012 Secretariat is delighted to announce the first annual Climate Change Adaptation Film Festival where three of the best cinematic depictions of climate change adaptation will be screened on the opening night of the Climate Change Adaptation Forum 2012. This festival celebrates the power of the media and the arts in addressing climate change, adaptation and mitigation in an educational, artistic and innovative way.

The Climate Change Adaptation Forum 2012 is an annual event attended by high-level representatives from around the world involved in climate change adaptation. They come from media, academia, non-government organizations, international, multi-lateral agencies, private sector and government with the primary aim of exchanging knowledge on adaptation actions in the context of sustainable development. Also in attendance are panels of climate change adaptation experts and celebrity spokespersons who advocate greater attention to climate change adaptation. This discussion is a media briefing and a pre-event to the upcoming 2nd Asia-Pacific Climate Change Adaptation Forum to be held at the UN Conference Center from March 12 to 13, 2012.

### Provisional Agenda

Moderator & Provocateur:

**Stuart Ward**, *The Development Cooperation Section of the Embassy of Sweden in Bangkok*

1. Enjoy the flavors of the region as singers Jonas and Christy perform for us.
2. Screening of a video, prepared by Thai PBS of the recent floods that have devastated large parts of Thailand.
3. Khun Winai "Make" Kraibutr, famous Thai movie star, will speak on the creative industry's role in environmental issues.
4. Screening of the winning films on Climate Change Adaptation at the Film Festival for the 2nd Asia-Pacific Climate Change Adaptation Forum, 12 & 13 March 2012.
5. Panel Discussion on advocating greater attention to Climate Change Adaptation followed by a Q & A session.

The panelists are:-

- Dr. Mozaharul Alam, Regional Climate Change Coordinator for Asia and the Pacific Region, UNEP
- K. Thepchai Yong, Managing Director, Thai Public Broadcasting System (Thai PBS)
- Dr. Geoffrey Blate, Senior Advisor, WWF Greater Mekong
- Dr. Robert Mather, Head of South East Asia Group, The World Conservation Union (IUCN)
- Dr. Albert Salamanca, Stockholm Environment Institute, Asia Centre (SEI)

For further information or RSVP and media registration, email: [info@climateadapt.asia](mailto:info@climateadapt.asia)

## APAN Networking and Steering Committee Meeting, 11 March, Siam City Hotel, Bangkok

The APAN networking and steering committee meeting is scheduled to discuss current and the potential steering committee members, selected sub-regional nodes and the thematic nodes of APAN and some donors /observers.

## Workshop on ADB's Regional Technical Assistance, Promoting Climate Change Adaptation in Asia and the Pacific, 11 March, Siam City Hotel, Bangkok

In conjunction with the Second Asia Pacific Adaptation Forum on 12-13 March in Bangkok ADB is organizing a half-day culminating workshop on ADB's regional technical assistance, Promoting Climate Change Adaptation in Asia and the Pacific (RETA 6420). The workshop will be conducted to share and disseminate experiences and lessons learned under the RETA on how to integrate climate change adaptation in development plans, programs and projects. The program has two main work sessions: 1) short presentations from ADB Project Officers or implementing agencies on the status, outcomes and lessons learned from the small-grant activities on adaptation implemented under the RETA, and 2) a broader overview of ADB's technical and knowledge resources, products and activities with respect to adaptation, and ongoing priorities for filling knowledge gaps to support expanded adaptation efforts.

## FORTHCOMING ACTIVITIES

### Second Asia-Pacific Climate Change Adaptation Forum, March 12 to 13, Bangkok

The Adaptation Forum is being organized by the Regional Climate Change Adaptation Knowledge Platform for Asia (Adaptation Knowledge Platform), the Asia Pacific Adaptation Network (APAN) and the Asian Development Bank (ADB).

For more information, Pls visit: <http://www.asiapacificadapt.net/adaptationforum2012/>

## ANNOUNCEMENT

**NEW DATES** OF THE SECOND ASIA-PACIFIC CLIMATE CHANGE ADAPTATION FORUM, MONDAY, 12 & TUESDAY, 13 MARCH 2012

## 2nd Asia-Pacific Climate Change Adaptation Forum

The Second Asia-Pacific Climate Change Adaptation Forum, which had to be put off due to the alarming flood situation in Bangkok in October, will now be held at the United Nations Convention Centre (UNCC) from 12 to 13 March 2012.

The interactive Forum aims to focus on “Adaptation in Action” signifying a shift from deliberations to decisions, plans to policies, and from policies to practices.

Confronted with the threat of flooding, the Forum, earlier scheduled from October 27 to 28, 2011, had to be postponed at the last minute. Bangkok was in the grip of floods, which had led to the closure of the UNCC, besides prompting the Thai Government to declare a long holiday on days that coincided with the dates of the Forum.

We hope the deliberations at the Forum, which will gather leading adaptation practitioners from across the globe, will help put behind us this painful chapter in the history of Thailand.

The format of the Forum will remain the same, with a diverse range of plenary and keynote sessions, panel discussions, roundtables, thematic events, market place and film festival. Sessions will be facilitated by eminent climate scientists, adaptation experts and development planners from the region.

The Forum will focus on:

1. Linking knowledge to adaptation actions;
2. The governance of adaptation decision-making;
3. Insights from practices – Learning from experiences on the ground.

