INTEGRATED SAFEGUARDS DATA SHEET
CONCEPT STAGE

Report No.: ISDSC1200

Date ISDS Prepared/Updated: 11-Feb-2015

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I. BASIC INFORMATION

A. Basic Project Data

Country:	South Asia	**Project ID:**	P150220
Project Name:	Bangladesh Regional Weather and Climate Services Project (P150220)		
Task Team Leader(s):	Poonam Pillai,Nadia Sharmin		
Estimated Appraisal Date:	01-Oct-2015	**Estimated Board Date:**	28-Jan-2016
Managing Unit:	GSURR	**Lending Instrument:**	Investment Project Financing
Sector(s):	Flood protection (50%), General public administration sector (50%)		
Theme(s):	Natural disaster management (40%), Climate change (30%), Water resource management (30%)		

Financing (In USD Million)			
Total Project Cost:	75.00	Total Bank Financing:	75.00
Financing Gap:	0.00		

Financing Source	**Amount**
BORROWER/RECIPIENT	0.00
International Development Association (IDA)	75.00
Total	75.00

Environmental Category:	B - Partial Assessment
Is this a Repeater project?	No

B. Project Objectives

The main objective of the proposed project is to strengthen the capacity of the Government of Bangladesh to deliver weather and climate information in priority sectors and to prepare for climate variability and hydro-meteorological disasters.

C. Project Description

The project interventions are expected to encompass improved meteorological information services,

improved hydrological information services, strengthened forecasting and early warning systems, and improved dissemination of agro-meteorological information. It will be implemented over a period of 5 years.

The project has the following main components:

Component A. Strengthening Meteorological Information and Services (USD 40 million)

The main objective of this component is to strengthen lead time and accuracy of weather forecasting and Multi-hazard early warning systems. This component will be implemented by the BMD and include the following:

Sub-Component A1: Strengthening Meteorological Monitoring, Forecasting and Disaster Related Early Warning Systems (28 million): This sub-component aims to support modernization of BMD's meteorological observation network over land, air and ocean, weather forecasting capacity and strengthening public weather and climate services. Modernization will be national in scope including critical habitats such as the Sunderbans. It will finance installation of new Automatic Weather Station netowrks, real time rain gauges with telemetry, upper air soundings and strength marine meteorology. The telecommunication system at BMD and its divisional offices, database management, will be upgraded. The sub-component will support access to high performance computers; state-of-the-art numerical weather prediction tools, and improved hardware and software for BMD and divisional offices. Modernization of BMD's information system will help it to improve its capacity for handling data from international and national observation networks, and observations from satellites and radar network. The weather forecasting system is expected to be upgraded from 24 hours to 7 days forecast with verification of reliability. This sub-component will also support strengthening public weather services, development and implementation of a National Framework for Climate services, development of climate information products and services, support for urban weather services, and design of end-to-end early warning systems for severe weather phenomenon (such as thunderstorms) in targeted areas.

Sub-Component A2: Institutional Capacity Strengthening, Project Management, Monitoring and Evaluation (USD 7 million): This sub-component will provide strategic support for enhancing institutional capacity for weather and climate service delivery at the national and divisional levels. It will support strengthening policy and regulatory framework for BMD operations. The capacity strengthening of BMD will be improved through modern equipment, training and capacity building and collaboration with international meteorological institutions. This sub-component will also support successful project management, targeted analytic studies, and monitoring and evaluation.

Sub-Component A3: Regional Collaboration: (USD 5 million) This sub-component will support expanding GTS bandwidth to improve exchange of meteorological data to and from regional centers, scaling up ongoing regional pilot mechanisms such as Bangladesh's contribution and participation in the South Asia Climate Outlook Forum (SASCOF), support to scaling up SAARC- Severe Thunderstorm Observation and Regional Modelling (STORM) program; participation by BMD officials in regional workshops; twinning arrangements with regional and international hydrometeorological agencies; regional technical studies; establishment of climate portal for accessing and sharing regional weather and climate information products; and regional consultations and workshops to support disaster resilience.

Component B: Strengthening Water and Flood Information Services (USD 27 million)

The main objective of this component is to improve lead time and accuracy of hydrological forecasting, risk information and strengthen early warning systems. The component would be implemented by the BWDB and includes the following:

Sub-Component B1: Strengthening Hydrological Monitoring, Forecasting (USD 15 million): This sub-component will support design and modernization of the country's hydrological observation network and forecasting, including installation of automated hydrological stations, strengthening groundwater monitoring network, sediment monitoring and measurement of river morphology. BWDB's existing equipment repair and calibration facility will be upgraded and a centralized Data Center will be established. Multipurpose communication technologies for transmission and processing data to enable higher quality forecast and increase flood warning lead times. This sub-component will also support acquisition of hardware and software for improving hydrological and flood (flash floods, urban, riverine, coastal floods) forecasting. This would include a flood prediction model capable of assimilating river flow routing information and generating inundation maps. The model would be developed, calibrated and validated for basins/rivers in Bangladesh.

