



Documenting Community-Based Climate Change Adaptation and Disaster Risk Reduction (DRR) Practices in Cambodia

Recognizing the need to enhance and share knowledge on approaches to climate resilience appropriate for Cambodia, the Department of Climate Change (DCC) of the General Secretariat of National Council for Sustainable Development has made a public call for submissions of two-page descriptions of credible climate change adaptation and disaster risk reduction (DRR) practices under the two themes:

1. Indigenous/traditional practices for climate change adaptation and DRR: This relates to structures, techniques or practices which have been used by local people for at least one generation to design or manage their buildings, natural resources or livelihoods, or to protect these from extreme events (floods, droughts, storms). Alternatively, they can be measures that local people have started to develop themselves in response to increasing temperatures or changes in rainfall patterns.
2. Practices that promote climate resilience and empowerment of women, children and youth. These are local climate change adaptation practices that specifically enhance livelihoods of women, children and/or youth, or reduce their vulnerability to climate change. Such examples could be used or developed further for increasing women, youth, and children’s resilience to climate change and extreme events.

The call for submissions is open to government, Cambodia-based non-government organisations (NGOs), community-based organisations (CBOs), university researchers, students, local communities, and the private sector. The submissions will be reviewed by an evaluation committee of staff from the Department of Climate Change, Strategic Program for Climate Resilience/TA team, Cambodia Climate Change Alliance team, and Plan International. Up to 15 of the best documented practices will be shared in a national ‘Conference on Community Based Climate Change Response Practices in Cambodia’, to be held in November 2016. They will also be published as part of a compendium of practices for distribution at national and international level.

Submission Instructions:

- The template for submission is attached to this announcement (in Annex). It can also be downloaded from <http://www.spcrcambodia.org/en/blog.php> or <http://www.camclimate.org.kh>
- Please submit adaptation practices either in Khmer or English by 5pm (Cambodia time) on **November 2, 2016**. The submission must be made via email to adaptation_call@camclimate.org.kh with an email subject line “Adaptation Practices”.
- For more information, please contact us **by telephone** (855 12 617 092 and 855 77 535 392) or **email** (adbspcrta8179@gmail.com).

Department of Climate Change Trains Adaptation Working Group on Advanced Vulnerability Assessment and Adaptation Planning

About 80 participants from various key ministries, institutions and provincial departments attended two trainings on advanced vulnerability assessment and adaptation planning covering feasibility studies in agriculture, water resource and urban infrastructure. The trainings took place on August 16-18 in Prey Veng Province and September 26-28 in Kampong Chhnang Province.



The trainings were presided over by H.E. Prof. Dr. Sabo Ojano, Secretary of State of the Ministry of Environment and chair of SPCR Coordination Team, H.E. Pon Saroeun, Under-secretary of State and Deputy Chair of SPCR Coordination Team. The trainings were organized by the Department of Climate Change under the Mainstreaming Climate Resilience into Development Planning of the Strategic Program for Climate Resilience in collaboration with H.E. Mok Theary, Prey Veng Deputy Provincial Governor and H.E. Pal Yoeurn, Kampong Chhnang Deputy Provincial Governor. Officials from ministries/departments at national and sub-national levels from Pursat, Battambang, and Tboung Khmum, Prey Veng and Kampong Chhnang provinces also took part in the training.

The core participants were the members of the Adaptation Working Group (AWG) that brings together representatives from the Ministry of Environment, the Ministry of Economy and Finance, the Ministry of Water Resources and Meteorology, the Ministry of Agriculture and Forestry and Fisheries, the Ministry of Public Works and Transport, the Ministry of Rural Development, the Ministry of Women’s Affair, the Ministry of Planning, National Committee for Disaster Management, National Committee for Sub-national Democratic Development, and Council for the Development of Cambodia.