Some sessions will focus on key sectors or areas vulnerable to the impacts of Climate Change impacts whereas others will deal with issues that cut across sectors and places. These broad themes will be discussed in the context of sustainable development, and with the objective of stimulating concrete and practical actions that will impact the most vulnerable ecosystems and societies.

The Adaptation Forum is being organized by the Regional Climate Change Adaptation Knowledge Platform for Asia (Adaptation Knowledge Platform), the Asia Pacific Adaptation Network (APAN) and the Asian Development Bank (ADB).

For more information, please visit <http://www.asiapacificadapt.net/adaptationforum2012/>



## CCA News

**e-discussion on Strengthening Research Capacity of HKH Universities, 2–12 Jan, Kathmandu**

The Himalayan University Consortium (HUC), a membership-based network for promoting education, research and capacity building, and training for sustainable mountain development of HKH region, which covers many large, vulnerable, and fragile ecosystems in Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan, held a series of e-conferences from January 2 to 12. The e-discussions focused on how HKH universities could adopt a more socially and economically relevant and inclusive agenda for knowledge development and dissemination, and the kinds of institutional changes required to target knowledge development in support of poor and marginalized communities.

**Students Brave Hailstorm to Study Climate Change in Remote Nepal, 8 Feb**

On Feb 8, the weather at Gopetar, a small village located at an altitude of over 2,000 m altitude, between Taplejung and Panchthar in the Mechi Highway, was very cold when the Mobile Campaign for Climate Change Awareness spearheaded by Nepal Climate Change Knowledge Management Center (NCKMC) reached there to organize an on-the-spot climate program at Sirijung Higher Secondary School. Dr Dinesh Bhuju, Team Leader of the Center, explained the difference between weather and climate to his audience, while Mr Pawan Neupane, an environmentalist in the team, taught the students how to do hazard mapping of their locality and keep a weather diary to understand climate change. The program was organized by the Mobile Campaign of Strengthening NCKMC Project undertaken by Nepal Academy of Science and Technology (NAST) with funds from Climate and Development Knowledge Network (CDKN).

**Climate Change Program in Tea Growing Ilam, 9 Feb, East Nepal**

On Feb 9, NCKMC organized on-the-spot climate program at Adarsh HS School at Ilam Bazaar, Nepal's most popular tea growing hilly area in the east. Over 120 students of science stream attentively listened as the NAST experts spoke at length on climate change and its impacts. They also actively participated in the discussion, and asked how this serious issue of climate change was being coordinated at the national level. They wanted to know about the key players in the issue, especially those involved in developing tools of adaptation and mitigation.

**Climate Change Talk Captured, 7 Feb, Taplejung, Nepal**

Funling Bazar, the headquarters of Nepal's remote mountainous district Taplejung, conducted day-long activities on climate change and its impacts, attracting hundreds of enthusiastic high school students accompanied by their science teachers and principals, who were worried about the snow white mountains turning into black rocks due to less snow in the recent years. A dozen of colorful posters with photos or graphics explaining climate change and its impacts on human health, agriculture, forests, biodiversity and livelihood were displayed on the occasion. During the interaction program, NAST academician Dr Dinesh Raj Bhuju explained the causes of climate change, especially the human-generated factors and some of the adaptation measures that could be taken.

**Policy Dialogue on Climate Change, 5 Feb, Biratnagar, Nepal**

A Policy Dialogue on Climate Change and Consultation was successfully conducted in Biratnagar, Nepal's industrial hub in eastern lowland of Tarai. Professor Maheswor Man Shrestha, Vice-Chancellor of Purbanchal University, inaugurated the program highlighting the importance of taking climate change information to the general populace and raising awareness since its negative impacts would impact everyone.

**Nepal Village on Climate Change Frontline, 25–28 Jan**

Global warming, which is hitting Nepal particularly hard, is causing glaciers to melt, raising the fear of catastrophes. The locals residing in the Sunkoshi and Bhotekoshi Basins along the Araniko Highway of Nepal have witnessed three glacial Lake Outburst Floods (GLOFs) in the past and live in perpetual fear of another sudden disaster. The villagers lamented that they were not responsible for climate change, so why were they being made to suffer. Their misery was recounted by Nepali newspapers such as Gorkhapatra, The Rising Nepal, and The Himalayan Times.

**Business Opportunities in Himalayan Ecosystem Management, 3 Feb, New Delhi**

The mountain ecosystems of the Hindu Kush-Himalayas play a pivotal role in protecting the environment and in providing goods and services essential for human well-being and prosperity. Yet while government, research and development institutions, and civil society groups have frequently convened to discuss approaches to sustainable development in mountains, the private sector has not



often been at the table. On February 3, a side event at the Delhi Sustainable Development Summit (DSDS) invited business leaders to the discussion table.



