BD Rural Water, Sanitation and Hygiene for Human Capital Development Project (P169342)

# Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 19-Dec-2019 | Report No: PIDC27121

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# **BASIC INFORMATION**

# A. Basic Project Data

Country Bangladesh	Project ID P169342	Parent Project ID (if any)	Project Name BD Rural Water, Sanitation and Hygiene for Human Capital Development Project (P169342)
Region SOUTH ASIA	Estimated Appraisal Date May 31, 2020	Estimated Board Date Aug 20, 2020	Practice Area (Lead) Water
Financing Instrument Investment Project Financing	Borrower(s) People's Republic of Bangladesh	Implementing Agency Department of Public Health Engineering (DPHE), Palli Karma-Sahayak Foundation (PKSF)	

# **Proposed Development Objective(s)**

To support the Government of Bangladesh in improving human capital development through increasing access to 'safely-managed' water supply, sanitation, and hygiene (WASH) services in areas identified for health and nutrition convergence.

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

## **SUMMARY**

Total Project Cost	350.00
Total Financing	350.00
of which IBRD/IDA	300.00
Financing Gap	0.00

#### **DETAILS**

# **World Bank Group Financing**

International Development Association (IDA)	300.00
IDA Credit	300.00

## **Non-World Bank Group Financing**

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Counterpart Funding		50.00
Borrowing Agency		50.00
Environmental and Social Risk Classification	Concept Review Decisi	ion
Environmental and Social Risk Classification  Moderate	·	ion authorize the preparation to
	·	

#### **B.** Introduction and Context

- 1. **Bangladesh's economy is growing quickly.** During recent years economic conditions improved in the country. GDP grew well above the average for developing countries, averaging 6.5 percent since 2010, with an officially estimated growth of 7.9 percent in FY18, driven by manufacturing and construction. Per capita income is now US\$1,670 (WB Atlas method, 2018) which is well above the lower middle-income country category threshold which it crossed in FY14.
- 2. The country has seen significant progress on reducing extreme poverty and boosting shared prosperity, especially through human development. The poverty incidence based on the international \$1.90 per capita per day poverty line (measured on the basis of the Purchasing Power Parity exchange rate) has declined from 44.2 percent in 1991 to a 14.8 percent in 2016 (latest available poverty data). It is believed such progress was possible partly due to the country's focus in building human capital. In 2017, the Human Capital Index of 0.48 for Bangladesh surpassed the South Asian average and the lower middle-income average in all criteria except for stunting. Bangladesh has lowered infant mortality and increased life expectancy with 97 percent of children likely to survive to the age of 5 and 87 percent of 15-year-old children likely to survive to the age of 60. Bangladesh performs well in years of schooling with an average of 11 years per child. Girls have a higher HCI than boys with higher educational enrollment and attainment, as well as a higher probability of survival to age 5 and age 60 and a lower risk of stunting. Bangladesh's performance against the Millennium Development Goals (MDG) goals was also impressive relative to the South Asia Region average for most of the indicators.
- 3. Such progress notwithstanding, significant human capital development challenges remain as Bangladesh aspires to meet its target of eliminating poverty by 2030 and attaining the upper middle-income status by 2031. For example, the learning adjusted years of schooling is just 6.5 years due to the poor quality of education, 36 percent of children are afflicted by chronic malnutrition, and nearly half of children under five in the poorest wealth quintile are stunted, placing significant limits on human capital development. With 63 percent of the population living in rural areas, the population in Bangladesh is predominantly rural, so investments in rural areas are becoming

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<sup>&</sup>lt;sup>1</sup> World Bank Data. 2017. Human Capital Index. https://databank.worldbank.org/source/human-capital-index.

