**Nepal: Water Resources Project Preparatory Facility**

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<tr>
<th>Project Name</th>
<th>Water Resources Project Preparatory Facility</th>
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<td>Project Number</td>
<td>45206-001</td>
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<td>Country</td>
<td>Nepal</td>
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<td>Project Status</td>
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<td>Project Type / Modality of Assistance</td>
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<td>Source of Funding / Amount</td>
<td>Grant 0299-NEP: Water Resources Project Preparatory Facility</td>
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<td>concessional ordinary capital resources lending / Asian Development Fund $11.00 million</td>
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**Strategic Agendas**
- Environmentally sustainable growth
- Inclusive economic growth

**Drivers of Change**
- Governance and capacity development

**Sector / Subsector**
- Agriculture, natural resources and rural development - Irrigation - Rural flood protection - Rural water policy, institutional and capacity development

**Gender Equity and Mainstreaming**
- Effective gender mainstreaming

**Description**

The project impact will be accelerated expansion of areas covered by irrigation, drainage and flood control infrastructure. The outcome will be improved readiness of water resources management projects for implementation. The Project’s expected outputs are: (i) detailed feasibility studies for high priority water resources projects undertaken; (ii) environmental, social, and technical capacity of the Department of Water Resources and Irrigation (DWRI) improved; (iii) Irrigation Master Plan updated; and (iv) efficient project management.

Given the ADB country strategy and government priorities, the Project will (i) prepare a project for the rehabilitation and expansion of farmer managed irrigation systems, and the rehabilitation and partial management transfer of some agency-managed irrigation systems; (ii) undertake water-induced hazard mapping and prepare a water-induced disaster prevention project for a priority river basin; and, (iii) prepare other high priority projects as identified by DWRI. The Project will prepare these projects to a level of detailed feasibility which includes technical study, safeguard screening and plans preparation, and economic and financial analysis of at least 30% of subprojects for project readiness, thereby advancing activities which would normally occupy the first one or two years of implementation.

The Project will enhance the capacities of staff of the DWRI through formal and on-the-job training (including participation in project preparation under the Project). Importantly, the Project will reorganize and strengthen the existing Environment Section of DWRI as a Social and Environment Section with (i) clear terms of reference of the section, (ii) environmental and social safeguards guidelines developed to ensure safeguard planning and implementation process complies with the national laws, regulations and ADB’s Safeguard Policy Statement requirements; and (iii) gender equality and social inclusion (GESI) guidelines on project planning and implementation prepared.

The Project will help update the Irrigation Master Plan with a view to the sustainable development and management of irrigation systems in the country until 2030. Changes in land use, water use, agricultural technology, irrigation and water resources policy and legislation, and the extent of irrigation development since the Master Plan was prepared will be reviewed.
Nepal's National Adaptation Programme of Action for climate change notes that Nepal, as largely an agrarian economy, is highly sensitive to changes in climate and natural resources availability. Climate change threatens to reduce the effectiveness of development initiatives across Nepal. In some regions increasing drought will impair food security and affect the availability of water resources, while in others, further increases in the intensity of rains will cause increased flooding and landslide risks threatening human security, water supplies, and infrastructure. The preparation of readily implementable water resources projects which address these issues is thus crucial to the Government's program to address both food security and climate change. The Proposed Water Resources Project Preparatory Facility (the Project) will assist the Government's effort to ensure that critically important water resources projects are implemented efficiently by advancing the preparatory activities in a systematic manner, through planning and appraising high priority projects for potential funding by the Government and development partners. This will contribute significantly toward improving the implementation performance of the ensuing projects by reducing the gap period from project approval to commencement of improvement works, helping to achieve the intended outcomes efficiently and realizing their impact and benefits timely.