The event 'Business Opportunities in Mountain Ecosystem Management' was organized by the Kathmandu-based International Centre for Integrated Mountain Development (ICIMOD) and The Energy and Resources Institute (TERI). It provided a rare opportunity for scientists, economists, members of the business community, and policy makers to focus on the role and responsibility of businesses in sustainable mountain development, and to explore the emerging investment opportunities. <http://www.icimod.org/?q=6593>

## Upcoming CCA Events

### Divisional Conference on Climate Change and Community-Based Adaptation (CBA), 18 March, Sylhet, Bangladesh

CARE Bangladesh will hold a divisional conference on Climate Change and Community-Based Adaptation in Sylhet on March 18. The co-organizers of the conference included Association with Action Research for Community Adaptation in Bangladesh (ARCAB) and Department of Forestry and Environmental Science, Shahjalal University of Science and Technology (SUST), Sylhet. The conference includes four sessions focusing on the following themes:

1. Gender and Climate Change
2. Agricultural Adaptation Approaches
3. Non-farm livelihood Approaches
4. Indigenous Approaches

The organizing committee will publish a proceeding of abstracts, and all those interested in getting their abstracts published can send write-ups of not more than 250 words to Dr. Md. Qumruzzaman Chowdhury at [qumrul@gmail.com](mailto:qumrul@gmail.com)

### 1st National Conference on Community-Based Adaptation, 9–10 April, Dhaka

Action Research for Community Adaptation in Bangladesh (ARCAB), a long-term action research programme on Community Based Adaptation (CBA) to climate change in five major ecosystems in Bangladesh, is organizing its 1st national CBA conference in April 2012 to demonstrate the theories and practices of CBA in Bangladesh. The two-day event will provide knowledge-sharing spaces to academicians, practitioners, researchers and CBA communities. It will feature four plenary sessions and eight parallel sessions on different aspects and themes of CBA. ARCAB is jointly managed by Bangladesh Centre for Advanced Studies (BCAS) and International Institute for Environment and Development (IIED). For more information, visit [www.arcab.org](http://www.arcab.org)

### Resilient Cities 2012, 3rd Global Forum on Urban Resilience and Adaptation, 12–15 May, Bonn, Germany

The third Global Forum on Urban Resilience and Adaptation 'Resilient Cities', will take place in Bonn, Germany, from May 12 to 15. It will provide an outstanding platform for discussions, experience sharing, networking and development of resilience and adaptation solutions. Visit: [www.iclei.org/bonn2012](http://www.iclei.org/bonn2012)

### International SWAT Conference & Workshops, 16–20 July, New Delhi, India

The Soil and Water Assessment Tool (SWAT) is a public domain model jointly developed by USDA Agricultural Research Service (USDA-ARS) and Texas AgriLife Research, part of The Texas A&M University System. SWAT is a river basin-scale model to simulate the quality and quantity of surface and ground water and predict the environmental impact of land management practices on different soil patterns and land use patterns. SWAT is widely used in assessing soil erosion prevention and control, non-point source pollution control and regional management in watersheds. Conference topics include large-scale applications and climate change applications. For more information, visit <http://swatmodel.tamu.edu/conferences/2012/>

### 4th International Disaster and Risk Conference, 26–30 August, Davos

The 4th International Disaster and Risk Conference (IDRC) 2012, where science meets practice and international institutions, will take place in Davos, Switzerland, from August 26 to 30 with several pre-and post-conference activities (conferences, workshops, trainings). For the fourth time, risk and disaster management experts, practitioners,

scientists, key players from UN and International Organizations, civil society, Non-Governmental Organizations and the private sector representatives will meet in Davos to discuss latest scientific findings and sustainable solutions for today's challenges. This biennial global gathering attracts about 1,000 participants from over 100 countries and offers an ideal platform for networking, knowledge exchange and dissemination of practical knowhow. <http://www.grforum.org/>

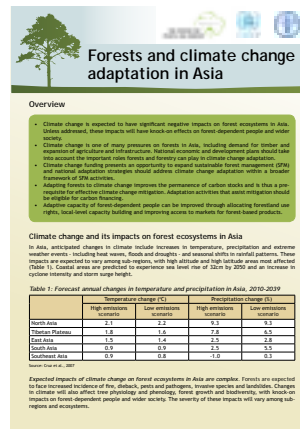
## CCA Information Resources & Knowledge Products

### Publications

#### Adaptation to Climate Change with a Focus on Rural Areas and India



The Indo-German project, 'Climate Change Adaptation in Rural Areas of India' (CCA RAI, [www.ccarai.org](http://www.ccarai.org)) has launched a book, titled "Adaptation to Climate Change with a Focus on Rural Areas and India". The publication provides an overview of the main issues in current adaptation discussions and suggests adaptation options in six different fields related to rural areas: Agriculture, Forests, Biodiversity, Water Resources, Coastal Zones, Disaster Risk Management. It also describes concepts and approaches for adaptation and its integration into development planning besides giving examples from India, as well as other parts of the world, to illustrate how existing theory can be put into practice. The book was jointly published by Ministry of Environment and Forests, Government of India and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in October 2011. The authors are international and Indian adaptation practitioners and academics. <http://www2.gtz.de/dokumente/bib-2011/giz2011-0479en-climate-change-rural-india.pdf>



#### Policy Brief on Forests and Climate Change Adaptation

[http://www.fao.org/fileadmin/templates/rap/files/NRE/Forests\\_and\\_climate\\_change\\_adaptation\\_in\\_Asia.pdf](http://www.fao.org/fileadmin/templates/rap/files/NRE/Forests_and_climate_change_adaptation_in_Asia.pdf)

Related meeting report and presentations:

<http://www.fao.org/asiapacific/forestry-adaptation>

#### Policy brief on Forests and Landslides: The Role of Forests and Forestry in the Prevention and Rehabilitation of Landslides in Asia