important more than ever to realize the country's human capital potential. For example, an estimated 35 percent of the population in rural areas lives below the poverty line, while nationally it is 24 percent.<sup>2</sup> At the same time, the rural population experiences insufficient access to basic services, such as education, health clinics, and adequate roads. As a result, about 38 percent of rural children under five are stunted or are too short for their age compared to 31 percent in urban areas, urban mothers and spouses are more educated than their rural counterparts, urban households have a higher proportion of vaccinated children,<sup>3</sup> and urban students' educational attainment is better than rural students as the quality of education differs.<sup>4</sup>

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<sup>&</sup>lt;sup>2</sup> Bangladesh-Rural Population-Trading Economy

<sup>&</sup>lt;sup>3</sup> Chittur S Srinivasan, Giacomo Zanello, and Bhavani Shankar. Rural-urban disparities in child nutrition in Bangladesh and Nepal. BMC Public Health. June 2013.

<sup>4</sup> https://www.thedailystar.net/news-detail-185596

Sectoral and Institutional Context

#### **Sectoral and Institutional Context**

- 4. Rural Bangladesh has achieved a high level of access to basic WASH services, still, significant challenges remain. In 2017, about 97 percent of the rural population had access at least to 'basic' water supply.<sup>5</sup> This achievement was largely due to the expansion of tube wells in rural areas, with close to 95 percent of rural people using them. However, 41% of all improved water points is contaminated with E. Coli at the source and 13% of are contaminated with arsenic,<sup>6</sup> on-premise piped water in rural areas is 3 percent in 2017. The community led total sanitation (CLTS) approach enabled a vast majority of the rural population to end open defecation and use sanitation facilities. As a result, access to 'improved' sanitation increased dramatically from 30 percent to 65 percent in rural areas from 2000 to 2017.<sup>7</sup> Around half of the population either access poor quality or share latrines with other households, only 32% of the rural population have access to a safely managed sanitation service.<sup>8</sup> Although 86 percent of the rural population has access to a designated handwashing facility, only 26 percentage points have access to facilities that have soap and water, only 14 percent of all persons washed both hands with soap after defecation or before eating.<sup>9</sup> However, 86 percent of rural healthcare facilities have access to an improved water source, only 42 percent are located and available on the premises, only 12 percent have designated toilets for women.<sup>10</sup>
- 5. Water, sanitation, and hygiene (WASH) plays a critical role in human capital development. It is well known that poor WASH leads to childhood malnutrition and poor health through waterborne diseases. It may in turn reduce productivity, and the associated costs of healthcare place an added stress on the individual and their households. The poorest, and especially poor women and girls feel the greatest burdens of inadequate WASH because of its synergies with other life deprivations such as little income, poor access to health services, food insecurity, and low levels of education. However, evidence has shown that successful WASH interventions generally improve overall health and reduce stunting in children under-5 years of age. This occurs through multiple pathways that include: (i) fewer episodes of diarrheal disease; (ii) improved gut health; (iii) reductions in protozoa and helminth infection; and (iv) reductions in anemia. The country has a high diarrheal disease burden and stunting rates (36 percent of children under five), especially among the bottom 40 percent of its income distribution (over 50 percent of children under five). This stems primarily from the lack of adequate sanitation and fecal sludge management. Currently fecal sludge management is absent in most of the cities (with only 2 percent of fecal sludge is properly treated in Dhaka), while in rural areas, most of the fecal sludge is not properly disposed. Consequently, contamination of shallow ground water tables and of surface water bodies through the dumping of untreated fecal sludge is a significant policy concern.
- 6. Resolving institutional challenges in the WASH sector is a key priority for improving WASH in the country. The Ministry of Local Government, Rural Development, and Cooperatives (MoLGRD&C) plays a central role in WASH service provision in rural areas. Officially, the Local Government (Union Parishad) Act of 2009 delegated the responsibility for provision of WASH services in rural areas to Union Parishads (UPs), <sup>13</sup> and the MOLGRD&C is only responsible for sector planning and strategy, policy, and standards development. However, the transfer of responsibility has been limited. In practice, the Department of Public Health Engineering (DPHE) under the MoLGRD&C still designs, finances, and installs water supply infrastructure, handing it over to the communities or the private sector for operation and maintenance. As for the sanitation facilities, households are responsible for building, owning, and operating them on their premises. While Union Parishads are in charge of ensuring compliance, their monitoring mechanisms and accountability are weak. In addition to the need of clarifying unclear and overlapping functions between the MoLGRD&C and Union Parishads, further, the current institutional framework does not involve local governments (such as Union Parishads and Paurashavas) in the planning process early on, despite the important role of operation and maintenance they are supposed to undertake. This has led to mismatched incentives. Other binding institutional limitations need to be addressed, including capacity constraints

