



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 06-Nov-2019 | Report No: PIDC27239



BASIC INFORMATION

A. Basic Project Data

Country South Asia	Project ID P171054	Parent Project ID (if any)	Project Name Climate Adaptation and Resilience for South Asia (P171054)
Region SOUTH ASIA	Estimated Appraisal Date Feb 28, 2020	Estimated Board Date May 12, 2020	Practice Area (Lead) Urban, Resilience and Land
Financing Instrument Investment Project Financing	Borrower(s) The Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), Asian Disaster Preparedness Center (ADPC)	Implementing Agency The Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), Asian Disaster Preparedness Center (ADPC)	

Proposed Development Objective(s)

To create an enabling environment for climate resilient policies and investments across South Asia

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	36.00
Total Financing	36.00
of which IBRD/IDA	36.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	36.00
IDA Grant	36.00

Environmental and Social Risk Classification

Concept Review Decision



Moderate

Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Regional Context

- 1. South Asia remained the fastest growing region in the world in 2018.** However, growth moderated from 7.2 percent in 2017 to 6.9 percent in 2018, along with the deceleration of growth in the rest of the world¹.² Economic prosperity in the South Asia Region (SAR) is largely defined by the extent to which the annual summer southwest monsoon reaches the various sub-regions and provides adequate rainfall and relief from the heat. Through shared dependence on monsoons, high mountain ranges of Himalayas, Karakoram and Hindukush and river systems of Indus, Ganges and Brahmaputra, countries in South Asia share similar topography, climatic patterns and thereby, the impact of changes in hydrological events.
- 2. Disasters take a huge toll on the development agenda of SAR countries.** Between 2000 and 2017, disasters in South Asia incurred estimated damages of US\$ 149.27 billion³. Public expenditure is under stress by the repeated need to reallocate capital budgets away from long term development planning and towards reconstruction activities in post-disaster environments. In the past decade alone, nearly 700 million people, half of the region's population, were affected by one or more disasters. Increased number and severity of hydro-meteorological events and hazards have increased the exposure of not just the population but also the region's growing capital stock. With future climate changes, coastal flood and storm/cyclone risk levels will rise.⁴ A recent World Bank study⁵ utilizing various climate change models identified climate 'hotspots' in SAR and concluded that 800 million (or 44%) people in South Asia today live in locations that would become moderate or severe hotspots by 2050 under the BAU scenario. They are also expected to experience a loss of income and adverse impact on living standards, due to climate change⁶.
- 3. Global climate change poses new challenges to SAR nations and their economic growth.** Decreased convective precipitation is likely to reduce rainfall and increase the frequency of hot weather conditions in Afghanistan, Bhutan, India, Nepal and Pakistan, while increased precipitation is likely in Bangladesh and Sri Lanka with significant potential

¹ World Bank. 2019. "Exports Wanted" South Asia Economic Focus (April), World Bank, Washington, DC.

² www.data.worldbank.org

³ Calculations based on Em-Dat data

⁴ Hirji, Rafik Fatehali; Nicol, Alan; Davis, Richard Mark. 2017. *Climate risks and solutions: adaptation frameworks for water resources planning, development, and management in South Asia, Summary report*. Washington, D.C.: World Bank Group.

⁵ Mani, Muthukumara S.; Bandyopadhyay, Sushenjit; Chonabayashi, Shun; Markandya, Anil; Mosier, Thomas Michael Rowe. 2018. *South Asia's hotspots: The impact of temperature and precipitation changes on living standards*. Washington, D.C.: World Bank Group.

⁶ See (i) "Effects of climate change on seasonal monsoons in Asia and impact on variability of rainfall in southeast Asia". By Yen Yi Loo and Ajit Singh. *Geoscience Frontiers*, vol 6, issue 6, Nov 2015, pp 817 to 823. The analysis is mainly for Southeast Asia, but there are observations on South Asia as well; (ii) *4 Degrees Turn Down the Heat – Climate Extremes, Regional Impacts, and the case for Resilience; the World Bank* by the Potsdam Institute for Climate Impact Research and Climate Analytics; June 2013; and (iii) *South Asia's Hotspots: Impacts of Temperature and Precipitation Changes on Living Standards*; World Bank. 2018: www.worldbank.org/southasiahotspots



impact on SAR growth.⁷ World Bank estimates suggest that climate change could result in 62 million people in SAR being pushed below the extreme poverty line by 2030⁸. Under a “Business as Usual” (BAU) scenario⁹, climate change is likely to cause a present value loss in GDP of \$57 billion (\$121 billion in 2050) in Bangladesh, \$37.9 billion (\$800.2 billion in 2050) in India and \$1.1 billion (\$33.9 billion in 2050) in Sri Lanka¹⁰.