[http://www.fao.org/fileadmin/templates/rap/files/NRE/Forestry\\_Group/Landslide\\_PolicyBrief.pdf](http://www.fao.org/fileadmin/templates/rap/files/NRE/Forestry_Group/Landslide_PolicyBrief.pdf)

#### Climate Adaptation and Transport Planning

<http://www.gpem.uq.edu.au/climate-adaptation-transport-planning>



### Climate Variability and Change in the Himalayas: Community Perceptions and Responses

This study investigates the effects of climate and socioeconomic changes on the livelihoods of mountain people in the Hindu-Kush Himalayan (HKH) region, causes of vulnerability, and the various ways in which people cope with and adapt to change, with the overall aim of contributing to enhancing the resilience of vulnerable mountain communities. ICIMOD conducted a community-based vulnerability and adaptive capacity assessment in four areas—Uttarakhand in northwestern India; Nepal, Eastern Bhutan, and North East India. An extensive participatory rural appraisal exercise was followed by field studies, including focus group discussions at the community level and in-depth interviews at the household level. Special attention was paid to potential differences in the vulnerability and adaptive capacity of women and men and of different social groups. The findings demonstrate that climate and socioeconomic change are already affecting the livelihoods of mountain communities, and that the communities have developed a repertoire of response strategies to these changes. <http://www.icimod.org/publications/index.php/search/publication/782>

#### Case Study: Bridging the gap - Integrating climate change and disaster risk reduction

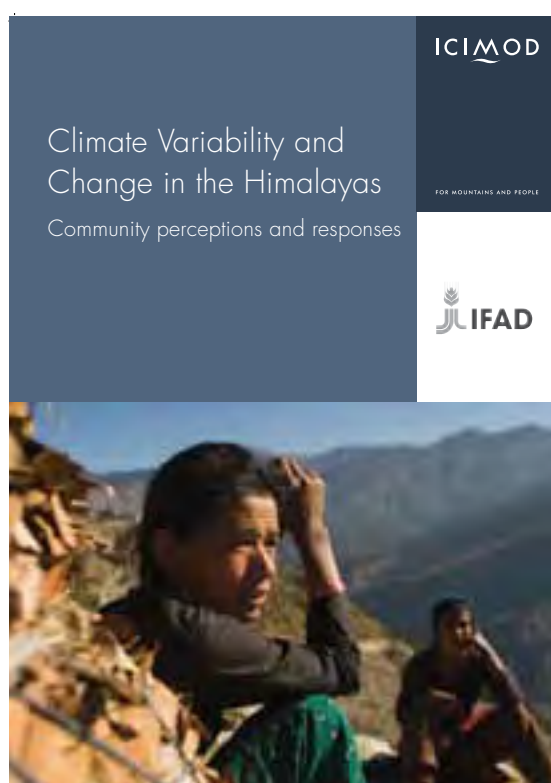
The climate is changing and communities in some countries are already feeling the heat. Climate information in the form of trends and forecasts, combined with tried and tested disaster risk reduction measures, can help anticipate disasters before they happen and enable communities to prepare for and cope with them. Fundamental to this approach is strengthening partnerships between the humanitarian sector and those working in the field of climate change. National Societies in the Asia-Pacific region have been showing the way in this important area. <http://www.climatecentre.org/site/publications/154/bridging-the-gap-integrating-climate-change-and-disaster-risk-reduction-case-study?type=2>

#### Case Study: Whatever the weather... Making climate information user friendly for humanitarian organizations

The Asia Pacific zone covers 45 countries and experiences 79% of the world's disaster related fatalities. Increasing climate risk threatens hard-earned development gains. A strategy for dealing with this is to better understand and pre-empt climate related hazards through systematic use of climate information available for early warning. This can occur on timescales of hours, days, weeks, months and even years ahead of time. Yet, early warning is not a technology, it is part of a system that relies on a chain of actors and responses. Challenges currently abound for practitioners trying to apply climate information. Increased interaction between end users such as humanitarians and information providers is required to ensure more user friendly, needs driven climate information so that ultimately lives can be saved and injuries can be limited. <http://www.climatecentre.org/site/publications/259/whatever-the-weather-making-climate-information-user-friendly-for-humanitarian-organizations?type=2>

#### Case Study: Spotlight on China – the convergence of disaster risk reduction and climate change adaptation in practice

Two-day seminar hosted by the Fujian Red Cross in Fuzhou 27 – 28 July 2010, is part of the project “Disaster Risk Reduction and Integrated Climate Change Adaptation – a National Model for a Community Context in the People's Republic of China”, implemented by the Chinese Red Cross with funding from the Finnish Red Cross. Representatives from the Red Cross Red Crescent and the Chinese government met, for the first time, as convergence of governmental departments including those responsible for agriculture, health, climate change, and disaster management, as well as meteorological office, with Chinese Red Cross counterparts from village up to provincial level. One experience that all participants share in common is the changes to climate that are occurring in Fujian province





of China, and they had the same concern – how to deal with a more demanding climate? <http://www.climatecentre.org/site/publications/274/spotlight-on-china-the-convergence-of-disaster-risk-reduction-and-climate-change-adaptation-in-practice?type=2>

### Adaptive capacity in the Solomon Islands

<http://www.climatecentre.org/site/publications/314/climate-aspects-in-the-pacific-assessing-capacity-for-change?type=2>