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in different levels of the government, especially in Union Parishads, and the lack of formal national policies or standards on water service provision and monitoring mechanisms.

- 7. An update the country's WASH policy framework is also urgently needed. Prime Minister Sheikh Hasina's vision to enhance the WASH service standards in rural areas to be comparable to those in urban areas led to the MoLGD&C's shift in focus from hand-pumped tube wells to pipe water schemes, 14 in line with SDG 6. However, the government's commitment to SDG 6 has not been reflected in policy documents yet. For example, while the government's WASH policies, namely the National Pro-poor strategy for Water and Sanitation of 2005, the Sector Development Plan (SDP) 2011-2025, and the National Strategy for Water Supply and Sanitation of 2014, are relatively well defined and provide holistic strategic guidance to the sector both for urban and rural areas, they require updating to consistently apply the 'safely-managed' service standard as the norm, which is mandated under SDG 6 and recommended for maximizing human capital outcomes.
- 8. The WB's Bangladesh WASH Poverty Diagnostics (BWPD) offers six priority areas of action to improve WASH in the country. Bangladesh has made meaningful advances in the sector to date, but the task remaining, including the challenges faced in rural areas, will be particularly difficult because it not only involves delivering higher quality WASH services but also delivering such services to those populations and areas that are often left behind. The BWPD gives a snapshot of the quality and inequality of WASH access by generating statistics from numerous datasets and shows its implications on the country's human development and poverty reduction. In sum, with more than one-third of children under five stunted and their ability to grow and learn subsequently limited, Bangladesh is not achieving its fullest potential. Since unsafe water and poor sanitation are linked to nutritional disadvantages in

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<sup>&</sup>lt;sup>5</sup> United Nations Children's Fund (UNICEF) and World Health Organization (WHO). 2019. Progress on household drinking water, sanitation and hygiene 2000-2017. Special focus on inequalities. New York.

<sup>&</sup>lt;sup>6</sup> World Bank. 2018. *Promising Progress: A Diagnostic of Water Supply, Sanitation, Hygiene, and Poverty in Bangladesh.* WASH Poverty Diagnostic. World Bank, Washington, DC.

<sup>&</sup>lt;sup>7</sup> UNICEF and WHO

<sup>&</sup>lt;sup>8</sup> UNICEF / WHO (2019) *Joint Monitoring Programme for Drinking Water and Sanitation* UNICEF and WHO.

<sup>&</sup>lt;sup>9</sup> Halder et al. 2010. BMC Public Health 10:545 http://www.biomedcentral.com/1471-2458/10/545

<sup>&</sup>lt;sup>10</sup> NIPORT, ACPR and ICF. 2018. Bangladesh Health Facility Survey 2014 & 2017

<sup>&</sup>lt;sup>11</sup> Andres, L. A. et. al. November 2018. Water and Human Capital, Impacts Across the Life Cycle. The World Bank. GWP.

<sup>&</sup>lt;sup>12</sup> World Bank. 2019. *Nutrition-Sensitive Water Supply, Sanitation, and Hygiene*. World Bank. Washington, DC.

