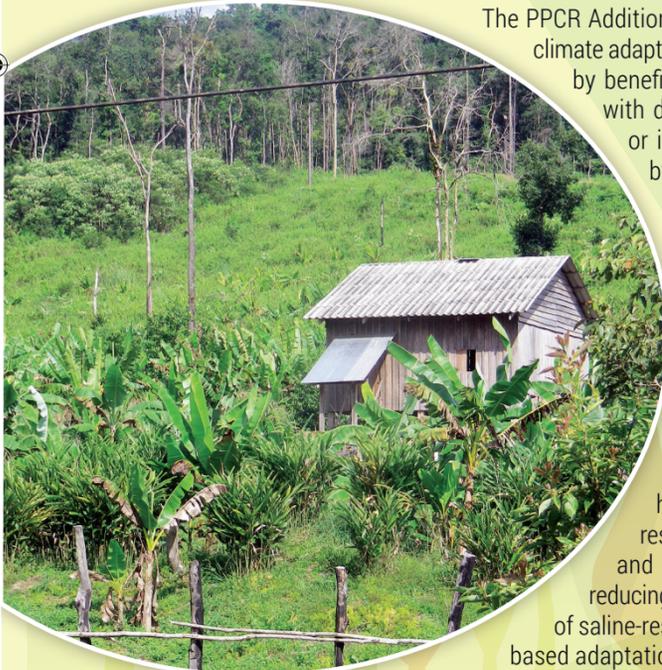


## Background

The Biodiversity Conservation Corridors (BCC) Project was developed to enhance the management of forest ecosystems in the countries of the Greater Mekong Subregion (GMS). The GMS Governments, with support from ADB, have identified the most important biodiversity conservation landscapes in the GMS that are vulnerable to increased development pressures and environmental degradation. In Cambodia, the Project will address the fragmentation of the biodiversity rich forest landscapes of Koh Kong and Monduliri provinces that may impair their ability to provide critical ecosystem services necessary for sustaining local livelihoods and investments in hydropower, transport, water and food-security enhancing sectors.

Additional co-financing has been made available from the Pilot Program for Climate Resilience (PPCR) sources to augment activities in the Greater Mekong Subregion Cambodia Biodiversity Conservation Corridor (BCC) Project that will promote climate resilient agriculture, forestry, water supply and coastal resources in Koh Kong and Monduliri provinces. The PPCR additional financing will strengthen climate resilience of the communities in the ongoing BCC project and ensure sustainability of its investments.

The PPCR Additional Financing will strengthen the climate adaptation measures of the BCC project by benefiting a further 4,300 households with diversified livelihood assets and/or income generating opportunities by 2022. The project beneficiaries' adaptive capacity to tackle climate change impacts is enhanced through specific interventions under output 3 "livelihoods improved and small-scale infrastructure support provided", including (i) climate resilient irrigation and system of rice intensification (SRI) techniques; (ii) rainwater harvesting ponds with climate resilient high value crop productivity, and (iii) bio-engineered sea barriers reducing salt water intrusion and adoption of saline-resistant crops; and (iv) ecosystem-based adaptation.



## Main thrust of current ADB BCC support

The intended impact of the project is climate resilient, sustainable, forest ecosystems that provide income and employment to project households in the biodiversity corridors of Cambodia. The intended outcome is sustainably managed biodiversity corridors in Cambodia.

The outputs are (i) communities are empowered to manage their forest resources, (ii) forest cover and habitat in biodiversity corridors is protected and restored, and ecosystem services protected and maintained, (iii) livelihoods improved and income small-scale infrastructure support provided in target communes, and (iv) project management and support services are operational (*Project Administration Manual, 2015*).

The International Institute of Rural Reconstruction (IIRR) and Cambodian Centre for Study and Development in Agriculture (CEDAC) as a joint venture was selected to conduct capacity building for System of Rice Intensification (SRI) and Drought and Salinity Resistant Crops. The objective of this assignment is to improve agriculture production, water conservation, family nutrition, and marketing of agricultural products for target groups. This will increase community incomes and build their resilience to climate change. The target areas are located in Monduliri and Koh Kong provinces.

IIRR and CEDAC was also identified to conduct training, monitoring, and coaching of communities to implement BCCI Village Development Funds (VDF), a component of GMS-BCC Project, which contributes to achieving Output 3 of the BCC Project: livelihoods and infrastructure in Koh Kong and Monduliri province.

IIRR and CEDAC are involved in this project to improve agricultural production, water conservation, family nutrition, and marketing of agricultural products for target groups. This will increase community incomes and build their resilience to climate change (*Technical proposal submission form, 2017*).

The project IIRR and CEDAC are implementing specific activities under output 3 "livelihoods improved and small-scale infrastructure support provided" covers 22 communes in Monduliri and Koh Kong provinces in Cambodia. The Ministry of Environment (MOE) and Ministry of Agriculture, Forestry and Fisheries (MAFF) are the executing agencies of the Project and have established Project Implementation Units (PIUs) in each agency.

## IIRR and CEDAC joint support role to the Biodiversity Conservation Corridors Project

horticulture production will be provided to at least 2000 households.