### Pacific La Nina case study

<http://www.climatecentre.org/site/publications/285/pacific-la-nina-case-study?type=2>

## Papers

### Sector Briefing on Climate Change Impacts and Adaptation

This briefing paper provides quick information on the impacts of climate change on specific sectors and vulnerability of these sectors both in biophysical and socio-economic terms to help identify risks and prioritize adaptation investments. For more information, please visit: <http://beta.adb.org/publications/series/climate-change-sector-briefs>



**ADB**

**Sector Briefing on Climate Change Impacts and Adaptation**

**AGRICULTURE**

Climate change is projected to have a wide range of impacts on various aspects of the agriculture sector. Overall, it is suggested that climate change will significantly undermine crop production in the region, posing a serious threat to food security, even after adaptation and productivity improvements have been accounted for. Effective adaptation in this sector will be of crucial importance.

**Potential Impacts of Climate Change on Agriculture**

**Production**

- While rising temperature and enhanced carbon dioxide fertilization may increase the suitability and yields of some crops in some areas, crop suitability and yields may be reduced in other areas.
- Increasing salinity, which may result from sea-level rise and/or storm surges, may further reduce the quantity and quality of land suitable for agriculture.
- Decreased availability of surface water for irrigation can put more pressure on groundwater extraction and lead to overexploitation, resulting in deteriorated water quality, land subsidence, and subsequent lower crop yields.
- Increasing frequency and intensity of droughts can disrupt agricultural production and may also increase salinity in soils and water, increasing the possibility of desertification and severe food production shortfalls.
- Soil-moisture deficit associated with the projected decline in precipitation and increase in water demand could lead to water challenges for rain-fed crops in parts of the region, adversely impacting production.

**Pests and Diseases**

- Climate change may trigger the proliferation of weeds, pests, and diseases that have the potential to severely limit the productivity of crops, livestock, and forests.
- Higher temperatures could result in an increase in pest populations.
- Warmer winter temperatures would reduce winterkill, favoring the increase of insect populations.

**Livestock, Fishery, Aquaculture, and Forestry**

- A rise in temperature combined with a decline in precipitation can reduce pasture productivity and availability, limiting the viability of livestock and potentially decreasing livestock yields.

**Climate Risk Management Assessment for Agriculture**

Under Component 2 of Regional Technical Assistance 6439: Twelfth Agriculture and Natural Resources Research at International Agricultural Research Centers, this ADB study was conducted to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change in the semi-arid regions of Asia, its potential impacts, and options for adaptation and mitigation. Results from this study and policy dialogues have assisted the governments of Bangladesh, People's Republic of China, India, Pakistan, Sri Lanka, Thailand, and Viet Nam in identifying and prioritizing areas most at risk and in implementing appropriate strategies to reduce risk and help farmers adapt to climate change.

**Source:** ADB. 2007. Technical Assistance for Twelfth Agriculture and Natural Resources Research at International Agricultural Research Centers. Manila.

- In most parts of Asia, pasture availability limits the expansion of livestock numbers. Cool temperature grasslands would shift northward with climate change, resulting in a decline in grassland productivity.
- The limited herbaceous production, heat stress from higher temperatures, and limited water intake due to a decrease in rainfall could cause reduced milk yields in animals and an increased incidence of some diseases.
- Future changes in ocean currents, sea level, seawater temperature, salinity, and wind speed and direction may substantially alter fish breeding habitats and food supply, ultimately affecting the abundance of fish in the region.
- Increases in salinity concentrations can negatively impact the viability of some fish populations while increasing potential for other species, such as shrimp.
- Increases in temperature and declines in precipitation will increase the risk of forest fires, which may result in increased health problems, deaths, damage, and loss of property.

Asian Development Bank



**STRATEGY BRIEF 3**  
Climate Change, Innovation & ICTs Project

**The Future Research Agenda for ICTs, Climate Change and Development**

Angelica V. Ospina & Richard Heeks

Climate Change, Innovation & ICTs Project  
Centre for Development Informatics  
University of Manchester, UK

This Strategy Brief explores the future research agenda for information and communication technologies, climate change and development (ICCD). It argues that new research on the role of digital tools is needed to identify innovative, locally-appropriate approaches to face the challenges and benefit from the opportunities posed by climate change. Emerging research in this field has started to shed light on the role of ICTs to mitigate, monitor and adapt to the effects of climate change within developing country settings. However, much remains to be done in order to provide evidence-based knowledge that can be used by decision-makers at the community, sectoral, national and international levels.

This Brief identifies key enablers and constraints for ICCD research. It then summarises a series of current knowledge gaps which can set the agenda for future research priorities in the field. The Brief concludes with concrete action steps to move the ICCD research agenda forward.

#### 1. Relevance of ICTs, Climate Change and Development (ICCD) Research

As climate change-related impacts grow in developing countries, there is an increasing need to develop innovative approaches which help vulnerable populations to better cope with, mitigate and adapt to the effects of both short- and long-term climatic effects. Alongside the momentum gained by climate change within national and international agendas, research in the field has risen exponentially – albeit from a very small and recent base – opening new ground for emerging fields of study where traditional climate change science, development studies and the application of innovative tools converge.