The Adaptation Working Group visited three communes (Kansom Ak, Rong Damrey and Ba Bong) in Prey Veng Province and also other three communes (Dar, Chro Nouk and Kampong Hao) in Kampong Chhnang Province to collect baseline data related to flood, drought and storm as part of the training exercises. The data collection will also be used for feasibility studies to prepare adaptation project proposals to be submitted to international funding agencies.

These are the second and third trainings to build capacity of the AWG members in climate resilient planning in agriculture, water resource and infrastructure sectors. The first training was held in Battambang Province last year.

In addition, during the National Forum on “Protection and Conservation of Natural Resources” was held on 22 August 2016, **Samdech Akka Mohasena Padei Techo Hun Sen**, Prime Minister of the Kingdom of Cambodia ordered six ministries namely the Ministry of Environment; the Ministry of Agriculture, Forestry and Fisheries; the Ministry of Land Management, Urban Planning and Construction; the Ministry of Mines and Energy; the Ministry of Industry and Handicraft; the Ministry of Water Resources and Meteorology to work closely with Civil Society Organizations on environmental protection and should held a forum for discussion every three months. He added that this mechanism also can be applied to the provincial level.

In contributing to this, as part of SPCR project in Cambodia, the Greater Mekong Sub-region Biodiversity Conservation Corridors Project has been implementing by the Ministry of Environment and Forestry Administration of the Ministry of Agriculture, Forestry and Fisheries to sustainably managed biodiversity corridors in Koh Kong and Monduliri provinces.

Since late 2015, **Samdech Hun Sen** announced a range of assistance at national and sub-national levels to help farmers affected by the worst drought across the country to deliver water to affected communities especially women, elders and children. To support this, the Ministry of Environment has transferred “Mainstreaming Climate Resilience” functioning to sub-national administration.

The cases studies below present some of the key challenges and proposed solutions related to climate changed based on information gathered from the communities and local authorities.

Farmers identify measures to adapt to drought in Prey Veng Province: Generally, the water availability in Prey Veng communities visited was from hand-pumping wells, digging ponds, rivers, lakes and reservoirs. A commune chief said that “right now there is some water for the community to use, but if we don’t take action now, it will be a problem later on in the dry season”. The community reported some actions they could take at local level to address this issue:

- **Form a Water Users Group** – Farmers in this community have seen other villages better manage water as a group. They would like to have some training on forming a Water User Group and on how to better manage water sustainably for agriculture productivity.
- **Conserve water** – Community members expressed the need to work together to more economically consume water. Some communities build small dams to keep a small reservoir. Such interventions need to be organized as groups so that the water is efficiently conserved and shared.
- **Change Cropping Patterns** - In recent years, rural farmers have been increasingly relying on reservoirs for irrigation, making them more vulnerable to extreme weather. Farmers in the at-risk areas hold off on planting crops because they stand a good chance of losing their investment. Also, farmers have changed their practices to grow short term rice seeds that require less water and can be harvested 3 months after planting.
- **Harvest Rainwater** - Women in communities need to transport two water bins which contain 25 litres each from the pond in pagoda about 2 kilometres away from their houses several times a day. Each household needs to increase their number of jars and dig ponds to store rainwater.

While communities can take some actions on their own, they need support from local and national government to get started on new practices. For examples, farmers know that using drip irrigation can save water quantity and time. But such technology is costly and can only be used from crops that are less familiar for farmers. They need training and assistance before they can make such a transition.

Also, urgent actions are needed to rehabilitate and construct the first and secondary canals/reservoirs for agriculture productivity and domestic consumption. While farmers can pump water to rescue the crops, if there without sufficient water sources to pump, nothing much can be done. The community wants to rehabilitate dykes, ponds, reservoirs and canals to make water available the whole year.

Coping with flooded market in Kampong Chhnang

Province: Kampong Hao commune, Kampong Leng district is easily accessed from Kampong Chhnang provincial town by road in the dry season and ferry during during rainy season. More than 90% of people in Kampong Hao commune are farmers. In addition to farming, some sell crops and other products at Kampong Hao rural market. This market floods each year up to 2,5 meters height from July to December due to Tonle Sap water rising and flash floods from the Touk Meas mountains. There are about 120 to 130 housing stores to serve 9 communes for this district. The market structure needs a drainage system, proper rubbish management and parking space in order to operate as a dry and sanitary space in the rainy season.