4. **Climate Change constrains countries’ macro-fiscal environments.** Climate-induced extreme weather events damage the capital stock and cause a sharp drop in economic output. In addition to human, infrastructure and productivity loss, there is loss of tax revenue and increased public spending for relief and reconstruction that strains government budgets. A high public debt level could prevent the country from accessing international capital markets even in the face of an extreme event, and in this circumstance donor grants could alleviate financial constraints. According to a recent World Bank report the lack of resilient infrastructure has huge economic costs, causing a significant strain on public budget and hampering private investment.
5. **Climate change poses threats to South Asia that require regional cooperation and collective action.** Countries in South Asia share the Karakoram-Hindu Kush-Himalaya mountain range and its associated ten river basins, linking the region by its provision of water, food, and energy to more than 1.9 billion people in the region. Increased temperatures and precipitation have accelerated the melting of Himalayan glaciers, amplifying risks of flooding from the increased runoff, increased extreme events, and more acute food and water shortages in the region. Five countries in South Asia share coastlines with rapidly rising sea levels. The shared annual monsoon and the projected reductions in pre-monsoon river flows and changes in the monsoon poses similar challenges to South Asian countries. As climate change does not adhere to ecological or jurisdictional boundaries, one-off isolated national-level adaptation and resilience policies and investments are unlikely to reach their full potential without larger alignment with the policy actions of similarly impacted countries in the region.

Sectoral and Institutional Context

6. **In the area of climate change, there have been considerable efforts of cooperation.** Notably SAARC has dedicated regional centers that look into specific environmental issues, established centers for hydromet which contribute to information and forecasting for the regional monsoon weather system and has prepared a regional roadmap and technical working group on climate resilience¹¹. Following the SAARC declarations in 2007 and 2008 on Climate Change, the SAARC Summit in 2010 concluded with the Thimphu Declaration on Climate Change, which sets an ambitious goal for reducing poverty while strengthening resilience to climate change. SAARC’s report - Climate Risks in the SAARC Region: Ways to Address the Social, Economic & Environmental Challenges In SAR, work is already

⁷ 4 Degrees Turn Down the Heat – Climate Extremes, Regional Impacts, and the case for Resilience; the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics; June 2013.

⁸World Bank. 2016. World Bank Group climate change action plan. Washington, DC: World Bank Group. <https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=26114433>

⁹ A “business-as-usual” baseline case is often associated with high GHG emissions by continuing on the current high carbon intensity development path <http://www.ipcc.ch/ipccreports/tar/wg3/index.php?idp=286>, resulting in temperature increases most likely around 4 degrees centigrade (as per IPCC scenarios A1B and A2) and 0.7 meter sea level rise by 2100. <http://bit.ly/2CTN7k7> The BAU scenario assumes that there is no mitigation effort or investment beyond the current level. Often, they involve no major interventions or paradigm shifts in the organization or functioning of a system but merely respect established constraints on future development. <http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=126>. This baseline scenario is used interchangeably with ‘no policy scenario’. For more discussion see http://www.ipcc-data.org/guidelines/pages/glossary/glossary_b.html

¹⁰ South Asia’s Hotspots: How climate change will affect living standards.

¹¹ These include SAARC Disaster Management Centre (SDMC) in Delhi, SAARC Forestry Centre in Bhutan, SAARC Energy Centre in Islamabad, SAARC Meteorological Research Centre (SMRC) in Dhaka, and SAARC Coastal Zone Management Centre (SZMC) in Male. SAARC also gives access to the SAARC Development Fund to finance climate-related interventions



ongoing through the South Asia Regional Hydromet Program to strengthen institutions, facilitate knowledge exchange, and enhance regional cooperation with respect to management of hydromet risks. Considerable national investments are being made in coastal resilience and adaptation, resilient infrastructure, etc. including a World Bank active portfolio of over US\$4.7 billion to strengthen climate resilience.