The emerging field of *Information and Communication Technologies (ICTs), Climate Change and Development (ICCD)* is situated at this junction (see Figure 1). ICCD research seeks to explore the linkages that exist between ICT tools (such as mobile telephony, community radio and Internet applications) and key climate change issues that are affecting the global South in the areas of mitigation, adaptation, monitoring and strategising. It is based on the recognition that information and knowledge are crucial enablers of action and change, and that the lack of appropriate information resources and knowledge sharing often lie at the core of developing countries' vulnerabilities to a multitude of stressors, including climate change.

### Future Research Agenda for ICTs, Climate Change and Development

This paper has been written for researchers, consultants and reflective practitioners working and researching in the fields of ICTs, climate change and development. [http://www.niccd.org/ICCD\\_Future\\_Research\\_Agenda\\_Strategy\\_Brief.pdf](http://www.niccd.org/ICCD_Future_Research_Agenda_Strategy_Brief.pdf)

### Agrobiodiversity and Community Adaptation to Climate Change in Tajikistan

Tajikistan is a mountainous country with numerous settings especially vulnerability to climate hazards. These include: glacier-dependent river basins supplying hydro power and water resources for irrigation; fragile mountain ecosystems and isolated forest stands that protect watersheds, and mountainous and riverside terrain prone to landslides and extremes in land degradation. Effective management of these eco-system-based risks to resource-dependent critical sectors will increase the demand for adaptation policy reform, capacity building, and incremental adaptation investments at the national level. In duration of 2007-2011 specialists of Institute of botany, physiology and genetic of Academy Science of the Republic of Tajikistan, NGO "Cooperation for development" with cooperation with Ministry of Agriculture and by supporting of the Christensen Fund in rural villages working with local community on strength

of knowledge farmers, women and young population on local and introduction agrobiodiversity, on climate change and adaptation to it.

For more information: KURBONALI PARTOEV, Head of herbarium department of the Institute botany, physiology and genetic of plant of Academy Science of the Republic of Tajikistan, Director of NGO "Cooperation for development"; Email: [pkurbonali@yahoo.com](mailto:pkurbonali@yahoo.com); [pkurbonali@mail.ru](mailto:pkurbonali@mail.ru)

## Articles

1. Article titled **"Equity and Justice in the Global Climate Change Debate"** published in Daily Star newspaper, Dhaka, 24 January, 2012  
<http://www.thedailystar.net/newDesign/news-details.php?nid=219567>
2. Article headlined **"The Inconvenient Truth"** published in CSE's Fortnightly News Bulletin (February 3, 2012)  
<http://www.downtoearth.org.in/content/inconvenient-truth>
3. **"Natural Disasters Article Collection"** from Routledge  
Routledge has compiled a collection of key journal articles examining the impact natural disasters can have on our environment and lives, and how we can prepare for them. The subjects covered include Planning, Preparation and Risk, Natural Disasters and Tourism, Environmental Damage and Consequences, Urban Damage and Consequences and Socio-Economic Impacts of Natural Disasters. The publishers are offering access to these articles completely free for a limited time. To read the articles, please click <http://www.tandf.co.uk/journals/offers/natural-disasters-collection/index.asp>
4. Article titled **"Scientists Urge Countries to Adopt 'Climate-smart' Agriculture"** in EcoBusiness.com  
<http://eco-business.com.createand1.com/t/r/l/dlhrukt/elruihttp/tu/>
5. Article headlined **"Government Okays Climate Change Support Programme"** published in Ekantipur  
<http://www.ekantipur.com/2012/02/14/development/govt-okays-climate-change-support-programme/348901.html>
6. Article on **"Politics of Climate Change; Sustainable Development to Green Development"** by Saleem Huq, in The Daily Star, on 16 February, 2012  
<http://www.thedailystar.net/newDesign/news-details.php?nid=222538>

## Newsletters

### Climate and Development Outlook: Stories of Change from the Climate Development Knowledge Network

CDKN's quarterly newsletter 'Climate and Development Outlook' highlights CDKN's projects around the world, featuring stories from its work to support climate compatible development.

In this second edition, covering the last quarter of 2011, it looks back at the positive results achieved from CDKN's support to the Least Developed Country Group of negotiators at the UN climate talks in Durban. It also announces some of the funding awards it has made for innovative policy research as a result of last year's CDKN Action Lab. One of CDKN's thematic work areas is climate-related disaster risk reduction. This edition of 'Climate and Development Outlook', highlights news of CDKN's collaboration with the Inter-governmental Panel on Climate Change (IPCC) to bring the report 'Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation,' also known as the IPCC SREX report, to a broad range of policy-makers. <http://cdkn.org/wp-content/uploads/2012/02/CDKN-NEWSLETTER-2-FINAL.pdf>

## Profiles

### SICRISA Project

SICRISA project is a DFID-funded project to promote climate science in South Asia, with writing workshops and short fellowships that would include mentoring for the participants, right from writing to submission for publication. <http://ids.ac.uk/idsproject/support-to-improve-climate-research-and-information-services-in-south-asia-sicrisa>, [www.sicrisa.org](http://www.sicrisa.org), <http://www.teriin.org/projects/sicrisa>

### LIRE: Bringing Modern Ecological Development to Vientiane

Lao Institute for Renewable Energy (LIRE), together with its key partner BORDA, has for a number of years been working to bring Decentralized Waste Water Treatment (DEWATS) systems to Lao PDR to improve water quality and sanitation in the urban environment of Lao PDR. After succeeding in this endeavor, it is now working to integrate the community based sanitation (CBS) model with the Energy-Food-Water security Nexus and build the systems into a broader set of climate-change adaptation measures. Thanks to Climate and Development Knowledge Network (CDKN), LIRE is partnering with Kristianstad University, Sweden, to deliver a hugely innovative ecological

