



# Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 28-Apr-2020 | Report No: PIDISDSA28495



**BASIC INFORMATION**

**A. Basic Project Data**

Country India	Project ID P169111	Project Name Second National Ganga River Basin Project	Parent Project ID (if any)
Region SOUTH ASIA	Estimated Appraisal Date 27-Apr-2020	Estimated Board Date 24-Jun-2020	Practice Area (Lead) Water
Financing Instrument Investment Project Financing	Borrower(s) India	Implementing Agency National Mission for Clean Ganga, Ministry of Jal Shakti	

Proposed Development Objective(s)

The objective of the Project is to reduce point-source pollution from targeted Urban Areas of the Ganga river basin and support the Central Ministry to develop an institutional framework for Ganga river basin management.

Components

- Institutional Development
- Infrastructure Development
- IBRD Guarantee
- Program Communications and Management
- Contingent Emergency Response Component

**PROJECT FINANCING DATA (US\$, Millions)**

**SUMMARY**

<b>Total Project Cost</b>	880.00
<b>Total Financing</b>	880.00
<b>of which IBRD/IDA</b>	400.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**



International Bank for Reconstruction and Development (IBRD)	400.00
<b>Non-World Bank Group Financing</b>	
Counterpart Funding	480.00
National Government	480.00

Environmental Assessment Category

A-Full Assessment

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

**B. Country and Sector Context**

Country Context

**1. The economic slowdown in India over the last three years has been exacerbated by the global outbreak of the COVID-19 pandemic.** The current slowdown is due to the combined effects of (i) unresolved domestic issues (impaired balance sheet issues in the banking and corporate sectors, compounded by stress in the non-banking segment of the financial sector) and (ii) significant negative economic impacts following the combined health and supply shocks in the wake of global outbreak of coronavirus disease 2019 (COVID-19). Governments across the world, including India, are trying to stem the spread of the conty reduction. Owing to robust economic growth during that period, more than 90 million people escaped extreme poverty and improved their living standards. Despite this success, poverty remains widespread. In 2015, 176 million Indians were living in extreme poverty, while 659 million—half the population—were below the higher poverty line commonly used for lower middle-income countries (US\$3.20 per person per day in 2011 PPP). The recent growth slowdown and the outbreak of COVID-19 will hit hardest the poor who have limited savings and other assets and are largely employed in the informal sector.

**2. Improving water security is key to India’s economic development and protecting human health, especially in the context of infectious disease outbreaks.** With water availability of around 1,100 m<sup>3</sup> per capita, India is close to the water scarcity threshold<sup>1</sup>. It is estimated that India’s water demand will be twice the available supply in 2030<sup>2</sup>. India experiences a highly seasonal and erratic pattern of rainfall: around 80 percent of rainfall occurs in just four months of the monsoon period<sup>3</sup>. Despite this, India’s water storage capacity is relatively low

<sup>1</sup> The Falkenmark Index is a measure of water scarcity and defines per capita water availability between 1000 and 1700 m<sup>3</sup> as water stress and between 500 and 1000 m<sup>3</sup> as chronic water scarcity, where the lack of water constrains economic and human development (Falkenmark and Widstrand, 1992, cited in Hosterman HN *et al* (2009). Water, Climate Change, and Adaptation: Focus on the Ganges Basin [www.nicholas.duke.edu/institute](http://www.nicholas.duke.edu/institute))

<sup>2</sup> 2030 Water Resources Group. 2009. Charting our Water Future: Economic Frameworks to Inform Decision-making.

<sup>3</sup> Dhawan V. 2017. Water and Agriculture in India. Background paper, Global Forum for Food and Agriculture



compared with other middle-income countries<sup>4</sup>. These national averages mask wide spatial and temporal variations in water availability in India. Agriculture accounts for nearly 80 percent of water use and is characterized by inefficient use of this water. Two-thirds of India's irrigation needs and 80 percent of its domestic water demand are met through groundwater, contributing to significant depletion of this resource. India faces these pressures on water availability at a time when demand for water is growing exponentially due to economic development, an increasing population and rapid urbanization. Water quality is also an issue - India ranked 120 among 122 countries on water quality in 2018, with nearly 70 per cent of its water resources being contaminated<sup>5</sup>. Nearly 80 percent of sewage generated in urban areas is let out untreated, severely impacting public health and the environment. A safe and reliable supply of water, and sanitary conditions, are essential to protecting human health. A World Bank study estimated that India loses \$80 billion annually due to environmental degradation, including water pollution, equivalent to 5.7 per cent of GDP<sup>6</sup>. The brunt of these losses is borne by children, women and the poor<sup>7</sup>.

**3. The need for improving water security is most acute in densely populated river basins such as the Ganga.** The Ganga basin includes 11 States<sup>8</sup> and is spread over approximately one quarter of India's landmass. It is home to over 40 percent of India's population (520 million) and two thirds of the country's poor. The Ganga basin is one of the most densely populated areas in the world with an average population density of 520 persons per square kilometer. It provides over one third of India's surface water<sup>9</sup> and includes the country's largest irrigated area. Over 40 percent of India's GDP is generated in the basin.

**4. Globally, the Ganga basin is one of the areas that is most vulnerable to climate change impacts<sup>10</sup>.** Temperature is projected to increase by 1 to 3 degrees by 2050<sup>11</sup> which will cause significant changes in rainfall patterns, impacting flows in the Ganga. Studies show that in some seasons extreme drought conditions may prevail due to high temperatures, while in others higher rainfall may result in floods. Changing precipitation patterns are also expected to increase the nutrient loading in rivers, further affecting the water quality<sup>12</sup>. More floods are likely to increase water contamination due to a higher volume of untreated wastewater being discharged into water bodies, which will increase the risk of exposure for local communities to waterborne pathogens and algal toxins. In the event of a drought, a heat wave or other water availability shock, the demand from local populations for clean and secure water supplies will grow, putting further pressure on already overexploited freshwater resources. Moreover, water pollution and lower water flows induced by climate change negatively impact the riverine biodiversity. For example, a study indicates that changes in river flow and depth

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<sup>4</sup> India's dams can store only about 200 cubic meters per capita whereas middle-income countries like China and Mexico can store about 1000 cubic meters per capita (Briscoe J and Malik RPS, 2006, India's Turbulent Water Future)

<sup>5</sup> NITI Aayog, Government of India. 2018. *Composite Water Management Index*

<sup>6</sup> World Bank. 2014. *Greening India's Growth: Costs Valuations and Trade-offs*.