The Government's 2005 National Water Plan (NWP) aims at, by 2027, an increase in extent of irrigable land provided with irrigation facilities from the current level of 65% to 97%, an increase in year-round irrigation coverage from the current 38% of irrigated area to 67%, and an average cropping intensity increase within year-round irrigated areas from the current 140% to 193%. In addition it aims to put in place infrastructure to mitigate predictable water-induced disasters in 20 districts and to establish functional water induced-disaster warning systems throughout the country by 2017. Another important facet of the NWP is its emphasis on integrated water resources management (IWRM) which is recognized as a key principle governing water and energy development.

The Asian Development Bank (ADB) Nepal Country Partnership Strategy (CPS) proposes that ADB and the Government explore interventions to improve food security including supporting greater availability of water and year-round irrigation to help mitigate the erratic rainfall patterns of recent years. It notes that ADB will (i) introduce disaster screening into its operations in Nepal to ensure that new investments factor in disaster risks and maximize mitigation measures; (ii) assist the Government in strengthening the capacity of agencies in managing disaster risks; and (iii) assist the Government to implement ongoing flood damage rehabilitation. The agriculture and natural resources sector roadmap for the CPS further notes that improved access to year-round irrigation would enable crop diversification and higher cropping intensities, thereby helping to alleviate food security concerns. The Project will address several factors constraining the efficient upgrading of existing water resources infrastructure or the expansion of coverage to new areas, and enhancing prevention of water-induced disasters. These include an outdated irrigation master plan, the difficulty in identifying projects for funding without well-defined priorities, and the lengthy time needed to gear up and implement projects after their approval. For example, the Community-Managed Irrigated Agriculture Sector Project had a very slow start and it was 3 years after approval that physical improvement works on the other hand, during years of intense rainfall both crops and infrastructure are likely to be damaged. The provision of year-round irrigation, both as supplementary irrigation during the monsoon season and full irrigation during the dry season is crucial to achieve the full potential of the country's agriculture resources. Moreover, protection from floods will both save irrigation infrastructure from damage and destruction while protecting standing crops. Overall, the incidence of poverty in irrigated areas in Nepal is about half of that in rain-fed areas. With irrigation the risk of crop failure is mitigated and farmers are incentivized to invest in more productive farming and high value crops. The provision of irrigation is thus a crucial input in meeting the country's food security goals, adapting to climate change impacts and improving rural livelihoods. In order for irrigation to have full impact, it must be complemented by improved water distribution and efficiency, strengthening of water user associations, improved system operation and maintenance, improved farming technologies and marketing, and protection from catastrophic floods.

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Impact

More water efficient and climate and disaster resilient food production system

Project Outcome

More water efficient and climate and disaster resilient food production system

Description of Outcome

Improved readiness of water resources management projects for implementation

Progress Toward Outcome

Project closed on 31 Dec 2019.

Implementation Progress

1a. CMASP-AF preparation documents completed and finalized in Nov 2013; ADB approved funding on 10 Apr 2014. 1b. At least 30% of CMASP-AF subprojects prepared to PAC approval completed. Feasibility studies for 77 batch-1 subprojects approved prior to loan approval.

1c. FHRRMP completed in June 2016.

1d. Priority River Basin Flood Risk Management Project (Package 7) - Fact-finding mission held from 18 to 29 Nov 2019. Loan documents under finalization for ADB interdepartmental circulation.

1e. Package 7 - Final DO for bid documents submitted on 10 October 2019. Project implementation consultants TOR prepared and approved by DWRI on 21 October 2019, EOJ issued on 31 October 2019. Waiting for Submission 1. 16 numbers of EOIs were received. PMU has submitted the evaluated shortlist to the DWRI for approval.

1f. Mechanized Irrigation Innovation Project (Package 6) Feasibility study is completed. Land acquisition and indigenous people plan and framework submitted on 29 Dec 2019. Consultant contract ended. Loan documents will be prepared in 2020.


2b. Completed. Orientation of all DWRI social and environment section staffs completed in 2014; TOT Training on the guidelines completed in Dec 2015. To date, only one environmental specialist is in the ECC section. GESEI section does not exist anymore. MEWRI is preparing the next organigram for DWRI and both sections will be reestablished.