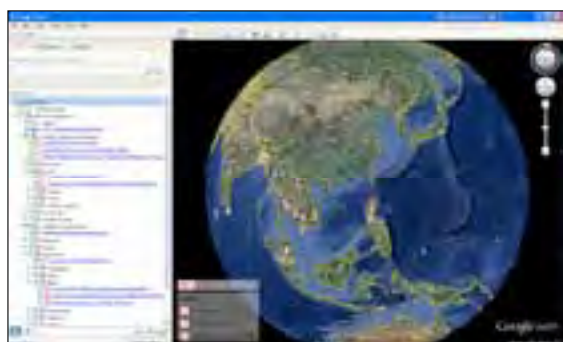
development approach for Vientiane, the capital of Lao PDR. The project, CityBlues++, follows on from the institutionally successful previous CityBlues program, and aims to integrate food security, energy and water security.

By taking waste, and turning it into energy, and taking sewage and making it clean, it will bring genuinely sustainable urbanization to Vientiane, one of the worlds' fastest growing cities.

LIRE's Climate Change Team: [www.lao-ire.org](http://www.lao-ire.org)



New mode of accessing latest IFRC Disaster Management resources



The IFRC and its member National Societies support 30 million people annually in disaster relief around the world. The IFRC Disaster Management (DM) Resources on Google Earth project allows practitioners and partners to easily access the disaster management experience of Asia Pacific and other global tools shared in the platform to better serve the most vulnerable communities.

In this package, readers can access the DM resources by clicking to specific countries of interest on the map, or by choosing from the following four categories:

1. IFRC Guidelines and References
2. Building safety and resilience
3. Disaster preparedness
4. Disaster response and recovery

Our seed file will be updated periodically to include latest resources, and it can be accessed at <http://www.ifrc.org/global/publications/disasters/resources/IFRC-AP-DM.zip>

### Red Cross Red Crescent Climate Centre Website: Addressing Consequences of Climate Change

Want to know more about climate change from a humanitarian perspective? The Red Cross Red Crescent Climate Centre has a website dedicated to helping people understand and address the humanitarian consequences of climate change and extreme weather events ([www.climatecentre.org](http://www.climatecentre.org)). The International Federation of Red Cross and Red Crescent has also just launched a Google Earth platform that enables practitioners and partners to see disaster management activities across the Asia-Pacific, including climate change adaptation (see

<http://www.ifrc.org/global/publications/disasters/resources/IFRC-DM-resources-Google-Earth-guide.pdf>). The Climate Centre's website highlights real-life cases linking science to action in the operations of the Red Cross Red Crescent Movement around the world, including case studies from the Asia-Pacific region. For specific information related to the Asia-Pacific country-level resources, please contact Susil Perera at the International Federation of Red Cross and Red Crescent Societies Disaster Management Unit, Asia Pacific Zone office, Kuala Lumpur, Malaysia ([susil.perera@ifrc.org](mailto:susil.perera@ifrc.org)). For the Climate Centre, please contact Rebecca McNaught ([mcnaught@climatecentre.org](mailto:mcnaught@climatecentre.org)). <http://www.youtube.com/watch?v=ldPT6CuDBZl&feature=relatedLearning>

## Learning Opportunities

### CDKN's Latest Opportunity: Caribbean Regional Research Call

CDKN has just launched a Caribbean Regional Research Call, in collaboration with the CARIBSAVE Partnership. The objectives of this research call are to attract and fund demand-led research on the CARICOM region, to inform the design of local, national and/or regional policies and programmes for climate-compatible development and response to the impacts of climate change. Expressions of interest should be submitted now, and successful EoIs will be invited to submit full technical proposals. The closing date of for responses to the call is 17:00 hrs (Barbados time) on March 9, 2012

### Launch of the 'The Earth Care Awards'

The Earth Care Awards aim at highlighting activities emanating from different sectors in response to the call for local-level action to support climate change mitigation and adaptation. The award is for excellence in climate change mitigation and adaptation. The awards for this year reflect the need for urgent action in the SAARC region, considering the vulnerability and challenges it faces from the climate impacts. The current edition of awards is open for countries from SAARC region, i.e. Afghanistan, Pakistan, India, Bhutan, Nepal, Sri Lanka, Bangladesh and Sri Lanka. The award will focus on three important areas, signifying action by large industries, small-scale industries, land use changes and water resources under community category and innovation for climate protection category. To download application visit [www.gogreenindia.co.in](http://www.gogreenindia.co.in) or contact [praveen.prakash@ceeindia.org](mailto:praveen.prakash@ceeindia.org)



### 3rd International Conference on Environmental Aspects of Bangladesh (ICEAB12), 13–14 Oct, University of Kitakyushu, Japan

The ICEAB12 provides vibrant opportunities for researchers, industry practitioners, students and fellow citizens to share their researches, ideas, and review various environmental aspects of Bangladesh, Japan and other regions of the globe. Researchers around the world are welcome to submit their unpublished original works and attend. Visit: <http://www.BENJapan.org/ICEAB>

