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Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 27-Sep-2018 | Report No: PIDISDSC24713

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Sri Lanka	P166865		Sri Lanka Water Resources Management Program (WARM-P) (P166865)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
SOUTH ASIA	Jan 14, 2019	Mar 14, 2019	Water
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Ministry of National Policies and Economic Affairs	Ministry of Mahaweli Development and Environment	

Proposed Development Objective(s)

The development objective of the project is to improve water resources planning, development, and management in Sri Lanka.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	170.00
Total Financing	170.00
of which IBRD/IDA	170.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	170.00

Environmental Assessment Category	Concept Review Decision
A - Full Assessment	Track II-The review did authorize the preparation to continue

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Other Decision (as needed)

B. Introduction and Context

Country Context

1. Sri Lanka has transitioned from a low-income to a middle-income country. Since the civil war ended in 2009, the economy has grown at an average rate of 5.8 percent a year, reflecting a peace dividend and a commitment to reconstruction and growth. The economy is transitioning from a predominantly rural-based economy towards a more urbanized one, oriented around manufacturing and services. Extreme poverty is rare and the country has also made significant improvements on its socio-economic and human development indicators. Social indicators rank among the highest in South Asia and compare favorably with those in middle-income countries of the World. The country has surpassed most of the MDG targets set for 2015 and was ranked 73rd in the Human Development Index in 2015.

2. **Climate change projections suggest the dry zones will become drier and the wet zone in the Southwest of the country will become wetter.** The projections also suggest that spatial and temporal variations in water availability and the frequency and severity of droughts and floods will increase. The impacts of climate change are already evident. Losses from floods in 2016 and 2017 in the Western Province – the most populated and economically developed region and the heart of the wet zone - totaled an estimated US$1.5 billion. The frequency and scale of flooding in several river basins have increased in recent years. This emerging scenario will have substantial impact on how water should be developed, allocated and managed to meet the demands fairly and equitably among different users and ensure its sustainable use for present and future generations. While these climate change impacts will not affect the country uniformly, they will make it harder to meet the water needs of different sectors, especially given the growing demand for water. Only careful planning and management of water resources can guarantee their optimal allocation.

Sectoral and Institutional Context

3. The Government has given a high priority for water resources development and management given its importance in promoting economic growth. In the Government's Public Investment Plan (PIP) for 2017-2020, the allocation of resources to the irrigation and water resources sector (over US$4 billion) is second only to roads, and larger than any other sector. The investment priorities of the PIP aim at increasing water storage with construction of new multi-purpose reservoirs and the transfer of water from surplus river basins to water deficit basins. Financing of some of the

PIP's priority infrastructure investments are underway, including those by the Asian Development Bank, would create additional water storage and trans-basin diversion canals and tunnels to transfer water within the water surplus Mahaweli basin and to adjacent water deficit river basins located in a number of provinces in the northern dry zone of the country. Feasibility studies for several other investments identified in the PIP are also underway. About 93% of the PIP investment program (39 of the 42 projects) would expand irrigation or improve irrigation infrastructure**.**

4. A recent World Bank assessment[1] of the of the key strategic issues and challenges facing the Water Resources Sector underscored the need to address emerging strategic issues and challenges in the sector, including groundwater management, flood and drought risk management, water quality management and pollution control, environmental flows and low flow regimes, climate change risk management, watershed management, river management, and improved safety of major water assets of the country. As the sector challenges escalate and new infrastructure planned under the PIP (including trans-basin canals) begin to be undertaken to reach new users, water resources management will have to undergo a gradual paradigm shift away from the traditional infrastructure-driven approach to an integrated and participatory planning, development and management approach. The key findings and recommendations have been endorsed by the Government.

5. The paradigm shift to an integrated and participatory planning to manage Sri Lanka's water resources would demand several changes: a pragmatic and shared vision for integrated water resources development and management; commitment to the policy and institutional reform process for integrated water resources management and water allocation; adjustments in the institutional mandates; revision of legal provisions; enhancement of capacity and skill mixes; and adoption of new modern information management tools and technology.

Relationship to CPF

6. **The WBG Country Partnership Framework (2017-2020) for Sri Lanka highlights the sector challenges and emphasizes that water resource development and management are a continuing priority** in light of increasing climate related risks**.** Specifically, it notes that the water institutions in Sri Lanka have not adapted to these challenges and the challenges are best managed within a coherent basin framework. The proposed Program will contribute towards meeting the *sustainability challenge related to governance and the environment* (CPF Challenge 4) and contribute directly to the *Seizing Green Growth Opportunities, Improving Environmental Management, and Enhancing Adaptation and Mitigation Potential* (Pillar 3) and strengthen climate resilience and disaster risk management (Objective 3.2).

