

Welcome to the platform that gives you up-to-date information on climate change adaptation activities happening in the region. This monthly newsletter is brought to you by APAN – a leading climate change adaptation network working across the Asia-Pacific region. Through this E-Communique and other activities, APAN is mobilising knowledge and building capacities for climate resilience.

We are happy to spotlight your climate change adaptation activities, announcements, events and new initiatives. To be featured in our newsletter, all you have to do is send a brief write-up and a web link to [info@asiapacificadapt.net](mailto:info@asiapacificadapt.net).

## APAN CALENDAR OF ACTIVITIES

### SEARCA, KU, and Partners Finalise New MS Program

A total of 33 representatives from 16 partner organisations convened at a workshop held at Kasetsart University (KU) in Bangkok, Thailand on February 2017 to finalise the training tracks and develop a quality plan for the Master of Science in Food Security and Climate Change (MS FSCC). The project is an initiative of the Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (<http://uc.searca.org>) led by KU and

SEARCA with Dr. Poonpipope Kasemsap of KU serving as the MS FSCC project leader.

Graduates of the MS FSCC will receive two degrees from two universities. The students will be spending at least a month in a second university and take a summer course possibly in a third university.

The Call for Applications for the MS FSCC opened at the start of March.

For more information, visit: <http://searcha.org/index.php/news-and-events/searcha-news/2740-searcha-ku-and-partners-finalize-new-ms-program>

## CLIMATE CHANGE ADAPTATION NEWS

### Changing the paradigm of low-income housing and post-disaster reconstruction – the example of Base

February 22, 2017, by Helen Roeth | CSR Asia Weekly

Asia and the Pacific is the most disaster-prone region in the world. Yet, about 30 percent of the 570 million people making-up the region's urban population live in inadequate, unsafe

housing. The region is therefore well-poised to benefit from Sustainable Development Goal 11 - which calls for improved access to adequate, safe and affordable housing for all by 2030. It also calls for financial and technical assistance for least developed countries in building sustainable and resilient buildings utilising local materials.

Base was set-up in 2012 with the aim to develop and bring affordable, sustainable and resilient housing concepts to the market for all income groups, and particularly for the urban poor in Asia and the Pacific. The organisation is a spin-off from a partnership between Hilti Foundation and UNESCAP that leverage Hilti Group's extensive technical and business expertise in the construction and building sector to research and develop scalable solutions to meet this tremendous housing need. While the organisation is funded by the Hilti Group, the aim is for Base to grow into a financially independent entity.

In an interview with CSR Asia, Base's Managing Director Corinna Salzer spoke about how the organisation is transforming the housing sector in Asia, starting with the Philippines.

For more information on Base, visit <http://www.base-builds.com/>

**Communities in Asia face multi-dimensional threats: poverty, tenure insecurity, and natural hazards. The construction sector is one of the most carbon emitting industries, further exacerbating the climate change risks faced by these communities. Consequently, housing solutions for low-income communities need to address these complex threats and work on many fronts to tackle the region's housing needs.**

The need to rebuild quickly after a disaster and to meet the needs of a tremendous number of people affected often undermines the ability of interventions to bring about long-term change and address the root causes of vulnerability. To tackle all dimensions of vulnerability, low-income and post-disaster housing need to be designed and built in ways that consider technology, community, economy, environment, and governance issues. In the Philippines, Base's programmes drive:

- **Environmentally-sound technology:** Base invested in research to drive innovation in building design and construction practices, with a focus on the value chain and ensuring the use of locally sourced, sustainably grown and processed raw materials. In the Philippines, bamboo was identified as a building material that could drive the successful scale-up of much needed housing solutions.
- **Local community involvement:** To ensure community acceptance, build local capacity, and support livelihood opportunities, Base involves communities, including urban slum dwellers, in the design and building process.
- **Advocacy for higher minimum standards for social housing:** Low-income housing is often exempted from local building regulations. Base has engineered a new housing system that complies with the national building code of the Philippines and advocates for the inclusion of the system into the code.

### **Housing solutions engineered to meet community needs using sustainable, locally sourced raw materials**

Conventional building technologies often do not address the economic and social requirements of the urban poor. To address this, Base focused the first two years after its founding on research and testing alternative building material to identify scalable building concepts. In the Philippines, bamboo was identified as a suitable locally available and affordable raw material. Using structural bamboo, Base developed a housing concept that stood out due to its cost-efficiency, disaster resistance, environmental performance, user comfortability, and the potential to support local skills building. Bamboo is a rapidly renewable and durable building material that can be harvested in just three years, ten times faster than traditional timber. Due to its abundance in the Philippines, it has a long tradition of utilisation in rural housing construction. However, access to bamboo of the quality needed for safe building construction is limited. Base thus aims to support inclusive value chains for bamboo-based construction across the Philippines.