### Quick Guide on Climate Change Adaptation and Resilience in Urban Poor Communities in the Asia-Pacific

The Quick Guide is being jointly prepared by ESCAP, UN-HABITAT and the Rockefeller Foundation. It will follow in the footsteps of the well-received series of earlier Quick Guides for Policy Makers on Housing the Urban Poor, which can be accessed here: <http://www.housing-theurban-poor.net/QuickGuides.asp>. Targeting local government policy makers, the guide aims to provide an overview of the key issues regarding climate change adaptation and the different options to improve resilience to climate change impacts in urban poor communities. ESCAP, UN-HABITAT and the Rockefeller Foundation would like to encourage organizations and individual experts with expertise on climate change adaptation and resilience on urban community and municipal levels in Asia-Pacific to join the process of developing the Quick Guide by sending suggestions and participating in upcoming meetings. The partners would also like to hear from organizations who would like to use the Quick Guide as part of their advocacy and capacity development work. For more information, contact Mr. Adnan H. Aliani, Chief, Sustainable Urban Development Section, Environment and Development Division, ESCAP, at [escap-edd-suds@un.org](mailto:escap-edd-suds@un.org) with a copy to [wehmer@un.org](mailto:wehmer@un.org)

### PIARN Travel Grants

PIARN is offering travel grants for postgraduate students working on topics relevant to climate change adaptation in primary industries to attend the 2011 National Climate Change Adaptation Research Facility (NCCARF) Conference and the associated postgraduate workshop to be held on 25 June. The conference, "Climate Adaptation in Action 2012: Sharing the Knowledge to Adapt", will be held in Melbourne in June, and will focus on the information needed to ensure Australia is adapting well to climate change. Successful interstate applicants will receive complimentary student registration (valued at \$500) and a \$1000 travel bursary to cover travel

and accommodation costs. Successful Victorian applicants will receive complimentary student registration. Students applying for the PIARN travel grants must have submitted an abstract for the main conference. Applications close on 30 March, 2012. For more information and to apply, visit the PIARN website.



### Governing Environmental Risks and Vulnerabilities in Cities, 17–20 May, New York City

Scholars are invited to participate in a panel titled "Governing Environmental Risks and Vulnerabilities in Cities" to be held at the ICARUS III (Initiative for Climate Adaptation Research and Understanding through the Social Sciences) meeting at Columbia University. The conference is organized jointly by Columbia University, the University of Illinois, Urbana-Champaign, and the University of Michigan. Cities around the world are developing new forms of governing social-environmental risks and vulnerabilities associated with climate change. Papers that examine the following topics are invited:

- New forms of mapping, assessing, and governing urban environmental risks and vulnerabilities
- Roles and powers of actors, institutions and networks involved in risk management or climate change adaptation in cities
- Effects of risk management or climate adaptation policies on socio-spatial differentiation in urban populations



- Shifting discourses of environmental governance in urban policy and planning
- Experiences of urban environmental (in)justices

Further information on the ICARUS III workshop can be found at <http://www.icarus.info/>

### **Call for Proposals: Canada Fund for African Climate Resilience**

The objective of the Canada Fund for African Climate Resilience (Canada Fund) is to support projects that will substantially improve and increase food security and/or economic growth within an African country by reducing the impacts of climate change through protection of investments and/or adaptation measures. For details on proposals, please visit: <http://www.acdi-cida.gc.ca/acdi-cida/ACDI-CIDA.nsf/eng/ANN-11983223-HVT#dea>

### **Asia-Pacific Leadership Programme on Environment for Sustainable Development**

Jointly hosted by UNEP and Tongji IESD (Institute of Environment for Sustainable Development), this programme provides training to emerging leaders from various backgrounds. For details, please visit: <http://unep-iesd.tongji.edu.cn/index.php?classid=178&newsid=913&t=show>

### **Call for Participation: Climate Asia would like to talk to climate change communicators**

BBC Media Action has launched a new research and communications project called Climate Asia. The project will identify ways in which communications can be used to strengthen climate change responses across the region. Working in seven countries - Bangladesh, China, India, Indonesia, Nepal, Pakistan and Vietnam - Climate Asia will include a survey of over 27,000 people. This will be the largest ever exploration of public knowledge and attitudes towards climate change in the region.

In addition to national surveys and qualitative research focusing on the needs of communities vulnerable to the effects of climate change, Climate Asia will also conduct in-depth interviews with experts and opinion formers in the fields of government, media & communications, development and climate change. A very important part of the research process will be to gather information on existing climate change communications - local, regional or international. More details: [gudrun.freese@bbcmediaaction.org](mailto:gudrun.freese@bbcmediaaction.org)

Climate Asia Bulletin: [climateasia@bbc.co.uk](mailto:climateasia@bbc.co.uk)

### **Films**

#### **Beyond Response: adapting to climate change at the Red Cross (Indonesia)**

<http://www.youtube.com/watch?v=KSNCfyOSS3c>

Secretariat

### **Adaptation Knowledge Platform**

AIT-UNEP Regional Resource Centre for Asia and the Pacific  
 Outreach Building, P.O. Box 4, Klong Luang  
 Pathumthani 12120, Thailand  
 Tel: +662 549 663  
 Email: [info@climateadapt.asia](mailto:info@climateadapt.asia)  
 Website: <http://www.climateadapt.asia>