<sup>7</sup> It is estimated that 1.5 million children under 5 years die each year due to water-related diseases in India. 200 million person-days of work are lost each year and the time burden is largely borne by women who are often responsible for looking after sick family members. Inadequate sanitation also differentially impacts the poor who are more likely to be unserved by sanitary infrastructure and services.

<sup>8</sup> There are five main stem states – Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. The remaining six states are Himachal Pradesh, Delhi, Haryana, Rajasthan, Madhya Pradesh and Chattisgarh.

<sup>9</sup> Bons CA (Ed.). 2018. *Ganga River Basin Planning Assessment Report*. Main volume and Appendices. Deltares with AECOM and FutureWater for the World Bank and the Government of India

<sup>10</sup> Khan S *et al.* 2018. *Flows and sediment dynamics in the Ganga River under present and future climate scenarios*

<sup>11</sup> 1°C to 2°C under the climate-sensitive scenario and 1.5°C to 3°C under the carbon-intensive scenario. Mani M *et al.* 2018. *South Asia's Hotspots: The Impact of Temperature and Precipitation Changes on Living Standards*.

<sup>12</sup> Jain CK & Singh S. 2018. *Impact of climate change on the hydrological dynamics of River Ganga, India*.



will adversely affect the distribution and survival of the endangered Gangetic dolphin which depends on echolocation to find its food<sup>13</sup>.

**5. The Ganga, India's iconic and revered river, is at risk.** In addition to being a valuable economic resource, the Ganga carries immense religious significance in India. The river is worshipped as a living goddess by Hindus, who comprise about 80 percent of India's population. Many of Hinduism's most important pilgrimage sites are located along the Ganga. This includes sites of the *Kumbh Mela*, a major Hindu festival and the world's largest congregation of pilgrims during which millions of people immerse themselves in the Ganga in a ritual that is believed to wash away sins and lead to salvation<sup>14</sup>. Despite being a revered river, the water quality and flows of the Ganga face several pressures, including: (i) abstraction of around 90 per cent of the water<sup>15</sup>, primarily for irrigation, industrial and domestic consumption; (ii) discharge of untreated municipal sewage and industrial effluents; (iii) over-exploitation of groundwater; (iv) dumping of solid waste; and (v) loss of floodplains. According to one study, these pressures, compounded by growing demand for water from farmers, cities, and industries, can place parts of the Ganga basin at or below the threshold level of water scarcity by 2025<sup>16</sup>. Water stress in the basin is further aggravated by widespread pollution. The National Mission for Clean Ganga (NMCG) of the Government of India (GoI) estimates that 3 billion liters of untreated wastewater is generated daily in cities with over 50,000 inhabitants located along the main stem of the Ganga. NMCG also indicates that this comprises over 80 percent of the pollution load from point sources in the Ganga and the remainder is from industrial effluent<sup>17</sup>. This situation is likely to worsen as population and economic growth increase pressure on the river and groundwater resources while adding to the amount of pollution discharged in the rivers. As a result, water quality of the Ganga has been assessed as unfit for many essential uses.

**6. Municipal wastewater treatment is the intervention with the greatest potential to improve the water quality of the Ganga and is also expected to help reduce transmission of infectious diseases such as COVID-19.** While there is no single, simple intervention to address the multiple pressures on the health of the Ganga, the intervention offering the greatest potential benefits to the health of the river is further improvement of municipal wastewater treatment. Greater reduction in pollution improves downstream water quality, improves ecosystem services, and reduces water-related illnesses and deaths. Appropriate wastewater treatment may reduce transmission of pathogens such as COVID-19. Emerging research has shown that the virus may remain viable in the environment for days, which could lead to fecal–oral transmission<sup>18</sup>. The presence of COVID-19 in sewage has also been reported in a March 2020 article that reviewed sewage samples of eight cities in The Netherlands<sup>19</sup>.

<sup>13</sup> Jain CK and Singh S. 2018. Impact of climate change on the hydrological dynamics of River Ganga, India. *Journal of Water and Climate Change*.

<sup>14</sup> *Kumbh Mela* means Festival of the Sacred Pitcher. An estimated 240 million people participated in the 2019 *Kumbh Mela* at Prayagraj <<https://www.hindustantimes.com/india-news/a-record-over-24-crore-people-visited-kumbh-2019-more-than-total-tourists-in-up-in-2014-17/story-9uncpmhBPnBj11ClnTiYQP.html>> Accessed April 7, 2020.

<sup>15</sup> Ibid Bons CA (2018)

<sup>16</sup> Hosterman HN *et al* (2009). *Water, Climate Change, and Adaptation: Focus on the Ganges Basin* [www.nicholas.duke.edu/institute](http://www.nicholas.duke.edu/institute)

<sup>17</sup> NMCG <<https://nmcg.nic.in/pollution.aspx>> Accessed April 10, 2020. The contribution of cities with less than 50,000 population and non-point sources to the pollution load has not been systematically studied.

<sup>18</sup> Lancet Gastroenterol Hepatol 2020. Published online on March 19, 2020 (<https://www.thelancet.com/action/showPdf?pii=S2468-1253%2820%2930083-2>)

<sup>19</sup> <https://www.medrxiv.org/content/10.1101/2020.03.29.20045880v1>



Furthermore, the discharge of inadequately treated wastewater is the most common source of enteric viral pathogens in aquatic environments leading to contamination of drinking water sources and spread of diseases.

**7. The Ganga Action Plan (GAP), launched in 1985, was a first in a series of national flagship programs to clean the Ganga and focused largely on municipal wastewater treatment.** The objective of the GAP was to restore river water quality to meet ‘bathing class’. While the Central government financed the construction of STPs under the GAP, their operation and maintenance (O&M) was the responsibility of State governments and ULBs. In practice, ULBs lacked resources to maintain STPs and O&M was under-funded by State governments, resulting in neglect and breakdown of STPs, and therefore failure of the GAP to achieve its objective. Further, the implementation of the GAP was hampered by several weaknesses, including: (i) poor and non-participatory planning (e.g. installed capacity fell short of the sewage generated, improper siting of STPs, essential components of schemes were not foreseen leading to delays); (ii) insufficient funding (the GAP spent approximately \$250 million over 23 years); (iii) weak water quality monitoring; and (iv) limited public involvement. The GAP was able to maintain and even show moderate improvements in water quality in some locations. Overall, however, it fell short of the goal of restoring river water quality to ‘bathing’ class (Annex 2) which cemented the public perception of the program as a failure.