Sub-Component B2: Early Warning Systems and Disaster Risk Management in Priority Areas (USD 7 million): The objective of this sub-component is to improve Early Warning Systems (EWS) and Disaster Risk Management in priority areas. Building on existing risk assessments, this sub-component will support development of end-to end flood related early warning systems, including identification of risk through multi-hazard risk assessments leading to generation of credible risk information for informing mitigation actions at policy, planning and community levels; establish decision support tools for flood risk management including software, hardware; installation of a now-casting system for flash floods and strengthen community based early warning systems. This sub-component will be implemented in close coordination with sub-component B1. While forecasting and procurement of systems and equipment related to forecasting would be covered under sub-component B1, this has an intrinsic relationship with dissemination of early warnings as a critical input.Priority areas will be identified during preparation.

Sub-Component B3: Institutional Capacity Strengthening, Project Management, Monitoring and Evaluation (USD 5 million): This sub-component would support institutional strengthening of the Hydrology Division of the BWDB. This would focus on strengthening the capacity of central, divisional and sectional offices of BWDB; establishment of a knowledge center that would serve as a repository of all water and flood forecasting related data and information, technical studies and project management. This sub-component will also support M&E activities to track implementation progress.

Component C: Agro-Met Information Systems Development and Use (USD 8 million)

The main objective of this component is to provide appropriate agro-meteorological services to farmers in priority districts. The main implementing agency for this component will be the DAE and has the following sub-components:

Sub-component C1: Development of a Decision Support System for Agro-Meteorological Information (USD 4 million): This sub-component will support the development and operationalization of a Decision Support System for processing agro-meteorological information. Activities to be funded include setting up a web-based portal for agromet services; support for hardware and software; development of agricultural monitoring products; risk mapping of climate

vulnerable communities; and development of agricultural information products.

Sub-component C2: Dissemination of Agrometeorological products to farming communities in different agro-ecological zones (USD 2 million): This sub-component would support outreach and dissemination of agrometeorological information services to farmers in priority districts; and development of mobile applications and use of new technologies. The sub-component will also support capacity building and training at the farm level for improved use of weather and climate information.

Sub-component C3: Institutional Capacity Strengthening, Project Management, Monitoring and Evaluation (USD 2 million): This sub-component would support technical capacity strengthening of DAE staff, technical studies, participation in regional fora on agromet service delivery, training visits, project management and monitoring and evaluation. The use and impact of disseminated information would be monitored and assessed at the community level through this sub-component.

Component D: Contingent Emergency Response Component (USD 0)

Following an adverse natural or man-made event or that causes a major disaster, the Government may request the Bank to re-allocate project funds to this component (which presently carries a zero allocation) to s upport response and reconstruction. This component would allow the Government to request the Bank to reallocate project funds and designate them as IRM funds to be engaged to partially cover emergency response and recovery costs. This component could also beused to channel additional funds should they become available as a result of the emergency.

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

Nationwide; including the Bay of Bengal. Specific locations are not known at this time.

E. Borrowers Institutional Capacity for Safeguard Policies

Bangladesh Meteorological Department (BMD) under Ministry of Defense (MoD), Bangladesh Water Development Board (BWDB) under Ministry of Water Resources (MoWR) and the Department of Agriculture Extension (DAE) are the implementing agencies.

Bangladesh Meteorological Department (BMD) is a government organization under the administrative control of the Ministry of Defense. BMD falls under the non-military category of the MoD. The staffs are hired through the Public Service Commission. BMD does not have any prior experience in working with the World Bank though it has experience working with other donor agencies particularly JICA. During preparation, it will be ensured that BMD's administrative location under the MoD will not hinder in any respect the World Bank's ability to carry out its project supervision, oversight, operational and fiduciary responsibilities. Prior to negotiations stage, BDM will prepare an O&M plan to ensure long terms sustainability. Further, BWDB and DAE have previous experience in implementing IDA funded projects, though BWDB's Hydrology Division has not been involved in any of those projects. The capacity of this Division including for safeguards will need to be strengthened.