[1] World Bank, 2018, A Note on Strategic Options for Water Resources Conservation, Management, and Development Final Draft, takes a rapid assessment of key strategic issues and challenges facing the Water Resources Sector and the Government's Public Investment Program (2017-20).

C. Proposed Development Objective(s)

Note to Task Teams: The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet. ***Please delete this note when finalizing the document.***

7. The development objective of the project is to improve water resources planning, development, and management in Sri Lanka.

Key Results (From PCN)

8. The following KPIs are proposed to measure outcomes of the project:

- Participatory River Basin Water Management Plans developed.
- Basin level coordination bodies established and functional in pilot river basins.
- Independent National Dam Safety Inspectorate functional.
- Bulk water allocation policy in major river basins approved by Cabinet and adopted.
- Regulations for Ground Water Management adopted by Cabinet.
- Integrated knowledge information system and database is established and accessible to all in pilot basins.

D. Concept Description

9. **The lead WRM agencies in Sri Lanka have proposed a cluster of river basins where they would like to test key aspects of river basin planning and management under the project**. This is primarily to respond to government's priority to transfer water from surplus basins to water deficit basins, alarmed by the concern that climate change will make the wet areas wetter and the dry areas drier in the future, of which the symptoms of that scenarios are becoming evident. In addition, the Government now needs to strengthen its machinery to address major water management challenges with appropriate polices, institutional arrangements, and knowhow that shall be initially tested and developed in a few selected basins.

10. **The Mahaweli Authority of Sri Lanka (MASL) has proposed Walawe basin**, in which watershed management and improving water and agriculture productivity of the Walawe major irrigation scheme are their major priorities. Walawe irrigation scheme is one of the few major schemes in the country that has significantly deviated away from full irrigated rice production to irrigated banana production. Also, there are a few other major irrigation schemes in the Walawe basin that are hydrologically linked to the Walawe scheme but are managed by the Department of Irrigation (ID). The basin provides a good opportunity for testing technology innovations and coordination arrangements to link the MASL, Irrigation Department, other agencies and the basin stakeholders, including the Water User Associations and other local level committees, for better basin level water management.

11. **Department of Irrigation has proposed basins are Kalu Ganga Basin and cluster of combined Ma Oya, Deduru Oya and Mee oya basins to be covered under this project**. The department has already completed conceptual level proposals for inter-basin water transfers from water surplus basins to water deficit basins (Kalu ganga basin to Walawe basin: Ma Oya basin to Deduru Oya and Mee Oya basins) in order to mitigate flood risks in surplus basins and improve water availability in water deficit basins. However, these proposals have not been framed and evaluated in the context of overall integrated basin level water resources planning and management considering best options for allocation of

water for economically productive uses. Therefore, these proposals need to be evaluated and developed with attention to current and future demand of water for multiple uses and economic value of water allocation. The Department of Irrigation (ID) wants to advance these conceptual level proposals to pre-feasibility and feasibility levels in a basin water resources planning and management context, and if possible to undertake priority feasible investments. Therefore, the conceptual level proposals in those select basins provide a good entry point for the agencies to reexamine and revise the proposals in the context of river basin based integrated water resources management.

12. The project will be anchored to the Ministry of Mahaweli Development and Environment (MMDE). The lead government implementing agencies for: a) Component 1 are the MASL and the Forest Department (FD) which are part of the MMDE; b) Component 2 are the MASL under MMDE and the ID and the Water Resources Board (WRB) under MIWRDM; and Component 3 are the MASL, ID and NPC. In addition, the participation of private plantation companies, communities, and agencies such as International Water Management Institute would be necessary as lead implementing partners for the planning and implementation of Component 1.

13. **To achieve the project objective, the proposed loan of $170 million will finance five components as listed below**:

Component 1: Watershed Restoration, Management and Related Infrastructure (US $75.0 million). This Component would support the MMDE to enhance capacity and develop a long-term program to restore and manage the hydrological and ecological functioning of severely degraded watersheds. In addition, the component would enhance the sustainability and economic value of land uses and the major water storage reservoirs and conveyance systems served by those watersheds. To achieve this objective, the proposed Component 1 would finance a program for the restoration and protection of select watersheds of the proposed upper Mahaweli and Walawe river basins with investments on the planning and implementation of ecosystem-based watershed assessment tools and practices, watershed treatment technologies and related infrastructure and practices with active participation of watershed stakeholders, including local communities and plantation companies. This component would also include support to the development of additional knowledge, tools, policy and regulatory provisions, stakeholder participatory approaches, and government institutional capacity and coordination arrangements for sustainable watershed management. This component will include following sub-components:

1.1 Watershed management planning, capacity building and public awareness
1.2 Watershed restoration and related infrastructure investment
1.3 Private sector watershed management pilots