**8. In 2009, the GoI created the National Ganga River Basin Authority (NGRBA) with a comprehensive mandate to introduce a basin-wide approach to planning and management of the Ganga clean-up program.** In 2011, the World Bank approved the ongoing National Ganga River Basin Project (NGRBP)<sup>20</sup> to support the NGRBA with \$1 billion in financing. The National Mission Clean Ganga (NMCG) was set up to implement the NGRBA’s mandate and to function as the National Program Management Group for the NGRBP. In its initial years, the NMCG was hamstrung by skeletal staff and a highly centralized governance structure that led to prolonged delays in implementation. The NGRBA also continued to be dogged by the challenges faced by the GAP, notably weak capacity and ownership of ULBs and inadequate counterpart funding from the States (equivalent to 30 percent of the cost of investments with the balance 70 percent being financed by the Central government). An assessment undertaken by the CPCB in 2013 of 51 STPs financed under the GAP and NGRBA in the Ganga basin found capacity utilization in the STPs of about 60 percent; 27 percent of STPs failed to meet effluent discharge standards and 20 percent of STPs were not operational.

**9. The launch of the *Namami Gange* Program in 2015 has revitalized the GoI’s efforts to clean the Ganga.** The *Namami Gange* (Homage to Ganga) Program was approved by the GoI in 2015 for a period of five years through 2020.

**10. The *Namami Gange* Program outlines a comprehensive vision for the Ganga.** The GoI’s Vision for the Ganga is to achieve the ‘wholesomeness of the Ganga’. This comprehensive vision recognizes the importance of pollution abatement and acknowledges that in the long term, other pressures on the health of the river also need to be addressed. The Vision for the Ganga has four building blocks:

- (i) *aviral dhara*<sup>21</sup> (continuous flow): the flow of water, sediments and other natural constituents of the river Ganga are continuous and adequate over the entire length of the river throughout the year. Hence, in-stream barriers, water diversions and barriers to surface runoff must be regulated;

<sup>20</sup> P119085

<sup>21</sup> *Nirmal dhara* and *aviral dhara* are important terms at the center of the national discourse over the Ganga, in particular, over the development of hydropower in the upper reaches of the Ganga and its tributaries



- (ii) *nirmal dhara* (unpolluted flow): the flow in the Ganga river is bereft of pollution;
- (iii) geological entity: protecting the geological foundation of the river basin and safeguarding its geomorphological integrity from anthropogenic damage; and
- (iv) ecological entity: to restore the ecological balance of the river and provide an enabling environment for endemic flora, fauna and micro-organisms to thrive in the river.

**11.** Learning from global experience, the *Namami Gange* Program has been organized around three phases in recognition that certain aspects of its vision require a long-term horizon whereas others can be addressed sooner. The first phase (three to five years, 2015 onwards) was intended to launch the program with ‘quick wins’ for immediate, visible impact such as solid waste collection and riverfront development. This was accompanied by a medium-term (up to ten years, 2018 onwards) focus on *nirmal dhara* - unpolluted flow - through municipal and industrial pollution load reduction, afforestation, biodiversity conservation and water quality monitoring improvements. In the long term (over ten years, 2028 onwards), the government plans to ensure *aviral dhara* - continuous flows - through determination of ecological flows, increased water use efficiency and maintenance of the geological and ecological integrity of the river. In view of the scale and complexity of the Ganga, a budget of Rs 200 billion (\$3 billion) was allocated for the *Namami Gange* Program from 2015 to 2020<sup>22</sup>. By comparison, it is estimated that Germany alone spent the equivalent of about \$55 billion on STPs to support the clean-up of the Rhine.

**12. The proposed SNGRBP builds on and extends the ongoing World Bank engagement with the GoI on cleaning the Ganga.** The proposed Project learns from the uneven implementation experience of the ongoing NGRBP to balance ambition with realism. It has an implementation timeline of 6.5 years (June 2020- December 2026). The proposed SNGRBP will continue to finance investments in pollution abatement that will work towards demonstrating sustainable mechanisms for financing O&M, building on the innovative and successful Hybrid Annuity Model (HAM) of Public Private Partnership (PPP) approach<sup>23</sup>. The SNGRBP has an extended scope, covering selected tributaries in addition to the mainstem of the river in five basin States<sup>24</sup>. Its investments focus on treating all wastewater from large point-source pollution cities on selected tributaries and on completing investments started under the ongoing NGRBP which will increase treatment capacity over 50% in Kolkata, the capital city of the State of West Bengal and will develop full network coverage and treatment in Patna, the capital city of the State of Bihar, and in three smaller cities for greater benefits. The proposed Project will also introduce the first-ever IBRD guarantee for wastewater treatment and the first IBRD Guarantee in the water and sanitation sector in India. The IBRD Guarantee will cover the payment obligations of the NMCG under three HAM PPP contracts and will help to mobilize private investment and optimize the cost of payment security provided by the NMCG. This is complemented by technical assistance to States and ULBs to strengthen and incentivize planning and management of wastewater treatment investments. Hence, the proposed Project directly contributes to the *Namami Gange* Program’s medium-term focus on *nirmal dhara* (pollution abatement, 2018-28).

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<sup>22</sup> GoI, 2015, Approval to Namami Gange - Integrated Ganga Conservation Mission / Programme under National Ganga River Basin Authority. New Delhi: Press Information Bureau

<sup>23</sup> The HAM PPP approach was introduced by the NMCG in 2016 to further strengthen the focus on sustaining infrastructure. Under the HAM PPP approach, the GoI pays a private operator 40 percent of the capital costs to build a STP during the construction period, the remaining 60 percent is paid out in quarterly annuities, on top of O&M annuities, over the 15 years of O&M, with payments of both capital cost and O&M annuities linked to the continued performance of the STP as per agreed parameters. This arrangement provides positive incentives for both government and private operators to invest in the success of the project and incentivizes proper O&M of the plants for at least 15 years.

<sup>24</sup> Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal



### C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

**13.** The objective of the Project is to reduce point-source pollution from targeted Urban Areas of the Ganga river basin and support the Central Ministry to develop an institutional framework for Ganga river basin management.

Key Results

**14.** The achievement of the PDO will be measured through four indicators:

- (i) Amount of Biochemical Oxygen Demand (BOD) pollution avoided due to Project interventions;
- (ii) Number of sewage treatment plants (STPs) constructed or rehabilitated under the Project which meet the national discharge standards at least 95 percent of the time;
- (iii) Recommendations of the study on institutional framework for Ganga river basin management are adopted;
- (iv) A public online system for continuous monitoring of water quality and flow in the Ganga and its tributaries is functional.

### D. Project Components

#### **Component 1 – Institutional Development (\$30 million, of which IBRD \$20 million).**

**15.** This component will support the development of an institutional framework to improve Ganga river basin management and strengthen planning, implementation and financing arrangements for wastewater collection and treatment.

