Photo courtesy of Nana Buxani / Christian Aid - Philippine Office

They used to live in a house made of cardboards and metal scraps.

Now they have none.

Those at the base of the pyramid or BoP - 4 billion people living in shantytowns and rural villages on less than USD $4 a day - are most vulnerable to the impacts of climate change.

Empower poor communities at the BoP to adapt to the changing climate.

Support community innovations for climate change adaptation.

www.ibop-asia.net

iBoP Asia is a project of the Ateneo School of Government supported by Canada's International Development Research Centre.

iBoP ASIA SCIENCE AND TECHNOLOGY INNOVATIONS FOR THE BASE OF THE PYRAMID IN SOUTHEAST ASIA

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For many countries in Asia whose geographical location makes them prone to natural disasters and whose developing economies place many communities in a state of poverty, addressing climate change is crucial.

The Fourth Report of the Intergovernmental Panel on Climate Change (IPCC) released in 2007 predicts:

- By 2050, freshwater availability in Central, South, East and Southeast Asia, particularly in large river basins, is projected to decrease.
- Coastal areas, especially heavily-populated megadelta regions in South, East and Southeast Asia, will experience increased flooding from the sea and, in some megadeltas, flooding from the rivers.
- There will be increased pressure on developing countries to achieve sustainable development as they try to balance environmental preservation and protection with rapid urbanization and industrialization.
- Morbidity and mortality from diseases associated with floods and droughts such as diarrhea are expected to rise in East, South and Southeast Asia.

Poor communities in many parts of the region, particularly in Southeast Asia, are always the most vulnerable to climate change-related disasters. When these disasters strike, they lose their homes, incomes and basic supplies (food and water), and they typically do not have savings or any insurance to help them recover in the aftermath of a calamity.

Left homeless, defenseless and hopeless, they now worry: How do we rebuild our lives? How do we cope?

iBoP Asia supports Community Innovations for Climate Change Adaptation

Following the Base of the Pyramid (BoP) approach to catalyzing and promoting science and technology (S&T)-based innovations for and by the poor, the iBoP Asia Project of the Ateneo School of Government supports and promotes innovative, locally developed technologies and systems that build and improve the adaptive capacity of poor communities.

The Base of the Pyramid (BoP) is a socio-economic designation for the roughly 4 billion people worldwide living on less than US$4 a day. Asia is home to 2.9 billion of this BoP population, which represents 80% of the region's population.

The key is to help poor communities create and innovate.

Our goal is to empower these communities and community-based groups to find and develop viable, low-cost and easy-to-use tools and methods that will reduce their vulnerability and increase their resilience to climate change risks.

In the Philippines, there are some documented innovations initiated at the community level*. These have yet to be replicated and adopted by other local communities in the country:

- In Iloilo, rainwater harvesting in the Tigum-Aganan Watershed is promoted by the *Kahublagan Sang Panimalay* Foundation. While the technology has long been developed, its management for irrigation purposes and use for water ponds evolved over the years to suit the needs of farming communities.
- The Green Architecture Movement (GAM) initiated a competition for designing and building typhoon-and earthquake-resilient school buildings. The winning entry in 2008, which presented a structure made of bamboo, will be used to construct the Nato Elementary School in Camarines Sur.
- The Panay Rural Development Center developed a technique for processing vegetables and other food stuff that allows them to be packaged, stored, and consumed as Emergency Food Packs in times of disasters.

**These innovations were presented during the "Coping with Climate Change Forum" sponsored by iBoP Asia and Christian Aid held March 2009.*

Three elements help establish an enabling environment that will foster community innovations for climate change adaptation.

SCIENCE: Drive for more robust knowledge sharing
Climate change science could provide vital clues to how vulnerable communities could adapt to its impacts. We need more efforts that will help *bridge the gap between traditional knowledge and local practices of communities, and emerging scientific knowledge on climate change adaptation*.

INNOVATION: Promote the use of indigenous resources for innovation
The development of innovations for climate change adaptation should be informed and influenced by the unique, if not peculiar, ways these communities experience climate change. In order to make new tools and methods practicable and accessible, we should *maximize and promote the use of indigenous materials and resources in innovation*.

POLICY: Institutionalize support for community innovations
Innovation does not end after a new tool or method has been made; it goes to as far as making sure this is successfully replicated, adopted and used not just by a handful but by all stakeholders in need - communities, government, even the private sector. There is also a need to *put in place an incentive system backed by enabling policies at the national and local levels* to encourage the development, promotion and use of community innovations for adaptation.

Join us! Support community innovations for climate change adaptation.

iBoP Asia is the short name for the Science & Technology for the Base of the Pyramid in Southeast Asia Project of the Ateneo School of Government, a graduate school of the Ateneo de Manila University in the Philippines, supported by Canada's International Development Research Centre. Visit ***www.ibop-asia.net*** *to know more about us and our initiatives.*

For inquiries, please contact the iBoP Asia Secretariat:
Tel: +63 2 426 6001 locals 4646 and 4639 / +63 2 929 7035
E-mail: info@ibop-asia.net