Component 2: Water Resources Management (WRM) Infrastructure Rehabilitation (US$75.0 million). This Component would finance: (a) improvements to approximately 30 identified major dams, water conveyance and supply canals to ensure their safety and durability (b) feasibility and other supporting studies for new water resources infrastructure, primarily inter-basin transfers required to address recurrent droughts and emerging water scarcity and demand in several river basins, as well as other new water resources infrastructure recommended in the river basin plans developed under Component 3. The Government has already prioritized a few feasibility studies to be included under the project, including a proposal to provide bulk drinking water conveyance and supply from Kalu Ganga reservoir to areas of the North Central Province (NCP) affected by the chronic kidney disease. This component will include following sub-components:

2.1 Improvements to dams and other major water assets
2.2 Feasibility studies and other studies for water resources development and management

Component 3: Strengthening Institutions for Water Resources Management (US$15.0 million). This Component would support the MMDE and MIWRDM in strengthening capacity for integrated river basin-based water resources planning and management, bulk water allocation planning and management, ground water management, and safety of major water assets. The Component would assist the Mahaweli Authority of Sri Lanka (MASL) of the MMDE and the Irrigation Department (ID) of the MIWRDM to develop a systematic and transformative participatory pilot basin planning process to be able to demonstrate policy innovations and procedures for optimal integrated water resources planning and management in the selected basins. The project would provide investments to develop basin development and management proposals and action plans in selected pilot river basins and implementation of actions and various infrastructure improvements recommended in the final basin plans for which detailed feasibility studies are not warranted. The basins for interventions will be finalized during project preparation, taking into account the initial shortlist of basins for this intervention proposed by the Government, which are Walawe, cluster of Ma Oya, Deduru Oya and Mee Oya basins, and Kalu Ganga basin. This component would also support: i) the Water Resources Board (WRB) with investments for improving ground water resources management, extending the support provided by the recently closed Dam Safety and Water Resources Planning Project (DSWRPP); and ii) the Water Management Secretariat (WMS) of the MMDE for bulk water planning and management in the gradually expanding Mahaweli water conveyance infrastructure and increasing demand for water for multiple uses. This component will include following sub-components:

3.1 Ground water management
3.2 Participatory basin water management planning & monitoring
3.3 Financial & institutional arrangements for watershed & river basin asset management

Component 4: Contingent Emergency Response Component (US$ 0.0 million). The objective of this zero-fund component is to support Sri Lanka in the event of disaster or emergencies. This disaster recovery contingency component could be triggered following the declaration of a disaster or emergency. This will allow the Bank to facilitate rapid reallocation of funds from project components to cover emergency response. During project preparation, the definition of the key aspects of the CERC will be detailed in the Project Operational Manual.

Component 5: Project Implementation, Monitoring and Management (US $5.0 million)

This component would support project implementation, supervision and monitoring activities that will be further defined as institutional and implementation arrangements are refined during preparation.

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SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Currently, the precise locations of interventions that would be supported by the project are not known. Initial indicative river basins include Ma Oya, Deduru Oya, Mee Oya, Walawe River basin and upper Mahaweli River basin all traversing

between different climatic and agro-ecological zones. The basins will be finalized by appraisal.

B. Borrower's Institutional Capacity for Safeguard Policies

A comprehensive policy and regulatory framework for environmental safeguards is in existence in Sri Lanka. The Central Environmental Authority (CEA) is the key regulatory body that is mandated by the National Environmental Act (NEA) to implement all regulatory provisions outlined in its statutes. The requirements and processes provisioned by the CEA and the NEA are largely consistent with the Bank's safeguard policy on Environmental Assessment. With over three decades of experience, the CEA demonstrates the technical expertise in evaluating environmental and social impacts of development projects. However even with an enabling legal environment, the enforcement of legal instruments and subsequent monitoring of environmental management activities has been very low.

Likewise, in terms of social safeguards, regulations governing land acquisition and resettlement are considered fairly comprehensive, and consistent with Bank's OP 4.12 requirements with the exception of few gaps, especially in areas of consultations, grievance redress mechanism, and compensation and assistance to non-titleholders. In the past, through various World Bank-financed projects, Government of Sri Lanka (GoSL) has the experience in complying with WB's requirements. However, due to capacity constraints as well as lengthy procedures, land acquisition has often been leading to delays in project implementation.

The implementation responsibility for this project will lie with the Mahaweli Authority of Sri Lanka and Department of Irrigation that have over a decade of experience of having implemented World Bank safeguard policies via both phases of the Dam Safety and Water Resources Management Project and the Climate Resilience Improvement Project. Both projects have included extensive capacity building on safeguards within the two departments. Further capacity building, extending to the field level will be incorporated as part of safeguards actions within the project.