**16. Sub-component 1.1 – Development of an institutional framework for Ganga basin management (IBRD \$2 million):** This sub-component will support the DoWR, RD&GR in developing a framework for Ganga river basin management. It will finance a comprehensive analysis of the functions and mandates of key institutions at Central, State and sub-State levels involved with aspects of Ganga river basin management, of the relevant laws and regulations; and of possible options for NMCG to operationalize the mandate it received through the Government Authorities Order of 2016. It will take into account the changing climate context in the Ganga basin and how institutional arrangements can be designed to enhance climate resilience, especially for the poor and vulnerable sections. The analysis will identify gender gaps, their causes and help in developing a set of institutional guidelines to address these e.g. facilitating women's entry and career progression in technical roles in river basin management. This study will make recommendations on options for strengthening the institutional framework for Ganga river basin management, describing the roles and responsibility sharing among key institutions and a roadmap for their implementation. The study will focus on data collection, monitoring and use for either strategic planning, forecasting and decision-making. It will be conducted with wide stakeholder consultation throughout its



implementation. This sub-component will also finance technical assistance to support the implementation of the adopted recommendations of the study.

**17. Sub-component 1.2 – Development and application of tools to monitor and inform decision-making for river basin management (IBRD \$10 million).** This sub-component will establish critical tools to improve river basin management and inform decision-making, including a publicly available online interface integrating data from the Water Resources Information System (WRIS)<sup>25</sup> for continuous monitoring of water quality and flow in the River Ganga and its tributaries. It will install additional real-time water quality monitoring stations at strategic locations, and a system for monitoring water withdrawal/consumption by major users in Uttarakhand and Uttar Pradesh. These data will be used in scenario modelling to explore water management options that balance economic, environmental and social factors, including gender considerations. This sub-component will also support an evidence-based, participatory investigation of environmental flow options, for all river reaches across the Ganga basin where substantial flow regime modification has occurred. It will provide technical assistance to the Ganga Knowledge Center (GKC), to strengthen its capacity to collate, manage and share data and information on the Ganga basin, including gender disaggregated data, and to strengthen its capacity in strategic communications and outreach (under Sub-component 4.1 and by other stakeholders). Improved monitoring and optimization of water quality and flow supported under this sub-component can strengthen beneficiaries' resilience to extreme events like droughts and floods.

**18. Sub-component 1.3 – Support to participating State Governments and ULBs to strengthen their capacity for wastewater service delivery and river management (IBRD \$7 million).** This sub-component will support selected States in studying possible options, roles and responsibility sharing between the parastatal EA and participating ULBs for O&M arrangements of wastewater service delivery with the aim of ensuring long-term sustainability of service delivery. These studies will inform the preparation by the participating State governments of a roadmap for sustained O&M of sanitation assets beyond the 15 years funded by the Central government under the current PPP arrangements, and of additional policy pieces, such as a State-level sanitation strategy, a connection strategy for household sewer connections with a special focus on inclusion of traditionally marginalized groups such as low income households, including those headed by women; and a roadmap to generate revenues, possibly through tariffs, making it possible to incrementally cover O&M costs.

**19.** This sub-component will support participating ULBs, on a demand basis, to strengthen their planning, institutional, technical and financial capacity to manage wastewater. This could include technical assistance for developing city-wide plans integrating sanitation with water supply, river management and wetland rejuvenation based on mapping of the wastewater network and treatment facilities and/or an assessment of options to generate a credible revenue stream for wastewater management, including updating property databases to increase tax revenues and earmarking a share of this increase to sanitation. This Sub-component will also benchmark the ULBs supported under the NGRBP and this Project based on their progress on strengthening their planning, institutional, technical and financial capacities to manage wastewater services. The top-ranked ULBs will be added to the criteria, currently solely focused on amount of pollution discharged into the river, to set priority for allocation of additional funding through the performance-based incentive described at Sub-component 2.4.

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<sup>25</sup> Supported by the World Bank under the ongoing IN National Hydrology Project (P152698).



20. This component will directly contribute to improved operational efficiencies of wastewater collection and treatment systems financed under the SNGRBP (see Component 2) and include relevant training on climate change.

**Sub-component 1.4 – Namami Gange Program Emergency Response Preparedness (IBRD \$1 million).** This sub-component will provide Consultant’s services and technical assistance to assess the preparedness of investments under the *Namami Gange* Program to respond to an emergency related to a health-crisis or natural disaster and develop a set of principles and recommendations to increase the resilience of investments implemented under the Program. This sub-component will also develop emergency preparedness plans at program and investment levels, establishing the protocol to follow in case of a health crisis that requires people to confine in their homes as was the case in the COVID-19 crisis or in case of a natural disaster such as flood, earthquake, drought or extreme climate event.

## **Component 2 – Infrastructure Development (\$800 million, of which IBRD \$350 million including contingencies)**

21. **Sub-component 2.1: Wastewater treatment investments (IBRD \$100 million):** The NMCG has identified three wastewater treatment investments in the State of UP in the cities of Agra, Meerut, and Saharanpur<sup>26</sup>, located on the Yamuna, Kali and Hindon tributaries of the Ganga, respectively. These investments were selected because they are among the largest pollution hotspots on these tributaries. Each investment will consist of goods and works to intercept and divert wastewater currently flowing through open drains into the river with pumping stations and conveyance systems and the construction and/or rehabilitation of STPs, which will allow to treat 100 percent of the wastewater generated by these cities prior to discharging it in the tributaries of the Ganga river. Integrating early lessons from the COVID-19 crisis, the design of these investments will pilot the implementation of the specific measures recommended in the emergency preparedness plans developed under sub-component 1.4. These investments will be procured using the HAM PPP approach, and will be combined with activities under sub-component 1.3 to promote planning of sewerage network extension, helping ULBs interested in securing funding for their implementation, possibly through the framework approach under Sub-component 2.3.