7. **Each SAR country has formulated an overarching climate change policy, strategy or action plan.** There are significant efforts to translate these policy statements into adaptation actions at sub-national levels and to mainstream them into development programs. All NDCs recognize in broad terms the importance of climate-smart agriculture, adaptive and integrated water management, clean and renewable energy, sustainable forest management and conservation of biodiversity, reducing disaster risk and enhancing physical and fiscal resilience, and integrated waste management.
8. **To increase resilience and achieve climate commitments, there is a need for a transformational shift towards policies and institutions that enable climate resilient investments.** The World Bank report “Lifelines – The Resilient Infrastructure Opportunity” outlines the importance of investing in resilient infrastructure, including both infrastructure assets and services. Investing in more resilient infrastructure is both profitable and urgent as disruptions are extremely costly for governments, households and private sector and large ongoing investments in infrastructure assets will have long-lasting repercussions as poor maintenance and natural disasters result in a vulnerable stock.
9. **The resilience deficit in South Asia is largely anchored in not just a financing deficit but also inadequate planning processes, data deficiency, barriers to data sharing, and capacities.** The challenge for IDA countries in SAR is to develop capacity to absorb the scientific information on localized projections of spatial and temporal impacts and adopt a suite of non-structural and structural investments to build resilience to climate change. Policy reforms are expected to lead to transformations towards climate-smart planning, skills, institutional capacity building and investments. To achieve these policy reforms, an incentive structure must be created in the form of providing cutting-edge information and expertise, and incremental financing to support climate resilient investments. There is a need for clear understanding of how climate policy (or inaction) may impact economic growth, fiscal sustainability and the country’s broader development agenda, and how fiscal and economic policy tools can be used to adapt to climate change.

Relationship to CPF

10. **The proposed Project is centrally positioned with the priority outcomes and result areas in the CPFs of the SAR countries,** which describe the areas of WBG’s support to clients in their adaptation and mitigation of climate change. All CPFs have integrated increased resilience to climate variability and change into their key objectives and broad pillars. The CPFs provide a powerful platform to support investments such as climate smart agriculture, forest management, water resource management, resilient transport systems, renewable energy, urban resilience, to adapt to the effects of climate change in the region. They support the development of early warning and response systems, improved multi-hazard risk information, resilient infrastructure designs and hydro meteorological services to better manage disaster risks. Another innovation is the creation of risk financing mechanisms through, e.g., the Catastrophe Deferred Drawdown Option (Cat DDO), which is now accessible for all SAR countries.
11. **The Regional Project will support the WBG’s *new Action Plan on Climate Change Adaptation and Resilience*¹², which aims to increase the World Bank’s level of ambition and commitments on climate change adaptation and resilience.**

¹² <https://www.worldbank.org/en/news/press-release/2019/01/15/world-bank-group-announces-50-billion-over-five-years-for-climate-adaptation-and-resilience>



The project's design and activities also contribute to the key objectives of the WBG's operational framework on "Supporting Growth, Investing in People and Addressing Fragility" and operationalize the SAR Regional Strategy's deepened focus on climate smart investments, building human capital and strengthening resilience. The project's focus on policy reforms and investments to strengthen South Asia's climate resilience further the agenda on supporting growth and sustainable investments. Activities focused on developing institutional capacity and skills to absorb those policy reforms and undertake climate-resilient investments contribute to the Bank's efforts on investing in people and building human capital.

12. **CARE builds on a number of global and national climate adaptation initiatives and attempts at supporting the region to achieve desired adaptation outcomes at the national and sub-national level.** The common adaptation interests among subsets of SAARC countries are reflected in their national priorities, as highlighted in their national communications, NAPAs, NAPs, and NDCs and existing regional and sub-regional initiatives. Some of the key analytics and initiatives the project builds upon are: (i) The 2019 World Bank report "Lifelines – The Resilient Infrastructure Opportunity; (ii) Report on "South Asia's Hotspots: Impacts of Temperature and Precipitation Changes on Living Standards (iii) Global Commission on Adaptation (GCA); (iv) Coalition of Finance Ministers; and (v) SAARC Roadmap on regional cooperation for climate change adaptation:

C. Proposed Development Objective(s)

13. The proposed development objective is to create an enabling environment for climate resilient policies and investments across South Asia.