C. Environmental and Social Safeguards Specialists on the Team

Nadeera Rajapakse, Environmental Specialist
Bandita Sijapati, Social Specialist

D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	This policy is applicable because the project will support the rehabilitation of existing water management infrastructure across the island as well as undertake technical feasibility that will identify a select set of priority infrastructure projects that will include improvements/rehabilitation to existing structures and the planning for new diversion and storage infrastructure within the water management sector. As sub-projects that will be supported through these investments are yet unknown, an Environmental and Social Assessment and Management Framework (ESMF) will be prepared

		and publicly disclosed locally and in the Bank external website. Further, a Strategic Environmental and Social Assessment (SESA) will be prepared at the basin level to assess the potential environmental impacts and to integrate environmental considerations into the policy and regulatory frameworks and proposed watershed management and river basin plans.
Performance Standards for Private Sector Activities OP/BP 4.03	No	There will not be any activities that involves financing of private sector proposed at this stage of the project preparation.
Natural Habitats OP/BP 4.04	Yes	Many of the country's water management infrastructure is located either within or in close proximity to significant natural habitats or designated areas of natural importance. In addition, feasibility studies may recommend new water infrastructure that could be located within or traverse natural habitats. As sub-project sites are not known, there also remain the uncertainty of project locations and their association natural habitats and how they can be impacted. Therefore, this policy is applicable. The ESMF will include appropriate screening as part of the environmental assessment (EA) process and necessary guidelines on avoidance/mitigation measures to address potential impacts.
Forests OP/BP 4.36	Yes	Based on the experience of the establishment of new infrastructure in the country in the recent past, it is expected that the potential infrastructure projects will have potential threats to forests as in many instances raw material such as metal, sand and gravel have been extracted from forest reserves. In addition, watershed management activities envisaged under the project will also bring positive impacts to the upper watershed and catchment forests. Therefore, this policy is applicable. The ESMF will include appropriate screening as part of the EA process and necessary guidelines on avoidance/mitigation measures to address potential impacts and to ensure positive impacts are well documented.
Pest Management OP 4.09	No	The potential infrastructure projects under the program do not include purchase of pesticides or pesticide application. Therefore, this policy is not applicable. However, as a precautionary measure, these types of activities will be identified in the negative list with appropriate screening as part of the ESMF.

Physical Cultural Resources OP/BP 4.11	Yes	The potential infrastructure projects under the program may be located in close proximity to designated physical cultural resources and cultural heritage sites as the countries historic cascading earthen tank system itself are sites of national cultural significance. The ESMF will include appropriate screening as part of the physical cultural resource screening and necessary guidelines on avoidance/mitigation measures to address potential impacts. It will also include appropriate screening as part of the EA process and chance-find procedures.
Indigenous Peoples OP/BP 4.10	No	There are no conclusive evidence pointing to indigenous people living within the potential project area who will be adversely affected by the project activities.
Involuntary Resettlement OP/BP 4.12	Yes	Depending on the location, scale and nature of the investments, especially under Component 2 (rehabilitation of existing structures or construction of new infrastructure), as well as potential investments derived from watershed management and river basin planning under Components 1, 2 and 3, activities supported under the project will require land acquisition. Likewise, there is also the risk of adverse impacts on the livelihoods of farmers as a result of proposed dam rehabilitation works as well as works related to watershed management. As a result, OP 4.12 on 'Involuntary Resettlement' has been triggered. However, since the precise nature of the sub-projects as well as the extent of land requirements are unknown at this stage, an Environmental and Social Management Framework (ESMF) will be prepared alongside a separate Resettlement Policy Framework (RPF). Further, a Strategic Environmental and Social Assessment (SESA) will be prepared at the basin level to assess the potential social impacts and to integrate social considerations into the regulatory framework as well as proposed watershed management and river basin plans. The ESMF and the RPS, will be prepared, consulted upon and disclosed locally and in the World Bank's external website, prior to appraisal.
Safety of Dams OP/BP 4.37	Yes	OP/BP4.37 is triggered because of the connectivity and dependence on water conveyance and control of the existing hydrological systems and water management infrastructure and the links of smaller tanks with the storage and operation of upstream medium/ large dams, which is typical for Sri Lanka’s

		cascading tank and irrigation infrastructure. While the program will not finance physical interventions that involve the construction of water bodies with embankments more than 15 meters high, the project will engage in the rehabilitation of and include the construction of new infrastructure such as storage reservoirs, flood embankments, dikes, storm water drainage canals which are hydrologically connected to existing small and medium tanks in the basins. Therefore due diligence measures with regard to the Safety of Dams will be included in the EAMF.
Projects on International Waterways OP/BP 7.50	No	The policy is not applicable because the project does not include potential infrastructure projects located in or have impacts on international waterways
Projects in Disputed Areas OP/BP 7.60	No	The policy is not applicable because there are no disputed areas in Sri Lanka.

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Dec 03, 2018

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

September to November 2018.

CONTACT POINT

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Borrower/Client/Recipient

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APPROVAL

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