Base has merged traditional bamboo-based construction practices with modern technology and design to develop a state of the art housing concept that can withstand winds of up to 240 km/hour. The pre-fabricated, modular housing system enables scalable, low-cost, high-performing housing construction in both rural and urban settings. By the end of 2017, Base aims to build 500 houses in ten provinces across the Philippines.

### **Housing to empower local communities and economies**

To ensure long-term sustainability and scalability, Base aims to provide a market-based housing solution by establishing local bamboo value chains. It acts as an incubator for start-ups that provide employment in bamboo farming, processing, and prefabrication and works with local partner organisations for housing construction. The start-ups produce strength graded bamboo of structural quality and manufacture quality-controlled, modular house components to meet increasing market needs. To date, 200 farmers and workers have been trained and employed in these start-ups.

“Our experience shows that engineered bamboo-based structures are not only accepted by low-income groups, but can provide an important entry point for overall social uplift and empowerment through a participatory process. When their needs are addressed in partnership with stakeholders from the government, international organisations, engineers, architects, urban planners, NGOs, social enterprises and others, the application of cost-efficient bamboo structures can provide a superior value proposition and has significant potential to reach scale.” Corinna Salzer, Managing Director, Base Builds PTE LTD.

For more information, visit <http://www.csr-asia.com/csr-asia-weekly-news-detail.php?id=12659>

## CCA INFORMATION RESOURCES AND KNOWLEDGE PRODUCTS

### Learning and Coping with Change: Case Stories of Climate Change Adaptation in Southeast Asia

by Percy E. Sajise, Maria Celeste H. Cadiz, and Rosario B. Bantayan

This book is intended to enrich knowledge and enhance awareness among various stakeholders and policy and decision makers that adaptation efforts not only address the challenges brought by climate change, but the implementation of these CCA initiatives also

fulfills goals that greatly benefit society, such as sustainable agricultural and rural development, disaster risk reduction, and improvements in quality of life. Although there is no “one-size-fits-all” adaptation, there are similarities in approaches, methodologies, and processes involved in identifying and implementing CCA goals and strategies as narrated in the 13 case stories featured in this book.

This book is available for download for free.

For more information, visit: <http://searcha.org/index.php/knowledge-resources/1603-pre-download?pid=331>

### Green Climate Fund Approves First Fast-track National Adaptation Plans Grants for Liberia and Nepal

UNDP Climate Change Adaptation Bulletin | Issue No. 23

The LDCF grant USD\$7 million was issued by the Global Environment Facility (GEF) on May 27, 2016, to expand ongoing support to Least Developed Countries with Country-driven processes to advance National Adaptation Plans (NAPs).

Under the fast-track procedure, Liberia will receive US\$2.2 million with UNDP acting as the delivery partner to support the National Adaptation Plans process, whilst Nepal will receive a grant of US\$2.9 million via UN Environment.

For more information, visit <http://adaptation-undp.org/lDCF-grant-usd7-million-expand-support-naps>

### Integrated Flood Management to Enhance Climate Resilience of the Vaisigano River Catchment in Samoa

UNDP Climate Change Adaptation Bulletin | Issue No. 23

The GCF-funded Integrated Flood Management to Enhance Climate Resilience of the Vaisigano River Catchment in Samoa project will enable the Government of Samoa to reduce the impact of recurrent flood-related impacts in the Vaisigano river catchment. The primary direct beneficiaries of the US\$65.7 million project include approximately 26,528 people in the Vaisigano river catchment who will benefit from upgraded infrastructure and drainage downstream, integrated planning and capacity strengthening, including planning for flooding caused by extreme weather events, and flood mitigation measures especially riverworks and ecosystems solutions in the Vaisigano River Catchment. Overall, 37,000 people will also benefit indirectly from project interventions.

For more information, visit <http://adaptation-undp.org/projects/gcf-samoa>

### Scaling-up of Glacial Lake Outburst Flood (GLOF) risk reduction in Northern Pakistan

UNDP Climate Change Adaptation Bulletin | Issue No. 23

Over 7 million people are threatened by outburst flooding events in Pakistan. The US\$37 million GCF-funded Scaling-Up of Glacial Lake Outburst Flood Risk Reduction in Northern Pakistan project will strengthen early warning systems, build new engineering structures such as dams, and support capacity building and improved disaster management policies to reduce risks for people affected by melting glaciers in Northern Pakistan.

For more information, visit <http://adaptation-undp.org/projects/%E2%80%A8scaling-glacial-lake-outburst-flood-glof-risk-reduction-northern-pakistan>