Villagers take some steps to protect themselves from storms in Prey Veng Province:

In Kansom Ork Commune in Kampong Trabek District in Prey Veng Province community members have seen the worsening storms and high temperatures and their damaging effects on crops. Due to such experiences, they planted more trees and bamboo trees around their houses. In some cases farmers use chemical treatment to spray on their paddy rice to make it shorter and so more resistant to the wind. In this area, encouraging more actions to plan trees and vegetation for storm protection could reduce reliance on chemical treatment, saving farmers money and improving environmental conditions. Also, some residents are building safe places in higher ground. However, these practices are initiated at the individual household level. The facilities they can build are very small and cannot fit all family members. The villagers need support to organize a community safety area for evacuation during storms.



Kraing Serei Community Forestry, Kampong Speu Province

In June 2016, the PPCR funded Mainstreaming Climate Resilience into Development Planning-Civil Society Support Mechanism (MCRDP-CSSM) project awarded a US\$42,566.82 grant to the community based organization (CBO) Kraing Serei Community Forestry (KSCF). The grant was for the 18 month project towards Enhancing Kraing Serei Community Resilience to Extreme Weather Events in Kirivoan Commune of Kampong Speu Province. With this support, the CBO will improve water supply distribution and management, promote climate adaptive agriculture, water sanitation and health practices, and strengthen environmental management in the community. The project will directly benefit at least 430 households in 3 of the 9 villages of the commune¹.

¹ The 9 villages of Krivioan commune of Phnom Sruoh District are: Krang Serei, Trapeang Kroloeng, Krang Sya, Krang Chres, Kraing Khvav, Tropeang At Tuek, Krang Ponley, Phsar Trapeang Kraloeng, and Krang Prasrok. The commune had a population of 1258 households and 6263 people (source: commune database 2010).

With very limited access to ponds, reservoirs, dams, rivers, canals and other water systems, Kirivoan commune has suffered from very poor access to water supply for household consumption, let alone for farming², especially in the dry season. People in this area rely on farming and non-forest timber products for their livelihoods. Water insecurity can be crippling: women and children spend several hours per day fetching water from distant sources. Many children are unable to attend school, and women who might be able to better contribute to their families' income cannot because their time is spent carrying water. Good health and sanitation, of course, is difficult to achieve in this situation. The 3 villages where the project is starting up (Kraing Chess, Kraing Sya and Tropeang Krolong) do not have a feasible place to construct a community pond, and so approached KSCF to ask for their support to expand an existing water network to bring water to their own villages.



KSCF's Earlier Achievements

Since its registration in 2010, KSCF with support from various donors³ has been very active in water security, agriculture, and livelihoods. Perhaps its greatest achievement has been the construction and expansion of a 80,000m³ water reservoir and gravity fed piped distribution system which brings safe water to 125 households in 3 villages in Kirivoan commune⁴. Households pay a US\$50 initial connection fee (discounted for poor families), plus a user fee.



The CBO has paid workers to maintain the system and collect fees using an individual meter system. Having piped water has transformed villagers' lives and they are more than willing to participate in the water scheme, including paying. In addition, to gaining on premise water access, villagers have also been better able to garden and raise livestock. In the past, the CBO also provided funds to 4 savings groups established around the community.



Today, the groups have created enough of their own savings (\$10,000 in total across the 4 groups) that they no longer need to borrow from the CBO. It is still involved, however – for example, it provides loan to a local agricultural cooperative. With support from World Vision, the CBO has also established an impressive potable water production, bottling, and distribution operation which is supplying several schools and a pagoda on top of its regular customer base.

