Cambodia: Irrigated Agriculture Improvement Project

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Irrigated Agriculture Improvement Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number</td>
<td>51159-002</td>
</tr>
<tr>
<td>Country</td>
<td>Cambodia</td>
</tr>
<tr>
<td>Project Status</td>
<td>Active</td>
</tr>
<tr>
<td>Project Type / Modality of Assistance</td>
<td>Grant / Loan</td>
</tr>
<tr>
<td>Source of Funding / Amount</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grant 0681-CAM: Irrigated Agriculture Improvement Project</td>
</tr>
<tr>
<td></td>
<td>concessional ordinary capital resources lending / Asian Development Fund</td>
</tr>
<tr>
<td></td>
<td>concessional ordinary capital resources lending / Asian Development Fund</td>
</tr>
<tr>
<td></td>
<td>Grant 0682-CAM: Irrigated Agriculture Improvement Project</td>
</tr>
<tr>
<td></td>
<td>High Level Technology Fund</td>
</tr>
<tr>
<td></td>
<td>High Level Technology Fund</td>
</tr>
<tr>
<td></td>
<td>Loan 3877-CAM: Irrigated Agriculture Improvement Project</td>
</tr>
<tr>
<td></td>
<td>concessional ordinary capital resources lending / Asian Development Fund</td>
</tr>
</tbody>
</table>

Strategic Agendas

- Environmentally sustainable growth
- Inclusive economic growth

Drivers of Change

- Knowledge solutions
- Partnerships

Sector / Subsector

- Agriculture, natural resources and rural development - Irrigation

Gender Equity and Mainstreaming

- Effective gender mainstreaming

Description

The project will assist the Government of Cambodia to (i) modernize and improve the climate and disaster resilience of four irrigation systems in Battambang, Kampong Cham, Kampong Thom, and Takeo provinces to supply water to 43,500 hectares (ha) for 291,847 people, of whom 148,288 (51%) are women; (ii) ensure sustainability of these irrigation schemes by strengthening the institutional and financial capacity of the government staff and farmer water user communities (FWUC) in operation and maintenance (O&M); (iii) improve farming practices for increased agricultural productivity and crop diversification; and (iv) establish a national water resources data management center (NWRDMC), a water resources information system (WRIS), and an irrigation asset management system for better water resources management, planning, operations, and investment.

Project Rationale and Linkage to Country/Regional Strategy

Inadequate irrigation infrastructure. Cambodia's agriculture sector plays an important role in food security and poverty reduction, provides a major source of livelihood and household income, and contributes to export earnings despite low agricultural productivity. The sector is operating far below its capacity, mainly because of inadequate irrigation infrastructure, which limits cropping intensity and crop diversification. Disasters such as floods and droughts occur annually. There are annual water shortages because of the climate, topography, limited water storage, and accessibility, especially in the Tonle Sap river basin.

Inadequate operation and maintenance. As agriculture is the biggest water user in Cambodia, the efficient, effective, and sustainable management of the country's water resources depends largely on irrigation systems' performance. Thus, it is important not only to upgrade irrigation systems, but also to improve O&M cost recovery using the user pays principle, and sustain the increases in agricultural productivity through strengthening capacity of government agencies and FWUCs, and closely involving the FWUCs in the design, implementation, and O&M of systems. Poor water data, low capacity, and limited institutional coordination. Cambodia's hydrometeorological monitoring network is limited with poor and incomplete water data records. The project will address the agricultural production constraints and reduce disaster risk by (i) modernizing infrastructure to improve water storage during drought and manage water during flood events, (ii) upgrading agricultural support services in crop diversification, (iii) establishing a financial and organizational system for FWUCs to increase their role in O&M, and (iv) establishing the NWRDMC and WRIS and supporting its operation.

Impact

Inclusive economic growth through agriculture and irrigation attained

Project Outcome

Description of Outcome

- Water and agriculture productivity in the project areas enhanced

Progress Toward Outcome

The project was approved on 4 Dec 2019 and the financing agreements were made effective on 19 Dec 2019. The project implementation consultants commenced work in July 2020 and NWRDMC consultants in August 2020. Three civil works contracts for Prek Po subproject were approved by ADB in September 2020. The inception mission is scheduled in October 2020.

Implementation Progress

Description of Project Outputs

- Efficiency and climate resilience of irrigation systems enhanced
- Water resources management improved

Status of Implementation Progress (Outputs, Activities, and Issues)

The contracts for the civil works on Prek Po subproject were approved by ADB in September 2020 and civil work has commenced. ADB is reviewing the bidding documents for the Kampong Pouy subproject. EA is aware and will initiate the establishment of the FWUCs. The DFAT program (CAVAC), which is supporting organizing the FWUCs, is unable to commence field consultations due to the COVID-19 pandemic. The NWRDMC consultants commenced work in late August 2020.