22. **Sub-component 2.2: Carry-forward of selected investments from NGRBP to SNGRBP (IBRD \$150 million):** This sub-component will finance selected investments currently under implementation under the ongoing NGRBP that will be carried over to the proposed SNGRBP at the closing of NGRBP (December 30, 2021). It is anticipated that five investments will be carried over: Digha Kankerbargh (HAM and DBOT) in Bihar, Howrah, Bally, Baranagar (HAM) in West Bengal (these are the first two HAM contracts funded under the ongoing NGRBP), and three investments in Begusarai, Munger and Buxar (all DBOT) in Bihar. The DBOT contracts in Begusarai, Munger and Buxar were procured under the ongoing NGRBP and faced delays as the NMCG terminated the DBOT contracts with the private operators for lack of performance, leaving unfinished works. These investments were also selected because each will bring the treatment capacity to 100 percent in each city and, except in Howrah, Bally, Baranagar, they will also develop full sewerage network coverage and target 100 percent house sewer connections in these cities. Moreover, these investments are complementing ongoing investments under the NGRBP. The Digha-Kankerbargh investment will complement investments under the ongoing NGRBP to will bring both sewage network coverage and treatment capacity to 100 percent in Patna, the capital of the State of Bihar. In West Bengal, the proposed investment will increase the sewage treatment capacity in Kolkata from 21 percent

<sup>26</sup> According to the 2011 census, Agra has 1.8 million people, Meerut 1.4 million people and Saharanpur 700,000 people.



to 54 percent. The ongoing NGRBP is financing the Tolly Nallah investment in Kolkata, which combined with another investment under preparation, will, upon completion, bring the sewage treatment capacity in Kolkata, the capital city of West Bengal, to 100 percent. For each of these investments that are carried forward from the ongoing NGRBP to the proposed SNGRBP, the Project will fund the balance of capital expenditure (CAPEX) and the first three years of operational expenditures (OPEX). The balance OPEX will be financed by Gol.

**23. Sub-component 2.3 – Improving Investments resilience to COVID-19-like emergency crises (IBRD \$5 million).** This sub-component will support the implementation of the recommendations of the emergency preparedness plans developed under sub-component 1.4 in the investments which will be carried-forward from the ongoing NGRBP to the proposed SNGRBP to improve the resilience of service delivery and to support service providers to respond to similar crisis or shock. These may include goods and works to develop remote management capabilities, increase the stocks of chemicals on STP sites and develop renewable energy generation capabilities on site to allow maintaining service provision in situations of restricted movements of people and to supplement electricity supply.

**24. Sub-component 2.4: Introducing a performance-based incentive for ULBs (IBRD \$95 million):** This sub-component aims to introduce criteria to allocate funding to ULBs based both on measures for pollution source prioritization and their performance in strengthening planning, management, and cost recovery of wastewater service delivery to promote holistic approaches at city level. A framework approach will be used to identify potential additional investments during Project implementation. The NMCG is considering investments to extend sewage networks in cities where initial investments have been made under the ongoing NGRBP and/or will be made under the proposed Project to saturate wastewater collection and promote last mile connectivity in these cities.

**25.** These interventions will support reduction in the volume of untreated wastewater discharged into water the Ganga and its tributaries. This will reduce flood risk and impact of floods as floodwaters will be less contaminated<sup>27</sup>. Hence, these interventions will increase residents' resilience to these climate-exacerbated events. The proposed investments that have a sewer network component will have a positive impact on the urban environment in targeted cities and increase their climate resilience. Learning the early lessons from the COVID19 pandemic, each investment will include dedicated equipment and protocols to protect the health and safety of the staff, facilitate remote management of the treatment facilities in case a health crisis requires limiting people's movements, be able to sustain treatment for at least 2 months and have flexible and adaptive protocols to optimize response to a specific crisis or emergency. Further, the designs of investments will ensure that energy recovery systems be installed in all STPs of 40MLD or more to reduce energy costs. Where feasible, the potential for wastewater re-use will be explored, which would reduce overall demand for water and thereby increase the targeted communities' resilience to droughts and water shortages. Since January 2016, the Gol has made it mandatory for all thermal power plants within 50 km of a STP to use treated wastewater in their operations.

### Component 3 – IBRD Guarantee (IBRD \$20 million)

**26. IBRD Guarantee:** HAM PPP contracts create long-term payment obligations for the NMCG. To provide comfort to the private operators on availability of continued funding, NMCG currently deposits in an Escrow Account an amount equivalent to two rolling milestone CAPEX payments during construction period. After

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<sup>27</sup> The rehabilitated and new climate-resilient sanitation infrastructure will be less likely to be overwhelmed and/or damaged.



construction is completed, the NMCG deposits in the Escrow Account payments equivalent to two years of OPEX on a rolling basis and maintains that balance for fifteen years of the O&M period for each HAM PPP contract. The Escrow Account provides two functions: it holds the deposited amount for 15 years of the O&M period and provides the basis for making periodic payments to private operators. To optimize the design and funding needed for the payment security, the NMCG is considering the use of an IBRD Guarantee as a more cost-effective payment security mechanism. Consistent with international experience in similar payment security guarantees, the IBRD guarantee will be offered to cover two rolling quarters of annuity payments during the fifteen years of O&M.

#### **Component 4 – Program communication and management (\$ 30 million, of which IBRD \$10 million)**

**27. Sub-component 4.1: Communication and Outreach Program (\$3 million).** In continuation of activities initiated under the NGRBP, this sub-component will support the NMCG to develop mass media campaigns and public engagement strategies to promote the adoption of behaviors related to achieving and sustaining a clean Ganga. The campaign will target a range of stakeholders – pilgrims, farmers, industries, city-dwellers and the general public – whose practices and activities impact water quality and usage. Communications and outreach activities will be rolled out at the national, State and city level with the aim of generating awareness and securing tangible changes in stakeholder behavior. The clear links between the COVID-19 advisable actions, the importance of handwashing with soap and the larger WASH agenda allow these messages to be integrated seamlessly into ongoing campaigns, and these activities will be scaled up and/or calibrated to include other relevant messages as the knowledge-base and the situation evolves.

**28.** Going forward, the Communications & Outreach program will also support NMCG in setting up two-way platforms for stakeholder dialogue as it seeks to address longer-term and potentially sensitive issues around river-basin management, augmenting river flows, setting up a robust e-flow regime etc. The Communications and Outreach sub-component will also support State and city to engage with citizens to promote improved practices and behaviors, e.g. higher uptake for connections to sewers, water-efficient agricultural practices.

**29. Sub-component 4.2: Program Management support (\$7 million).** The Project will support NMCG in coordinating and implementing Project activities, including complying with World Bank’s fiduciary procedures and safeguards. This will finance incremental and administrative expenses and critical consultant support to ensure efficient Project implementation, including transaction advisory, design review and construction supervision and financial audits. This Sub-component will also support environmental and social management of the Project, including gender gap mitigation and citizen feedback, and the preparation of safeguards documents and monitoring.

#### **Component 5 – Contingent Emergency Response Component (\$ 0 million).**

**30.** This Component provides the opportunity for the Government to request the Bank to re-allocate Project funds to support emergency response to an adverse health-related or natural event that causes a major disruption and require immediate response and/or reconstruction effort. This component would draw resources from the unallocated expenditure category and/or allow the Government to request the Bank to re-categorize and reallocate financing from other Project components to partially cover emergency response and recovery costs.