Key Results

14. To achieve the PDO, proposed key results include the following:

Outcome 1: Enhanced Regional Cooperation and Knowledge for Climate Resilience and Adaptation

Intermediate Outcomes:

- Increased availability and usage of shared knowledge, climate data and analytics in the region for climate resilience;
- Regional climate resilience guidelines for key sectors endorsed and available;
- Climate-informed decision-making tools and systems available for SAR countries to adopt and implement.

Outcome 2: Climate Resilience in policies, planning and investments in target countries enhanced

Intermediate Outcomes:

- National technical standards enhanced to climate resilient levels in key sectors;
- Number of policy actions supported through targeted incremental support to country program and investments;
- National capacities strengthened to apply climate resilient standards in policies, planning and investments.

D. Concept Description

15. **CARE will enable and support national-level resilience objectives and contribute to regional outcomes.** Governments in SAR will have access to (i) data and knowledge services provided by the regional program; and (ii) readily available technical assistance through the expertise and advisory services provided by regional entities,



thereby strengthening the climate resilience of operations and expediting project preparation and implementation. This would enable a two-way information flow between the regional and the national levels and allow national-level activities to contribute to regional outcomes. The Project recognizes the importance of the national NDCs and climate strategies as critical policy and strategic anchors for work on climate resilience and aims at coordinating the implementation of these strategies and action plans through regional data, knowledge sharing, standards and policy dialogue, for addressing common challenges.

16. **Geographical scope:** All SAR countries will benefit from the regional activities focusing on dialogue and learning opportunities, and access to enhanced data, standards and guidelines. National level interventions under the proposed project will focus on a sub-set of countries in South Asia, in particular Bangladesh, Nepal and Pakistan in the first phase. Based on a mid-term review, the project would consult and explore expansion of the project to other SAR countries and thematic areas, based on evolving demand and the resource envelope.
17. **Thematic scope: The project will focus on select 2-3 focus thematic areas among the following sectors** (i) Climate Smart Agriculture; (ii) Integrated Water Resource Management (IWRM); (iii) Resilient infrastructure¹³; (iv) Urban resilience; (v) Adaptive social protection; (vi) Ecological integrity with focus on mountain economy and forestry and (vi) Hydromet, Climate services and DRM.

Components

36. **Component 1: Promoting Evidence-based Climate Smart Decision Making** - This component will support creation of a resilience data and informatics service platform and a decision support system. The aim is to enhance access of line ministries and departments to all relevant data required for risk-informed planning and investments, including, hazard and climate variability data, weather patterns and any other sector-specific data.
37. **Component 2: Enabling Resilient Policies and Standards for Development** - This component would focus on enabling transformation of policies and capacities for climate resilience and adaptation across the region. This would be achieved through regional and national level dialogue, knowledge sharing, developing standards and technical support to critical national institutions. Regional guidelines and standards for climate resilience will be developed to harmonize policy, planning and investment reforms across the region and build resilience against common climate impacts. Implementing agencies would work closely with line ministries, through mobilization of key experts, some to be embedded, to ensure that policies and standards developed at the regional level are contextualized to the national and sectoral contexts. A major impact would be achieved through line ministries adopting standards and guidelines for resilience as part of their development planning (Component 2), combined with the use of data and decision support systems (Component 1) as the new norm. This component will also facilitate regional knowledge sharing on climate-resilient best practices in South Asia within the outlined thematic areas and establish *centers of change* to drive the transformational shift at the national level.
52. **Component 3: Project Management and Implementation Support** - This component will finance establishing and operating the Project Implementation Units (PIUs) of Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES) and ADPC. In addition, the component will also finance consultancies required for the preparation and supervision of specific activities, monitoring and evaluation, trainings, exposure visits, studies for knowledge generation and sector-specific climate impacts and related interventions, inclusive and gendered practices in climate resilient planning and investments.

¹³ Resilient infrastructure would include key sectors such as transport, energy, and water.



53. **Financing and Implementation:** The project will be financed through IDA Grants for eligible regional institutions. The two eligible regional organizations selected for implementation are – the Asian Disaster Preparedness Center (ADPC) and the Regional Integrated Multi-Hazard Early Warning System (RIMES).

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

The proposed project essentially consists of technical assistance (TA) type activities (types 2 and 3) and it will not involve type 1 TA (preparation of future investments) or finance any civil works. Environmental and Social impacts are mainly beneficial and negative direct impacts, if any, will occur outside the scope of and further downstream from the project.

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APPROVAL

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