Geographical Location

- Battambang Province, Kampong Cham Province, Kampong Thom, Takeo

Safeguard Categories
Consultations with stakeholders and affected persons were carried out during project preparation. Four hundred thirty-eight persons including 212 women were consulted between 06 Nov 2018 to 15 Nov 2018.

**Timing**

- **Effectivity Date**: 06 Nov 2018 to 15 Nov 2018
- **Signing Date**: 19 Dec 2019
- **Date**: 30 Jun 2025
- **Net Percentage**: 05 Dec 2019

- **Grant Utilization**
  - **Grant 0681-CAM**
  - **Total (Amount in US$ million)**
  - **Date**: 30 Sep 2020
  - **ADB**: -
  - **Others**: -
  - **Net Percentage**: -

**Stakeholder Communication, Participation, and Consultation**

- **During Project Design**: Consultations with stakeholders and affected persons were carried out during project preparation. Four hundred thirty-eight persons including 212 women have been consulted through meetings and gender-separate focus groups as part of due diligence and resettlement planning.

- **During Project Implementation**: Consultations with stakeholders and affected persons will continue throughout project implementation.

**Business Opportunities**

- **Consulting Services**: Two consulting services packages, one for PMIC and one for the establishment of NWRDMC and WRIS consultant, will be recruited using quality- and cost-based selection with a quality-cost ratio of 90:10. One individual consultant, National Accounting and Finance Specialist, will be recruited using the individual consultant selection method. Wildlife Conservation Society (WCS), an international non-government organization with an office in Cambodia, will be directly contracted for the conservation of the Bengal Florican in the Stung Chinit South subproject.

- **Procurement**: All procurement of goods and works will be undertaken in conformity with ADB’s Procurement Policy and Procurement Regulations for ADB Borrowers (2017, amended from time to time). Open Competitive Bidding (OCB) for international advertising will be used for the procurement of works and goods. For OCB for national advertising, before the start of any procurement, ADB and the government will review the Government of Cambodia’s Standard Operating Procedures and Procurement Manual for development partner financed projects to ensure consistency with ADB Procurement Policy and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

**Responsible ADB Officer**

- Lopez, Alvin

**Responsible ADB Department**

- Southeast Asia Department

**Responsible ADB Division**

- Environment, Natural Resources & Agriculture Division, SERD

**Executing Agencies**

- Ministry of Water Resources and Meteorology
  - 364 Monivong Blvd, Khan Chamkamorn Phnom Penh, Cambodia

**Timetable**

- **Concept Clearance**: 31 Jul 2017
- **Fact Finding**: 06 Nov 2018 to 15 Nov 2018
- **MRM**: 16 Sep 2019
- **Approval**: 04 Dec 2019
- **Last Review Mission**: -
- **Last POS Update**: 30 Sep 2020

**Indigenous Peoples**

- Due diligence concluded there is no indigenous peoples residing in Prek Po and Kamping Pouy subproject areas. There are 256 households and 1,022 people within the command areas of the Canal 15 and Stung Chinit South subprojects, respectively. These households are well integrated in the Khmer society, have identity cards and enjoy the same benefits as the mainstream Khmer population. These two subprojects will not directly or indirectly affect dignity, human rights, livelihood systems, or culture of the local Cham ethnic group, nor will it affect the territories or natural or cultural resources that they own, use, or occupy. The draft due diligence reports have been prepared for Canal 15 and Stung Chinit South subprojects and disclosed on ADB website. Once the detailed engineering designs of the subprojects are available, MOWRAM with support of the PMIC in consultation with the Cham people will reconfirm the scope of impact on the Cham ethnic group.

**Environmental Aspects**

An initial environmental examination (IEE) was prepared for three subprojects that were categorized as B for environment, and an environmental impact assessment (EIA) and environmental management plan were prepared for the Stung Chinit subproject which was classified as A for environment. Both the IEE and EIA were disclosed on ADB website on 10 April 2019. The project is expected to have overall environmental benefits supporting better management of water resources, sustainable rice production and a net reduction in greenhouse gas emissions. During construction, there will be localized temporary direct impacts, including air and water pollution, noise, and dust and spoil disposal. The Stung Chinit South subproject neighbors an important bird and biodiversity area, which encompasses the Baray Bengal Florican Conservation Area. Hence, there is a risk of indirect induced impacts to the important bird and biodiversity area through expansion of the irrigated area to the west of the command area, and consequent conversion of natural grassland. Identified impacts can be reduced to an acceptable level through effective implementation of the environmental management plan and the conservation program proposed under the sustainable rice platform. The Prek Po subproject includes a solid waste management program. MOWRAM has considerable experience in implementing ADB and other internationally financed projects, and will be supported by PMIC. Consultation with stakeholders and affected persons was carried out during project preparation and will be continued during implementation. Project related complaints will be addressed in a timely manner through a grievance redress mechanism. The domestic EIA for Prek Po is currently under preparation.