## E. Implementation

### Institutional and Implementation Arrangements

**31.** The proposed SNGRBP will utilize the institutional and implementation arrangements in place for the ongoing NGRBP, which have been strengthened in recent years.

**32. NMCG will continue to be responsible for overall Project implementation:** The NMCG, under the administrative control of the DoWR, RD&GR, is headed by a Director General (equivalent in rank to an Additional Secretary of the GoI), who is supported by five Executive Directors (equivalent in rank to a Joint Secretary of the GoI). The NMCG staff comprises 167 technical and administrative professionals with expertise in procurement, PPP, finance, safeguards, communications, monitoring and evaluation and so on. Given the complexity of the Project and scale of investments, NMCG will (a) retain a Project Management Consultant to assist in supervision of investments and efficient Project management; (b) retain a financial management and procurement consultant; and (c) appoint a Transaction Advisor and Project Engineer for each HAM contract financed under the Project.

**33.** At State level, SMCGs are the extended arm of the NMCG and will coordinate implementation of activities in the State. Each SMCG reports to a Project Director who is the Principal Secretary of the respective nodal department for the *Namami Gange* Program in the State (Urban Development or Water Supply and Sanitation). Investments are executed by different Executing Agencies (EAs), which are typically parastatal agencies responsible for urban water supply and sewerage in each State. The three discrete investments in Agra, Meerut and Saharanpur are located in UP and their EA will be the UP Jal Nigam, a parastatal responsible for water supply and sewerage provision in UP. The investments to be carried over from the ongoing NGRBP to the proposed SNGRBP are located in UP, Bihar and West Bengal. The corresponding EAs are the UP Jal Nigam, Bihar Urban Infrastructure Development Corporation (BUIDCO), and the Kolkata Municipal Corporation and the Kolkata Metropolitan Development Authority in West Bengal. Each EA has gained extensive experience in preparation, contracting and management of wastewater infrastructure investments under the ongoing NGRBP. The EAs will continue to be responsible for all contract management, including procurement, supervision, and payments, with support from NMCG and the respective SMCG.

**34. The NMCG and SMCGs will be responsible for planning, investments selection, quality assurance, procurement, contract management, and monitoring and evaluation under the SNGRBP.** The allocation of roles and responsibilities, including administrative and fiduciary arrangements, between the NMCG, SMCG and the EA shall continue as under the ongoing NGRBP. The NMCG will collaborate with other technical agencies, including CPCB and the MoJS' CWC, to draw upon their specialized expertise and supplement the capacity of the main implementing agencies. The NMCG will also continue to collaborate with international, national and local knowledge institutions, private sector business houses and industries, and civil society groups.

## F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The Project will be implemented in the Ganga river Basin in India, which accounts for 26 percent of India's landmass, 30 percent of its surface water and over 40 percent of its population. The Ganga river has significant economic, environmental, and cultural value in India. However, the river is heavily polluted in specific stretches and faces significant threats to its biodiversity, environmental sustainability, and quantity



and quality of its flows. The increasing population, urbanization and industrial growth risk further deteriorating the river water quality, particularly in the dry season. The main point sources of pollution are untreated sewage and industrial wastewater. Non-point source pollution from agriculture and livestock as well as solid waste disposal also pollute the river. The Project includes new investments using the HAM PPP approach in Agra, Meerut and Saharanpur, in the State of Uttar Pradesh, which are among the largest pollution hotspots of the Yamuna, Kali and Hindon tributaries, respectively. The Project will continue financing selected investments procured under the ongoing Bank financed NGRBP and to be carried forward to the proposed SNGRBP. These include Digha Kankerbargh (HAM and DBOT), Begusarai, Munger and Buxar (DBOT) in the State of Bihar and Howrah, Bally, Baranagar (HAM) in the State of West Bengal. Under the framework approach (Sub-component 2.3), the Project may also include investments in the States of Jharkhand and Uttarakhand, however, exact locations of these investments are not yet known. All investments under the Project will be located within the five main stem States, either along the Ganga river or along tributaries that have significant pollution impacts on the Ganga. Based on the experience of the ongoing project, the key environmental issues related to the project interventions include issues related to (i) siting and design of treatment and disposal facilities in sensitive locations; (ii) health and safety issues during construction; and (iii) inadequate operation of facilities impacting water quality and sludge disposal. The social due diligence carried out for three HAM Projects shows that the investments may lead to loss of small piece of land (which will be purchased through mutual negotiation on willing buyer – willing seller basis) and will cause inconvenience to residents around the construction zone. Loss of livelihood or sources of livelihood or resettlement however is not envisaged.

**G. Environmental and Social Safeguards Specialists on the Team**

Parthapriya Ghosh, Social Specialist  
 Asferachew Abate Abebe, Environmental Specialist

**SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The proposed Project, through enhancing sewage collection and treatment capacity, will have multiple positive environmental and social benefits. The adverse environmental impacts that will occur during construction and operation of the Project may include: (i) surface and groundwater contamination due to leakage and/or improper joints in sewers; (ii) disruption due to local traffic diversion and congestion during sewer laying works;



(iii) impact on public/private properties and other sensitive receptors along the sewer alignment during construction; (iv) disposal of excess excavated soil and construction debris; (v) exploitation of water sources for meeting construction water demand, air and noise pollution from construction equipment's; (vi) health and safety concerns of workers, while laying or rehabilitating existing sewers; (vii) health and safety issues associated with operation and maintenance of sewage treatment facility; and (viii) water logging problems due to improper/inadequate disposal of treated effluent. Considering the above and the environmental sensitivity of the Project area, the Project has been categorized as 'A' and OP 4.01 has been triggered. Because the sites for all investments are not known at the time of the Project preparation, ESMF, which has been used for the ongoing NGRBP, was updated for the whole Project. For three identified Hybrid Annuity Model (HAM) based investments to be carried out in the first year of the Project, Environment and Social Due Diligence Reports (ESDDR) have been prepared.

Performance Standards for Private Sector Activities OP/BP 4.03

No

The Project is using the Safeguards policies and is not financing any PPP, which has delegated authority on Safeguards assessment, hence OP 4.03 has not been triggered.