<sup>&</sup>lt;sup>13</sup> There are five tiers of government in Bangladesh: (i) the country is divided into eight divisions; (ii) the divisions are divided into 64 districts; (iii) the districts are divided into 491 sub-districts, or Upazilas; (iv) Upazilas are further subdivided into 4,554 Union Parishads (UP, or union councils or unions) and 323 Paurasabha (or town councils or municipalities), and there are 12 city corporations that are separate from Upazilas; and (v) the city corporations and municipalities are divided into wards, and each union is made up of nine wards, each consisting of one or two villages. UP is the oldest and lowest tier of the local government representing 10 to 15 villages with around 5,000 households. Each UP is composed of 13 elected representatives including a chair, nine members (one from each ward), and three women elected members. There is a water and sanitation task force in each UP, which is responsible for the provision and maintenance of water and sanitation services.

<sup>&</sup>lt;sup>14</sup> Dhaka Tribune, 19 August 2018

<sup>&</sup>lt;sup>15</sup> World Bank. 2018. *Promising Progress: A Diagnostic of Water Supply, Sanitation, Hygiene, and Poverty in Bangladesh*. WASH Poverty Diagnostic. World Bank, Washington, DC.

<sup>&</sup>lt;sup>16</sup> Rural Bangladesh has achieved a high level of access to 'basic' water supply and pioneered an approach to completely eradicate the practice of open defecation. In 2017, about 97 percent of the rural population had access at least to 'basic' water supply. This achievement was largely due to the expansion of tube wells in rural areas, with close to 95 percent of rural people using them. The community led total sanitation (CLTS) approach enabled a vast majority of the rural population to end open defecation and use sanitation facilities. As a result, access to 'improved' sanitation increased dramatically from 30 percent to 65 percent in rural areas from 2000 to 2017.

early-childhood, improving WASH is critical for the country's future. In response, the BWPD outlines six priority areas of action, in no order of ranking: (1) improving the quality of water services; (2) reducing shared sanitation, fecal contamination of the environment, and poor hygiene practices; (3) bringing services to the poor and other 'left-behind' populations, including those who are in the bottom 40 percent of the wealth distribution or in remote and hard-to-reach villages; (4) implementing WASH beyond the household to include community establishments such as healthcare facilities and other public places; (5) addressing binding institutional constraints and challenges (described in part above); and (6) harnessing complimentary effects of WASH to improve human development.

- 9. The Rural WASH for HCD Project is a first step in the World Bank's support designed to help the government achieve better human development outcomes through WASH interventions and uses a convergence approach. The proposed project closely follows all six BWDP priorities above, focusing on clarifying institutional arrangements, building capacity for implementation and supervision, introducing or reforming critical policies, investing in WASH infrastructures that meet the 'safely-managed' service standard including in remote areas and public places, and taking the convergence approach, where the WB's projects on health, income support for child nutrition, and WASH would be coordinated in a way to achieve maximum human capital development benefits.
- 10. The convergence approach seeks to leverage the WASH, health and nutrition human capital interventions. The project will converge with the two on-going WB projects: (i) the Bangladesh Health Sector Support Project (HSSP, P160846, US\$500 million, July 2017 December 2022), which seeks to strengthen the health, nutrition and population (HNP) sector's core management systems and delivery of essential HNP services; and (ii) the Bangladesh Income Support Program for the Poorest Project (ISPPP, P146520, US\$300 million, March 2015 June 2020), which seeks to provide income support to the poorest mothers in selected Upazilas while increasing the mothers' use of child nutrition and cognitive development services and enhancing local level government capacity to deliver safety nets. The convergence approach among the three World Bank projects and across three Global Practices<sup>17</sup> involves a geographical overlap of project locations, the use of common delivery platforms including beneficiary targeting, coordinated communication strategy, and leveraging each other's results indicators.
  - (a) <u>Geographical overlap of project locations.</u> This project will be implemented in a sub-set of four divisions where two WB projects are on-going, which are four divisions, Mymensingh, Rangpur, Chittagong, and Sylhet, consisting of 139 Upazilas in 36 districts.
  - (b) <u>Use of common delivery platforms.</u> Common delivery platforms will include: (i) applying the same targeting methodology to identify the poorest households that was used in the ISPPP (ii) utilizing community health workers under the Ministry of Health, to deliver regular training on hand washing, baby WASH, and menstrual hygiene.
  - (c) <u>Coordinated communication strategy.</u> While this project will develop a new behavioral communications campaign (BCC), it will incorporate and coordinating with the on-going BCC under the ISPPP and HSSP to improve their WASH contents by delivering clear messages on features of newly promoted (i.e. 'safelymanaged') WASH facilities.
  - (d) <u>Leveraging each other's results indicators.</u> The three converging projects will leverage results indicators from each other's project that measure the intermediary outputs or outcomes contributing to long-term health and nutritional impact.