² Using funds from MCRDP-CSSM, the CBO conducted a Vulnerability Reduction Analysis in November 2015, on which it based the design of its project.
³ UNDP via its Sweden/GEF funded Cambodia Community Based Adaptation Project (CCBAP) and partner local NGO Mlup Baitong; World Vision; and Nordic Development Fund component of ADB Rural Roads Improvement Project I.
⁴ Krang Serei village (70 households), Trapeang Krolong village (20hh in annex Kautout Chhum), and Kraing Chres village (35hh in annex Chrok Chhar).

New project: further enhancing the community's resilience to Climate Change

Water management and distribution

Despite the past year's terrible drought, the main reservoir stored enough water to last throughout the dry season. With a cap on monthly use, there is enough water for households and gardens, but not enough to irrigate crops during the dry season. In the past month, however, the reservoir went dry and the villagers have been struggling. The rainy season has been slow to arrive in Kampong Speu, and the community has had to turn to manually pumping underground. Other villagers do not have access to the piped water system at all.



To build the resilience of the community to extreme weather events, the new grant funded by the ADB SPCR program through Plan International will:

- Expand the existing distribution network by an additional 471 households⁵.
- Provide a large water pump and increase the storage capacity from 12,000m³ to a 21,000m³ of a secondary reservoir downstream. This smaller reservoir benefits from a greater catchment area and will fill with water before the larger one situated upstream. Whenever necessary, the pump will be used to direct water from the lower reservoir to the main one, from where water can be distributed simply using gravity.
- The project will support strengthening the sustainability and capacity of the CBO, provincial authorities, and water users' groups so that they can together effectively and transparently manage the water system far into the future, according to the season and on water levels, and especially in case of shortages.



Forestry

KSCF's original mission was forest protection in support of non-timber forest products (NTFP) livelihoods. Over the years, the CBO funded forest patrolling and campaigned to preserve forest and water resources.

Mr. Lon Thim, the director of the CBO, explained "The few families that regularly go into the forest to collect NTFPs like honey and wild vegetables are enough of a dissuading presence for local would-be poachers. The ADB SPCR grant will direct some funds towards seed groups and tree planting across 4 villages, especially around the school, community forest and water reservoir. The CBO also sponsors spiritual ceremonies in protection and honor of the forest twice yearly, using earnings from the water distribution activity.

⁵ 85 households or 80% of the population in Trapeang Kroloeng village, 200 households or 85% of the population in Krang Chres Villages, and 186 households or 100% of the population in Kraing Sya village.

Other activities

To maximize socioeconomic benefits, the project also conducts awareness raising to communities on climate change adaptation, nutrition, WASH, and provides training and support for climate smart home gardening.



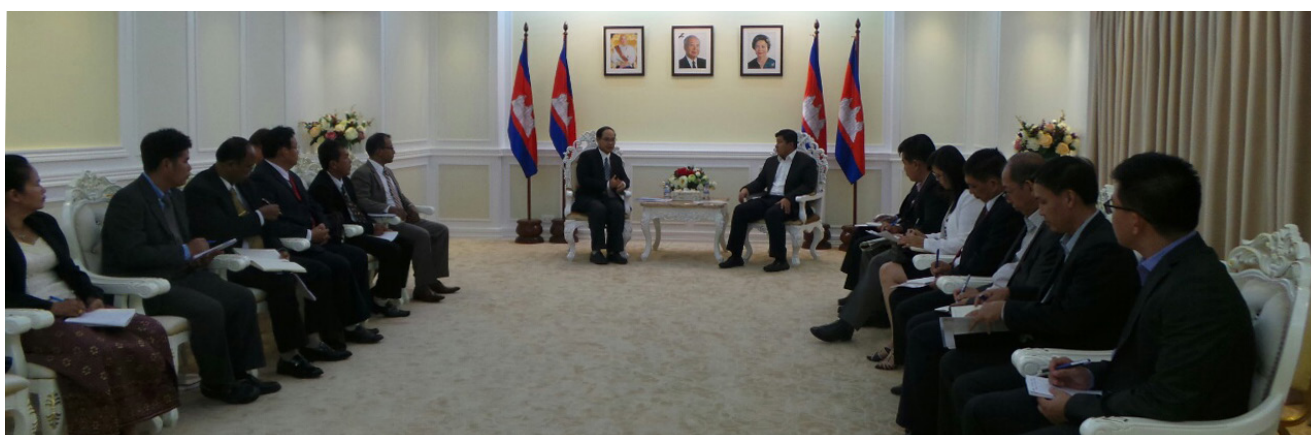
Initiative on climate resilient sub-national planning, gender equality and monitoring adaptation investments launched