Natural Habitats OP/BP 4.04

Yes

Project activities do not cause any significant conversion of natural habitats. However, the Ganga basin includes number of environmentally sensitive areas and all these sensitive areas are away from the main stem of the river or from the key cities where most of the investments are expected to be implemented. OP 4.04, hence has been triggered, to monitor chances of any accidental impacts on ecological resources due to Project impacts and in the event of any such impacts, will implement necessary actions, including mobilizing resources, to avoid or mitigate such impacts. It is envisaged that the Project interventions, by reducing the pollution load in the river, will protect and enhance sustenance of these sensitive habitats. This will play significant role in reviving of endangered species such as Gangetic Dolphin, turtles and other flora and fauna that depend on the Ganga river.



Forests OP/BP 4.36	No	The Project will not (i) include any logging; (ii) impact the health or quality of any forest; (iii) either increase or decrease access or rights of communities to forests or minor forest produce; or (iv) propose to bring about any changes in management, protection and utilization of forests in the basin. OP 4.36 hence, has not been triggered.
Pest Management OP 4.09	No	The Project will not use, or directly/indirectly promote use of any chemical or synthetic pesticides or herbicides, including in site clearance for subprojects. OP4.09, hence has not been triggered.
Physical Cultural Resources OP/BP 4.11	Yes	Considering the presence of number of historic and heritage structures in the Project area and cultural significance of the Ganga river, OP 4.11 has been triggered. The ESMF of the Project and specific ESIA's to be prepared for the respective investments, will carry out necessary assessment for the Physical Cultural Resources and recommend appropriate mitigation and management plans, if needed.
Indigenous Peoples OP/BP 4.10	No	The experience of the ongoing NGRBP shows that urban areas where investments are being implemented across all the five states does not have tribal population. Even if some tribal households are found, they have largely assimilated with the mainstream population.
Involuntary Resettlement OP/BP 4.12	Yes	The social due diligence carried out for three HAM based investments shows that the investments may lead to loss of small piece of land (which will be purchased through mutual negotiation on willing buyer – willing seller basis), potential loss of livelihood and will cause inconvenience to residents around the construction zone. However no involuntary resettlement is envisaged. Investment specific ESIA will be carried out and ESMP / RAPs will be prepared as required as per the Resettlement Policy and Land Acquisition Framework (RPLAF) that has been prepared as part of ESMF.
Safety of Dams OP/BP 4.37	No	The Project does not include any dam related activities. OP 4.37, hence has not been triggered.
Projects on International Waterways OP/BP 7.50	Yes	The Ganga River and its tributaries are considered international waterways for the purpose OP 7.50. In fulfilment of this policy, a notification was sent to the Governments of China, Bangladesh and Nepal on December 27, 2019. A response was received from the Government of China on January 31, 2020, that



requested that the Project exclude any activities in disputed areas and requested revisions to the indicative map included in the Project information shared as part of the notification. A response was sent on February 17, 2020 that acknowledged receipt of these observations from the Government of China, restated the concerns raised and clarified that the Project does not include any investments in disputed areas. A map not showing the disputed areas was prepared and is annexed to the PAD.

Projects in Disputed Areas OP/BP 7.60

No

No part of the Project's influence area is disputed and hence OP 7.60 has not been triggered.

## KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

Environmental Impacts: Adverse environmental impacts may arise if the investments are not designed, executed or operated appropriately. These impacts could be due to a variety of reasons, such as

(a) Potential siting of investments such as sewage treatment facilities in environmentally sensitive locations such as flood plains, drainage paths, natural water bodies or close to wildlife sanctuaries or other natural habitats, leading to long-term impacts. This will be addressed through careful screening and analysis of alternative sites early during project design.

(b) Potential absence of sludge/waste disposal and management and leachate facilities in the proposed investments, and consequent disposal of untreated sludge and other organic waste into the Ganga and other nearby sensitive habitats in the basin. This will be carefully considered during selection of appropriate treatment technologies and design of these facilities.

(c) Inadequate management of environmental issues such as disposal of construction wastes during the construction of the investments, including inadequate precautions to avoid contamination of the Ganga and all nearby water bodies; air pollution, excessive noise and other nuisance to the nearby communities; vibration and pollution impacts on nearby physical cultural resources; inadequate attention to the occupational health and workers safety issues. All such issues to be addressed by specific provision of environmental, health and safety provisions in all works contracts;

(d) Inadequate maintenance of the facilities created by investments, depending on their locations, leading to continuation and or further deterioration of river water quality, deterioration of ambient environmental quality, negative impacts on the aquatic and other habitats, and possible degradation soil or contamination of groundwater, and associated health impacts on the communities in the sub-project surrounding. This will need to be addressed in investment level environmental and social assessments and mitigation measures to be included in the operation and maintenance management plans of the investments.

Social Impacts: While the Project is expected to benefit Ganga basin communities, poor implementation of investments could lead to adverse impacts on people and land. Potential social impacts during the construction phase of investments include: loss of land or structures, loss of access to areas for livelihood support, inadequate public safety, noise, and other disruptions at sensitive receptors such as schools and health centers. Site selection for major



facilities, such as wastewater treatment plants, can be expected to be locally controversial among directly affected people and other stakeholders. The potential social impact includes loss of properties, income and livelihood; loss of access during construction; and decline in property values adjacent to STP, pumping stations sites; etc.

According to the draft ESDDR prepared for the three identified HAM investments to be procured under the Project, there will be need for private land acquisition which might result in involuntary resettlement and potential loss of livelihood. Nonetheless, such land acquisition is likely to be small scale and unlikely to trigger any need for a full-scale resettlement action plan. The social screening of the investments will ensure that acquisition of private landholding is absolutely minimized. The purchase of private land will be on “willing buyer-willing seller” basis. The experience of the ongoing NGRBP shows that in cases of direct land purchase for pumping stations, the seller was given the option to decline and alternative sites were identified. There is also a strong possibility that in some of the urban areas where investments will be taken up in the later years during the project, the land parcels earmarked for public use are already encroached. Squatters on the public land reserved for sewerage infrastructure is not unknown in India, although no such cases came to notice in the sample sites investigated. To cope with such possibilities, the Project has prepared a Resettlement Policy and Land Acquisition Framework (RPLAF), included in the Project’s ESMF.