## **Relationship to CPF**

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- 11. This project supports all three focus areas in the World Bank Country Partnership Framework (CPF) for FY16-FY20. 18 First, the project will primarily contribute to Social Inclusion (Focus Area 2) by targeting assistance to the most vulnerable in the rural area to better access 'safely-managed' WASH services, which would positively impact nutrition, health, and education outcomes. Second, the project will address some of the key constraints to the Growth and Competitiveness agenda (Focus Area 1) by strengthening the market delivery of WASH, mobilizing private capital to finance WASH services, and creating jobs. Third, the project is addressing the Climate and Environment Management agenda (Focus Area 3) through improving sanitation facilities and fecal sludge management, thereby reducing contamination of surface and ground water and mitigating public health impacts.
- 12. The proposed project is consistent with the World Bank's strategic goals of ending extreme poverty and promoting shared prosperity. The project contributes to the two interlinked goals by focusing on providing the most vulnerable people with access to WASH services, which would lead to less exposure to waterborne diseases such as diarrhea. The most vulnerable people will be identified in the villages where there are on-going Bank operations and a nexus of poverty, malnutrition (e.g. stunting), and poor WASH infrastructure (see paragraph 20 for more details).
- 13. **The project is well-aligned with the Human Capital Project**, a global effort to accelerate more and better investments in people for greater equity and economic growth. Early healthcare and education can prepare children to succeed and prosper as adults in a rapidly changing world, and in order to do so, improved WASH services are essential. For example, increasing evidence suggests that WASH interventions may relieve malnutrition of children under 5 years of age by developing fewer episodes of diarrheal disease, improving gut health, and decreasing anemia. <sup>19</sup> In order to maximize human capital development impact, the project will converge with two other World Bank projects (see paragraphs 8 and 9).
- 14. The project promotes maximizing finance for development (MFD) by engaging MFIs and the private sector. The WB will provide capacity building and financing support to a wholesale MFI, which will leverage retail MFIs to offer WASH loans to households and local entrepreneurs. This approach has proven successful in a recent GPOBA pilot project. <sup>20</sup> Furthermore, to ensure the quality and sustainability of the proposed pilot piped water schemes, the private sector would be sought to operate and maintain such systems. The project will also support the establishment of a WASH revolving fund and leverage capital from the MFIs to provide private sector loans.

## C. Proposed Development Objective(s)

15. To support the Government of Bangladesh in improving human capital development through increasing access to 'safely-managed' water supply, sanitation, and hygiene (WASH) services in areas identified for health and nutrition convergence.

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<sup>&</sup>lt;sup>17</sup> To further strengthen cross-practice coordination, this project has a co-TTL from the Social Protection Global Practice.

<sup>&</sup>lt;sup>18</sup> World Bank Group (March 2016) Country Partnership Framework (CPF) for Bangladesh for the Period FY16-FY20

<sup>&</sup>lt;sup>19</sup> Luis A. Andres, Claire Chase, Yue Chen, Richard Damania, George Joseph, Regassa Namara, Jason Russ, Esha Dilip Zaveri. 2018. *Water and Human Capital: Impacts across the lifecycle*. World Bank. Washington, D.C.