1. SRI training of 60 key farmers/households.
2. Climate resilient home garden and drought resilient crop training to at least 2000 households who will also be provided with 40 rainwater harvesting ponds in Monduliri and Koh Kong.
3. Climate and salinity-resistant non rice crops training will be provided to at least 400 households in Koh Kong.
4. Infant and family nutrition training that links back to the home garden products, rainwater harvesting ponds and horticulture production will be provided to at least 2000 households.
5. Training to WUGs on rainwater harvesting ponds and irrigation systems.
6. Value chain and crop gross margin analysis for selected crops
7. Training and support to potential households/farmer groups on agriculture-based business development.
8. Establishment of rainwater harvesting ponds, efficient irrigation systems and proper operation and maintenance induction for WUGs.



## Technical Training and Support

## Implementation Approach Highlights

### 1. Conduct of feasibility study on rice and non-rice crop production

The study will aim to research rice and non-rice crop production and sustainable farming methods tailored to various locations and ecosystem.

The study will focus on extending SRI, identification of potential crops for growing in target area, irrigation schemes, livelihood assets and activities, vulnerability and coping strategies, policies, institutions and processes of promoting rice and non-rice crops.

Value-chain study will be undertaken to identify promising crops for each province.

### 2. Developing capacity for provincial project implementation units and farmers on system of rice intensification and drought- and salinity- resistant crops.

- Conducting a participatory training needs assessment
  - a) Training needs assessment for farmers (focus groups)
  - b) Training needs assessment for PGLD staff
- Designing training curriculum and materials
- Organizing training workshops on System of Rice Intensification (SRI) and Horticulture Production

### Expected results of the project are as follows:

- Around 1,000 farmer families adopted SRI techniques.
- At least 2,000 farmer families adopted crop gardening techniques and drought-resilient crops
- Climate resilient crop production techniques introduced to at least 400 farmer families.

- **Farmer Promoters: Local champions for transformation.**

Each Farmer Promoter (FP) would train and monitor around 30 farmers. There would be 60 FPs for promoting horticulture production and farmer producer groups, and additional 60 FPs for promoting SRI. Each FP would train other cooperating farmers for 6 training sessions.

- **Establishing Farmer-Led Demonstration**

An overall goal would be for the villages where IIRR and CEDAC are involved in is to turn them into climate-smart villages (CSV) where action research is done on scale and proof of concept sites are developed.

**The action will achieve results as follows:**

- Potential farmers in Kaoh Nheak district conducted SRI demonstration and documented best practice
- At least three demonstration areas or 120 demonstration plots surrounded by living hedges established for each pond established
- At least one demonstration area or 20 demonstration plots in the target villages in Andoung Tuek and Kandaol communes established on saline crops.

- **Conduct demonstration farms/plots that acts as examples.** Here villagers will learn about climate resilient rice and other crop production, including home gardens. The demonstration will include:

- At least five demo-plots for SRI in Kaoh Nheak district of Mondulkiri.
- At least three pond demo-plots for salinity-resilient non-rice crop in each village in Andoung Tuek and Kandaol communes in Koh Kong.

- **Establishing of Rice and Non-Rice Crop Production and Business Mechanisms**

The activity's purpose is to support rice, vegetable, and fruit tree producers and involve key actors to establish their collective marketing network at district level.

Training of farmer groups on establishing farmer producer groups. One producer group of 15 members will be established and strengthened in the target village. It is expected that at least 6 producer groups (3 producer groups in each province) will benefit from 10 meetings-events, and then established. In addition to this, at least two trade fairs will be conducted. It is noted that the producer groups will be linked to existing rice mill cooperatives established by CEDAC in Mondulkiri and linked to existing producer networks established by IIRR in Koh Kong.

The producer groups of both target provinces will be linked with the community development fund and savings and credit groups of community forestry and community protected areas so that they have access to finance.

- **Promoting Nutritional Education**

Following practical trainings on farming, the household nutrition specialist and commune health centre staff would provide nutritional training to FPs and existing Village Health Support Groups (VHSGs) in 13 villages using the training materials developed for the project. There would be 120 FPs (around 60 female) and 36 VHSG volunteers targeted, and training would be set out in three separate sessions. Micro nutrient campaign, another activity for this strategy, would be conducted by FPs and VHSGs with support from village chiefs.

- **Forming and Strengthening Water User Groups (WUGs)**

- Establishing and Strengthening Water User groups (Community Pond)**

It is expected that 13 community pond user groups of 260 members established in 13 target villages. The groups will play significant roles in managing 40 rain-water harvesting ponds. Each village will establish a WUG.

- Establishing and Strengthening Water User Groups where Sea Dyke and dams are constructed.**

**At the end of the project, it is expected that:**

- A water user group of a scheme in Srae Chrey (a sub-village of Nang Buo village in Nang Khi Lik commune of Mondulkiri province) established. Around 500 SRI farmers will be members of the water user group.
- Two water user groups of around 400 households established at sea dyke in Ta Meakh village, Andoung Tuek commune, and in Ta Ok and Prateal villages, Andoung Tuek commune, and in Kandaol commune of Koh Kong province.

- **Information and Communication Management**

Within the project life, IIRR and CEDAC would aim that by year 2019, the project results, logos and roles of the Asian Development Bank and Project Implementation Units will be known as an established leader and "go-to" institutions for its expertise in scalable, evidence-based approaches to promote SRI, and drought – and salinity crops among the rural poor in Koh Kong and Mondulkiri provinces.

**The project will work in close collaboration with Ministry of Environment (MoE), Forestry Administration, Provincial Department of Environment, Provincial Department of Agriculture, Forestry and Fisheries (PDAFF). District Officers (DOs) and the Commune Councils will also be strongly involved in the implementation of project activities.**



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# Enhancing the Management of Forest Ecosystem

through the improvements of livelihoods and small-scale water infrastructure



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