The MoD will be the nodal ministry; it will create the Project Steering Committee (PSC) with representatives from other ministries. The PSC will be responsible for overall project oversight. Each implementing agency will have its own Project Management Unit (PMU). There will be one Project Coordination Unit (PCU) under MoD which will coordinate with all three PMUs and will operate

under the overall guidance of the PSC. The implementing Ministries will have the overall responsibility for the project implementation including, but not limited to, reporting, monitoring and evaluation, procurement control, financial management, audit and disbursements, compliance with environmental and social assessments, as well as coordination with the line agencies and the World Bank. It will be necessary to strengthen each implementing agency with PMUs housing professional, technical, procurement, financial management, social, and environment staff that would use appropriate procurement and financial management systems, and procedures with adequate internal control arrangements. These would be complemented by a Governance and Accountability Action Plan (GAAP) for BMD. For BWDB and DAE, GAAPs for other IDA projects will be updated and incorporated as needed.

F. Environmental and Social Safeguards Specialists on the Team

Sabah Moyeen (GSURR)

Shakil Ahmed Ferdausi (GENDR)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The proposed project is not expected to create any significant environmental impact since it is targeted to develop institutional capacity for transmission and processing data to enable higher quality forecast and increase flood warning lead times. However, the project will support both (i) Strengthening Meteorological Monitoring, Forecasting and Disaster related Early Warning System and (ii) Strengthening Hydrological Monitoring and Forecasting. These will include acquisition of hardware and software. Installation of some hardware may require physical infrastructure development at the field. Details of the hardware support and associated infrastructure are not known at this stage and the project is classified as Category 'B'. An Environmental and Social Management Framework will be prepared for the project to describe the procedure for environmental and social management in the proposed project.
Natural Habitats OP/BP 4.04	TBD	The project physical activities are not expected to lead any conversion or degradation of critical or other natural habitats. However, the modernization of the network includes Sundarbans, which is an UNESCO heritage site and the single largest mangrove forest. In addition, there will be some installations in natural water bodies. Accordingly, the policy has been triggered as TBD. No separate instrument is required for natural habitats. It will be covered under ESMF.
Forests OP/BP 4.36	No	The proposed project is not expected to have any

		impact on the health and quality of forests, the rights and welfare of people and their level of dependence upon or interaction with forests; and the management, protection, or utilization of natural forests or plantations. As such, the policy has not been triggered.
Pest Management OP 4.09	No	The project will not finance procurement of fertilizers and pesticides. Also the project will not influence on the increased use of fertilizers and pesticides. Accordingly, the policy has not been triggered.
Physical Cultural Resources OP/BP 4.11	TBD	Some of the project locations may have cultural property associated with them that may be impacted by infrastructure development work. A Cultural Property Action Framework may need to be prepared as part of ESMF.
Indigenous Peoples OP/BP 4.10	Yes	The project is expected to be implemented nationwide including in the Southern part of the country where Indigenous People may live. The specific locations for project interventions are not known at this stage and so an Indigenous Peoples Development Framework (IPDF) or Small, Ethnic and other Vulnerable Communities Development Framework (SEVCDF). The latter will be included as part of the Social Management Framework (part of Environmental and Social Management Framework) discussed below, and will include consultation and communication strategies and measures to enhance the positive impacts of the project for the communities.
Involuntary Resettlement OP/ BP 4.12	Yes	Under Component A and B the project will upgrade and modernize equipment, install new equipment and weather stations, as well as update communication and data generation/dissemination processes. While it is understood that the scale of these activities will be relatively small in terms of land and space usage, and that the activities will be mainly carried out within the existing premises of the implementing agencies, it cannot be guaranteed that no land acquisition will be required or that people and livelihoods on private and/or public lands will not be impacted by the project. Since the project's scope is nationwide and the specific locations for the various interventions has not been determined a Social Management Framework will be prepared for the project to include a Resettlement Policy Framework

		(RPF), a Consultation and Communication Strategy (CCS) focused on ongoing information and feedback which can lend itself to participatory project design. Component C would support outreach and dissemination of agromet information services to farmers in priority districts, development of mobile applications and use of new technologies. The views and needs of communities in terms weather and climactic situations they face and the type/frequency of forecasts which would be locally useful, needs to be captured and analyzed via a Social Assessment and the CCS. The CCS will have a gender focus as well to address the needs of women specifically relevant to the project activities and outcomes.
Safety of Dams OP/BP 4.37	No	Not relevant to the project
Projects on International Waterways OP/BP 7.50	TBD	
Projects in Disputed Areas OP/ BP 7.60	No	

III. SAFEGUARD PREPARATION PLAN

A. Tentative target date for preparing the PAD Stage ISDS: 30-Jun-2015

B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing[1] should be specified in the PAD-stage ISDS:

May, 30, 2015

IV. APPROVALS

Task Team Leader(s):	Name: Poonam Pillai,Nadia Sharmin	
Approved By:		
Regional Safeguards Coordinator:	Name: Francis V. Fragano (RSA)	Date: 11-Feb-2015
Practice Manager/ Manager:	Name: Bernice K. Van Bronkhorst (PMGR)	Date: 11-Feb-2015

[1] Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.