<sup>&</sup>lt;sup>20</sup> http://www.gprba.org/sites/www.gprba.org/files/publication/downloads/2018-09/MFD%20Brief%20%20Bangladesh%20Rural%20Sanitation.pdf

- 16. The PDO will be measured against the following PDO-level indicators:
  - (a) the number of people provided with access to 'safely-managed' water services (men and women);
  - (b) the number of people provided with access to 'safely-managed' sanitation services (men and women);
  - (c) the number of people trained in WASH quality standards compliance (local governments and entrepreneurs; and
  - (d) the number of national or local policies (e.g. SDG WASH policy, pro-poor strategy, groundwater strategy) updated or introduced.

## **D. Concept Description**

- 17. The project components have been developed in coordination with on-going WB projects on nutrition and health.

  To achieve the project objective, the project will finance the following five components.
  - <u>Component 1: Investments in water supply.</u> This component will support community water points (predominantly deep tube wells) in remote areas, mini piped water schemes serving single or multiple villages, household loans for water supply improvements through MFIs, and commercial loans and technical assistance to local entrepreneurs through MFIs.
  - <u>Component 2: Investments in sanitation.</u> Support will focus on providing 'safely-managed' latrines in households and public places, piloting innovative technologies, and raising awareness through behavioral change communication (BCC) campaign. MFIs will offer loans to households, and loans and technical assistance to local entrepreneurs. The poorest households will receive grants to build sanitation facilities.
  - <u>Component 3: Sector policy and capacity strengthening.</u> This component will support the strengthening the sector's policy and regulatory framework including building capacity for service delivery.
  - <u>Component 4: Project implementation and management.</u> This component will support key project management activities enabling DPHE and PKSF to coordinate and implement the proposed project.
  - <u>Component 5: Contingent emergency response (CERC).</u> A provisional zero amount component is included, which will allow for rapid reallocation of loan proceeds from other project components during an emergency.
- 18. The government has committed to investing in 'safely-managed' WASH facilities, which are in line with the service standards needed for meeting SDG 6 and maximizing human capital development. Given that these are a defined set of ring-fenced activities, which could be reimbursed against eligible expenditures, and will take up most of the project funding, IPF is chosen among the available WB instruments. With the project cost of US\$350 million, it was estimated 40-50 Upazilas could be covered. The Bank and the two implementing agencies, Department of Public Health and Engineering (DPHE) and Palli Karma-Sahayak Foundation (PKSF), worked together and selected the 45 Upazilas in 18 districts based on a set of criteria, including water availability and quality, WASH coverage rates, and availability of quality MFI services (see Annex 2 for the list of Upazilas chosen). Co-financing and counterpart funding are being sought.
- 19. The project beneficiaries include members of households, the public, national and local governments, and the private sector. It is estimated that 5 million people living in some of the lowest income areas in rural Bangladesh with high stunting rates will have better access to 'safely-managed' WASH facilities in their home, public spaces, and/or

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health facilities through this project. This may especially benefit children, women, the vulnerable groups, since they are most susceptible to health consequences of non-access and subsequent deprivation of life-long economic and educational opportunities. The project will also provide capacity building to national and local governments to implement policies to be revised or introduced through this project. In addition, the private sector will benefit from the project through increased financing and market creating activities.

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	

Key environmental issues would be the contamination of water and discharge of sludge and untreated sewage. Also The treatment of water as risk relates to chemical usage (e.g. for disinfection) of water supply scheme. Also construction related impacts on air, noise and water might be a concern.

The project has several implications from the social side – gender (design, safety, impact on women's health), inclusion (addressing the needs of indigenous, marginalized and vulnerable communities, culturally sensitized design, easing access to information and finance, assistance with repair and maintenance), land use (common/private property, optimizing access through strategic location, resettlement impacts if any), community health and safety, type of labor used and associated impacts, amongst others. However these risk will be mitigated by following the appropriate design and protocol as well by following mitigation hierarchy.

# **CONTACT POINT**

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## **Borrower/Client/Recipient**

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**APPROVAL** 

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