The RPLAF specifies procedures to be followed in the event that resettlement or land acquisition is required for any investment, including procedures for identification of persons entitled, their entitlement for compensation and/or resettlement assistance, and the consultation and grievance redress mechanisms. Once the sites of the other investments are known during the project implementation period and any adverse impact such as land acquisition and / or loss of livelihood a detailed site level assessment will be carried out and plans will be prepared accordingly.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area: All interventions proposed under the proposed Project contribute to the long-term objective of improving the water quality of the Ganga and selected tributaries. By virtue of this objective, the impacts of the Project are expected to be positive, beneficial, and aimed towards long term sustainability. The project is also expected to improve, the overall health profile of the project cities where sewerage and wastewater treatment investments are undertaken by way of reducing the incidence of water born diseases and thereby indirectly increasing the productivity of the work force. As such, no cumulative impacts are expected. However, if the need arises because of nature of the investments and receiving environment, a cumulative impact assessment may be prepared as part of ESIA for investments. Overall, at a cumulative level, the impacts are expected to be beneficial, and the regular monitoring processes will ensure that these beneficial impacts are enhanced.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts. The Environmental and Social Management Framework (ESMF) prepared for safeguard management in the Project requires analyzing various alternatives for each investment while carrying out respective Environmental and Social Impact Assessments (ESIA). As per the agreed policies of ESMF, these ESIA’s will be reviewed and cleared by the Bank prior to the start of the works of each investment. In addition to the ESMF, and in order to ensure integration of social and environmental issues in the long-term management of the river basin, the project has undertaken a Strategic Social and Environmental Assessment (SSEA) during the implementation of the ongoing NGRBP. The recommendations of SSEA will be suitably integrated in various activities of the Project.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described. Considering the significance of Project interventions, the borrower through independent consultants has prepared an



Environmental and Social Management Framework (ESMF) for the project. The ESMF details out the policies, procedures and institutional responsibilities for assessing and managing the potential environmental and social risks and impacts that may come up throughout the lifetime of investments and is intended for use and application by the execution agencies in each State. The ESMF provides detailed guidance, and sample terms of reference and reporting structures, for compliance. Each investment will be subjected to environmental and social screening. Based on the screening results, appropriate risk mitigation measures will be taken, including through preparation of a standalone ESIA, preparation of a detailed EMP; Environmental and Social Management Plans (ESMP) and Social Impact Assessment and/or Resettlement Action Plan (RAP), as applicable. The ongoing NGRBP has a good track record of screening investments using the guidelines and screening formats provided in the ESMF of the ongoing NGRBP and prepared and enforced the appropriate safeguard instruments. The ESMF of the proposed SNGRBP builds on the ESMF of the ongoing NGRBP.

The environmental and social specialists hired under the ongoing NGRBP at the national level and State level will continue under the proposed SNGRBP. They will ensure that all potential adverse environmental and social impacts of investments are addressed through a set of procedures detailed in the Environmental and Social Management Framework (ESMF) of the proposed SNGRBP. During the implementation of the ongoing NGRBP, several Environmental and Social Due Diligence Reports (ESDDR) and ESIA were prepared. Audits on the implementation of safeguard measures were conducted annually and gaps were identified and duly addressed. Once safeguard documents are reviewed by SMCG and NMCG, these are forwarded to Bank. All investment specific ESIA, ESMP and RAP are reviewed and cleared by the Bank before bids for civil works are invited. A similar safeguard implementation arrangement will be used in implementing safeguards under the proposed SNGRBP.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The ESMF and its specific instruments provide guidelines and procedures for identifying relevant stakeholders for carrying out consultation during the preparation of ESIA and ESDDRs. These procedures were effectively used by the ongoing NGRBP for the preparation of over thirty 30 ESIA or ESDDRs. The consultation frameworks provide systematic guidance to address potential risks and to enhance quality, targeting, and benefits to the communities. Dialogue and disclosure actions during the assessment and execution process of an investment are designed to ensure that those stakeholders, irrespective of whether they benefit from or are adversely affected by the project interventions, are well informed and are able participate in the decision-making process. The ESMF procedures consider the level of environmental and social risk of each type of investments in allocating time and resources to be dedicated for stakeholder consultation.

The consultations for the ESMF of the ongoing NGRBP were conducted initially in April 2010 with participating states, ULBs, NGRBA expert members, and NGOs to discuss the issues to be covered and broad outline of ESMF. Another consultation was organized in MoEF&CC with States and PIAs to discuss the draft ESMF. A workshop for consultation on Investment frameworks and ESMF was organized in October 2010 where States, PIAs, and NMCG participated and it was agreed that States would conduct the public consultations at important towns where projects are likely to be implemented under the program.

Following the national level consultations, public consultations have been carried out in sample investments areas in each of the five main stem States to get feedback and suggestions from the affected community on the ESMF. The dates of these consultation meetings were announced in the local newspapers in advance so that all interested parties could participate and provide suggestions. The ESMF was translated into local language and disclosed on the websites and placed with the offices of the nodal agencies prior to the consultation meetings. Representatives of the State



Nodal Agencies facilitated the public consultation meetings.

The ongoing NGRBP’s ESMF was updated in 2017 to reflect changes made in land acquisition process and provisions were made for implementation of (i) Retroactive financing of projects and (ii) Investments using the Hybrid Annuity Model of PPP. Consultation with the States were organized in April 2017 to discuss the revised version of the ongoing NGRBP’s ESMF.

The ongoing NGRBP’s ESMF was first disclosed in country in December 2010 and on January 28, 2011 in Bank’s infoshop. The revised NGRBP’s ESMF was disclosed on January 2017. For each investment, ESDDRs and/or ESIA’s will continue to be disclosed on the NMCG’s and World Bank’s websites. An advanced draft of the ESMF of the proposed SNGRBP was disclosed by NMCG on its website on February 21, 2020. The draft ESMF was finalized in March 2020 and the final ESMF, reviewed and approved by the Bank, was disclosed by NMCG on its website on March 24, 2020. Dissemination of the final ESMF could not take place due to the national lockdown in India implemented to stop the spread of the COVID19 pandemic. The final ESMF will be disseminated to the States and other stakeholders through consultations before implementation of the work under the Project starts.

**B. Disclosure Requirements**

**Environmental Assessment/Audit/Management Plan/Other**

Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
04-Feb-2020	21-Feb-2020	21-Feb-2020

**"In country" Disclosure**

**Resettlement Action Plan/Framework/Policy Process**

Date of receipt by the Bank	Date of submission for disclosure
04-Feb-2020	21-Feb-2020

**"In country" Disclosure**

India  
21-Feb-2020

Comments



**C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)**

**OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

**OP/BP 4.04 - Natural Habitats**

Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

NA

**OP/BP 4.11 - Physical Cultural Resources**

Does the EA include adequate measures related to cultural property?

Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

Yes

**OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

**OP 7.50 - Projects on International Waterways**

Have the other riparians been notified of the project?

Yes

If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?

NA

Has the RVP approved such an exception?

NA



### The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes

### All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

### CONTACT POINT

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**APPROVAL**

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**Approved By**

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Country Director:	Sumila Gulyani	30-Apr-2020

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