2c. 27 training courses completed (403 staffs from DWRI and MEWRI; with 17.62% of women staff participation). Women staff in DWRI are less than 10%.

2d. Completed. GESEI guidelines on project planning and implementation prepared and completed; approved by MEWRI on 23 July 2015. GESEI training of DWRI staff through several short-term orientation sessions and workshops/seminars completed. To date, GESEI section does not exist anymore in DWRI.

3a. First Irrigation Master Plan (IMP) submitted on 12 Sep 2019. IMP under finalization by DWRI for MEWRI final approval.

3b. Completed. PMU established on 13 Dec 2012; FMBC consultants with over 20% women mobilized from Apr 2013 until February 2019.

3c. Completed. Project M&E systems developed in Mar 2014.

3d. Project completed on 31 Dec 2019. Closely monitoring submission of withdrawal applications for timely closure of project

Geographical Location

Nation-wide

Safeguard Categories

Environment C
Involuntary Resettlement

C

Indigenous Peoples

C

Summary of Environmental and Social Aspects

Environmental Aspects
The Project mainly entails studies and preparing candidate projects for future funding as well as some capacity building activities. With environment category C, no environmental assessments will be required for the Facility itself. An environmental assessment and review framework (EARF) will be prepared to guide environmental assessment of safeguards and document preparation for the projects to be prepared under the project.

Involuntary Resettlement
The proposed Project aims to support the Department of Water Resources and Irrigation (DWRI) for detailed feasibility of future water resources management projects. The scope of the project is limited to study and preparation of reports for future projects and institutional support to DWRI. The Project will not require acquisition of land and associated properties, and will not affect means of livelihood and sources of income. Hence, the safeguard requirements 2 will not apply, as there is no involuntary resettlement. A resettlement framework will be prepared to guide preparation of involuntary resettlement documents for projects to be prepared under the Project.

Indigenous Peoples
The proposed Project aims to support the Department of Water Resources and Irrigation (DWRI) for detailed feasibility of future water resources management projects. The scope of the project is limited to study and preparation of reports for future projects and institutional support to DWRI. The Project will neither directly nor indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous people. Hence, the safeguard requirements 3 will not trigger, as there is no impact on territories or natural or cultural resources that indigenous peoples own, use, occupy or claim as their ancestral domain. An Indigenous People Planning Framework will be prepared to guide preparation of indigenous people planning documents for projects to be prepared under the Project.

Stakeholder Communication, Participation, and Consultation

During Project Design
An initial consultation process with the government agencies and development partners active in promoting water resources development and preventing water related disasters in Nepal was undertaken during the consultation and reconnaissance missions. National level consultation meetings with the Ministry of Energy, Water Resources and Irrigation (MEWRI) and DWRI were carried out during the missions. The Mission visited two districts jointly with the Government to assess status of various existing irrigation schemes and held discussions with the regional irrigation directorate and irrigation division offices, WUAs, stakeholders and the beneficiaries. Further stakeholder consultations will be undertaken during the fact-finding mission of project processing, and during the design of the individual projects.

During Project Implementation

Responsible ADB Officer
L’Hostis, Marie

Responsible ADB Department
South Asia Department

Responsible ADB Division
Environment, Natural Resources & Agriculture Division, SARD

Executing Agencies
Ministry of Irrigation
INFO@MOIR.GOV.NP
Office of the Secretary
Singhadurbar, Kathmandu, Nepal

Timetable

Concept Clearance 30 Nov 2011
Fact Finding 07 Feb 2012 to 21 Feb 2012
MRM 28 Mar 2012
Approval 27 Jul 2012
Last Review Mission -
Last PDS Update 30 Jan 2020

Grant 0299-NEP

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<th>Effectivity Date</th>
<th>Closing Original</th>
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