On July 1st, the final package of *Mainstreaming Climate Resilience into Development Planning* CAM 45283-001 – *Package C: Gender, M&E and mainstreaming at sub-national levels* was launched. This initiative is executed by the Department of Climate Change (DCC) and implemented by the National Committee for Subnational Democratic Development (NCDD-S), the Ministry of Women’s Affairs and the Ministry of Planning. The consortium of UN-Habitat, Forum Syd, and Save the Earth Cambodia will provide technical assistance for its implementation. The three-year project (August 2016-2019) will deliver three main outputs related to mainstreaming climate resilience at sub-national level, integrating gender into adaptation planning and monitoring and evaluation of adaptation investments.

- 1. Mainstreaming climate resilience at subnational levels in close cooperation with the Secretariat of the National Committee for Subnational Democratic Development (NCDD-S)** will target reducing vulnerability at district and commune levels in selected provinces by enhancing the capacity of local governments to mainstream climate resilience into subnational development planning. Activities will include:
 - Incorporating climate risk management into district and commune development plans, programs, and projects,
 - Conducting training and developing guidance manuals,
 - Applying climate risk screening tools for sub-national adaptation assessments; and
 - Piloting adaptation activities at commune and district levels.
- 2. Integrating gender considerations in climate change adaptation in close cooperation with the Ministry of Women Affairs (MOWA)** will enhance women’s adaptive capacity to cope with the impacts of climate change by improving institutional and technical capacity at national and provincial levels to integrate gender concerns into climate change adaptation initiatives. Key activities will include
 - Providing technical support to revise and operationalize the master plan on gender and climate change;
 - Integrating gender concerns into climate change action plans in at least three sectors, such as agriculture, water resources, and health;
 - Developing guidance manuals and awareness-raising programs on gender mainstreaming in adaptation for the MOWA and key sector ministries;

- Implementing gender-equitable adaptation pilots and building an economic case for gender mainstreaming in adaptation projects.
3. **Monitoring, reporting, and evaluating the effectiveness of adaptation investments in close cooperation with the Ministry of Planning (MOP)** will track and assess the efficiency of adaptation funding and the effectiveness of interventions in achieving the desired objectives, monitoring, reporting, and evaluation is critical and must be integrated into the design of climate change strategies, plans, programs, and projects. This theme will conduct activities such as capacity-building at various ministries in managing climate change data and incorporating adaptation related indicators into sub-national planning and investment projects.

New Activities in Ministry of Planning, Ministry of Women's Affairs and National Committee for Sub-National Democratic Development – Secretariat



Additional activities under the Mainstreaming Climate Resilience into Development Planning project began in August 2016 following signing of a technical assistance agreement between ADB and a consortium led by UN-Habitat including Forum Syd and Save the Earth Cambodia.

The expert team began work in August. An introductory meeting was chaired by H.E. Say Samal, Minister of Environment on September 6, 2016. He welcomed the start of the additional activities and provided guidance to the team, placing especial emphasis on the need to prioritize adaptation activities that directly reduce vulnerability in rural communities – for example, by improving access to water.

The team is currently conducting capacity needs assessment activities with sector ministries, civil society organizations and sub-national governments. An inception report will be delivered in mid-October and an inception workshop is planned for late October.



For more information:

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