**Involuntary Resettlement**

The preliminary designs prepared for Prek Po, Canal 15, and Stung Chinit South subprojects suggest that they will not require land acquisition, nor will they entail any impact on assets or livelihoods. The preliminary design prepared for the Kamping Pouy subproject suggests that it will permanently impact 433.12 square meters of land and 15 households, of which 9 nine households will be physically displaced. The draft resettlement due diligence reports for Prek Po, Canal 15, and Stung Chinit South subprojects, and the draft resettlement plan for Kamping Pouy subproject were prepared in line with the government’s laws and regulations and ADB’s SPS 2009, and disclosed on ADB website on 12 August 2019. Draft due diligence reports and resettlement plan will be updated based on the detailed engineering designs to reconfirm the subprojects’ impact. MOWRAM is currently working with GDR for the preparation of the Detailed Resettlement Plan for Kamping Pouy and is expected to complete it prior to commencement of civil works.

**Business Opportunities**

- **Consulting Services**: Two consulting services packages, one for PMIC and one for the establishment of NWRDMC and WRIS consultant, will be recruited using quality- and cost-based selection with a quality-cost ratio of 90:10. One individual consultant, National Accounting and Finance Specialist, will be recruited using the individual consultant selection method. Wildlife Conservation Society (WCS), an international non-government organization with an office in Cambodia, will be directly contracted for the conservation of the Bengal Florican in the Stung Chinit South subproject.

- **Procurement**: All procurement of goods and works will be undertaken in conformity with ADB’s Procurement Policy and Procurement Regulations for ADB Borrowers (2017, amended from time to time). Open Competitive Bidding (OCB) for international advertising will be used for the procurement of works and goods. For OCB for national advertising, before the start of any procurement, ADB and the government will review the Government of Cambodia’s Standard Operating Procedures and Procurement Manual for development partner financed projects to ensure consistency with ADB Procurement Policy and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

**Responsible ADB Officer**

- Lopez, Alvin

**Responsible ADB Department**

- Southeast Asia Department

**Responsible ADB Division**

- Environment, Natural Resources & Agriculture Division, SERD

**Executing Agencies**

- Ministry of Water Resources and Meteorology
  - 364 Monivong Blvd, Khan Chamkamorn Phnom Penh, Cambodia

**Timetable**

- **Concept Clearance**: 31 Jul 2017
- **Fact Finding**: 06 Nov 2018 to 15 Nov 2018
- **MRM**: 16 Sep 2019
- **Approval**: 04 Dec 2019
- **Last Review Mission**: -
- **Last POS Update**: 30 Sep 2020

**Grant 0681-CAM**

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Original</th>
<th>Revised</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signing Date</td>
<td>05 Dec 2019</td>
<td>19 Dec 2019</td>
<td>30 Jun 2025</td>
</tr>
<tr>
<td>Effectivity Date</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Financing Plan**

- **Date**: 30 Sep 2020
- **ADB**: -
- **Others**: -
- **Net Percentage**: -
### Grant 0682-CAM

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Approval</th>
<th>Signing Date</th>
<th>Effectivity Date</th>
<th>Closing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>04 Dec 2019</td>
<td>05 Dec 2019</td>
<td>19 Dec 2019</td>
<td>30 Jun 2025</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing Plan</th>
<th>Grant Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (Amount in US$ million)</td>
<td>Date</td>
</tr>
<tr>
<td>Project Cost</td>
<td>3.20</td>
</tr>
<tr>
<td>ADB</td>
<td>0.00</td>
</tr>
<tr>
<td>Counterpart</td>
<td>0.00</td>
</tr>
<tr>
<td>Cofinancing</td>
<td>3.20</td>
</tr>
</tbody>
</table>

### Loan 3877-CAM

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Approval</th>
<th>Signing Date</th>
<th>Effectivity Date</th>
<th>Closing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>04 Dec 2019</td>
<td>05 Dec 2019</td>
<td>19 Dec 2019</td>
<td>30 Jun 2025</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing Plan</th>
<th>Loan Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (Amount in US$ million)</td>
<td>Date</td>
</tr>
<tr>
<td>Project Cost</td>
<td>122.69</td>
</tr>
<tr>
<td>ADB</td>
<td>117.00</td>
</tr>
<tr>
<td>Counterpart</td>
<td>5.69</td>
</tr>
<tr>
<td>Cofinancing</td>
<td>0.00</td>
</tr>
</tbody>
</table>

---

**Project Page**  

**Request for Information**  

**Date Generated**  
05 October 2020

*ADB provides the information contained in this project data sheet (PDS) solely as a resource for its users without any form of assurance. Whilst ADB tries to provide high quality content, the information are provided "as is" without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement. ADB specifically does not make any warranties or representations as to the accuracy or completeness of any such information.*