



RESTRUCTURING PAPER
ON A
PROPOSED PROJECT RESTRUCTURING
OF THE
SENEGAL RURAL WATER SUPPLY AND SANITATION PROJECT
APPROVED ON JUNE 22, 2018
TO
THE REPUBLIC OF SENEGAL
December 28, 2020

WATER GLOBAL PRACTICE

WESTERN AND CENTRAL AFRICA REGION

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**ABBREVIATIONS AND ACRONYMS**

ASUFOR	Rural Boreholes Water Users Association (<i>Association d'Usagers de Forages Ruraux</i>)
CBA	Cost-benefit Analysis
CBO	Community Based Organization
CE	Cost-effectiveness
CESMP	Contractor Environmental and Social Management Plan
COVID-19	Coronavirus Disease
DA	Directorate of Sanitation (<i>Direction de l'Assainissement</i>)
DEEC	Directorate of Environment (<i>Direction de l'Environnement et des Établissements Classés</i>)
DGPRES	Directorate of Water Resource Management and Planning (<i>Direction de la Gestion et de la Planification des Ressources en Eau</i>)
DH	Directorate of Hydraulics (<i>Direction de l'Hydraulique</i>)
EIRR	Economic Internal Rate of Return
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
GHM	Management of Menstrual Hygiene
GoS	Government of Senegal
GRM	Grievance Review Mechanism
IDA	International Development Association
IEC	Information, Education and Communication
ISDS	Integrated Safeguards Data Sheet
MEA	Ministry of Water and Sanitation (<i>Ministère de l'Eau et de l'Assainissement</i>)
NPV	Net Present Value
O&M	Operations and Maintenance
OFOR	Rural Boreholes Agency (<i>Office des Forages Ruraux</i>)
ONAS	National Sanitation Agency of Senegal (<i>Office National de l'Assainissement du Sénégal</i>)
PCU	Project Coordination Unit
PDO	Project Development Objective
PEPAM	Water and Sanitation Millennium Program (<i>Programme d'Eau Potable et d'Assainissement du Millénaire</i>)
PIM	Project Implementation Manual
PPSD	Project Procurement Strategy for Development
RAP	Resettlement Action Plan
REDISSE	Regional Disease Surveillance Systems Enhancement
RPF	Resettlement Policy Framework
SDG	Sustainable Development Goal
SIA	Specialized Implementation Agency
SONES	National Water Company of Senegal (<i>Société Nationale des Eaux du Sénégal</i>)
SPRP	Strategic Preparedness and Response Program
STEP	Systematic Tracking Exchanges on Procurement
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WRM	Water Resources Management
WSS	Water Supply and Sanitation



BASIC DATA

Product Information

Project ID P164262	Financing Instrument Investment Project Financing
Original EA Category Partial Assessment (B)	Current EA Category Partial Assessment (B)
Approval Date 22-Jun-2018	Current Closing Date 30-Jun-2023

Organizations

Borrower République du Sénégal	Responsible Agency Direction de l'Hydraulique (DH),Office des Forages Ruraux (OFOR),Direction de Gestion et de Planification des Ressources en Eau (DGPRE),Project Implementation Unit (PIU),Office National de l'Assainissement du Sénégal (ONAS),Direction de l'Assainissement (DA),Société Nationale des Eaux du Sénégal (SONES)
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Project Development Objective (PDO)

Original PDO

The project's development objective is to increase access to improved water and sanitation services in selected rural areas and strengthen capacity for water resources management.

Summary Status of Financing (US\$, Millions)

Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Net		
					Commitment	Disbursed	Undisbursed
IDA-62810	22-Jun-2018	20-Jul-2018	15-Oct-2018	30-Jun-2023	130.00	11.01	114.50

Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No



I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING

A. Project Status

1. **The Senegal Rural Water Supply and Sanitation Project (*Projet Eau et Assainissement en Milieu Rural, PEAMIR, P164262*) was approved by the Board of Directors on June 22, 2018 and became effective on October 15, 2018.** The project aims at closing the access gaps between urban and rural areas and between water and sanitation services and contributing to poverty reduction and shared prosperity in rural areas and small towns. Improving key water and sanitation infrastructure is a core element in sharing prosperity and enhancing human capital through the expected reduction of water-borne diseases, which result in absenteeism from work and/or school, malnutrition, stunting and of the costs associated with medical expenses and loss of income. The project



development objective (PDO) is to increase access to improved water and sanitation services in selected rural areas and strengthen capacity for water resources management (WRM).

2. **Overall, the Project's progress towards PDO achievement is rated moderately satisfactory and implementation performance has recently been downgraded to moderately satisfactory.** The Project suffered from a delayed start of works on the field due to the long approval process of contracts by the dedicated bodies within the Ministry of Finance. During the last supervision mission held in January 2020, it seemed that the issue had been unblocked enabling the launch of activities for 16 contracts to start civil works in rural water perimeter. However, Senegal, like the rest of the world, has put in place measures to limit the spread of Coronavirus disease (COVID-19) such as social distancing and travel restrictions. These measures have constrained the implementation of the project activities. Unfortunately, most of the works contracts were suspended in March 2020 due to containment measures. It was only during the month of June that the containment was lifted, thus allowing the restarting of construction sites on the ground. No contract for the main component of the project, the sanitation component, has yet been awarded, the expected timeline for the sanitation activities to start is in January 2021.
3. **Reform process in rural areas has been stalled by the Government pending the results of an audit.** The project was designed to support the rural water sector reform with eight lease-contracts to be signed with private operations. So far, four (4) perimeters are operational with private operators on board, three operators are currently working in the project area Two contracts are pending signature and approval of Ministry of Finance, and in the two remaining perimeters the process to recruit operators need to be relaunched as the first tender was unsuccessful. The slow process of starting operations by private operators has led some rural boreholes water users associations (*Association des Usagers de Forages Ruraux*, ASUFORs) to contest the merits of the reform and to systematically work against the transfer of water supply schemes to private operators in some delegated perimeters. The weakness of the communication on the reform, the delay on the implementation, and the weak results of some private operators at the beginning, led on October 2019 the Head of State to take the decision to temporarily suspend the implementation of the public service delegations (DSP) on the remaining perimeters. As a result, the President instructed the Ministry to make an exhaustive assessment of the reform process and of the entities in charge of carrying it out. At the request of the Minister of Water and Sanitation, the Project will support the reform assessment mission and the communication plan to support and better explain the objectives, achievements and expected results of this reform.
4. **The Project is in compliance with its main legal covenants.** The Steering Committee was established by ministerial decision on May 8, 2018 and held regularly its quarterly sessions. The Project Implementation Manual (PIM) was approved on October 9, 2018. The project coordination unit (PCU) is well staffed except the financial management specialist who left the project recently; the process to replace him will be completed soon. The Specialized Implementation Agencies Rural Boreholes Agency (*Office des Forages Ruraux*, OFOR), National Sanitation Agency of Senegal (*Office National de l'Assainissement du Senegal*, ONAS), Directorate of Water Resource Management and Planning (*Direction de la Gestion et de la Planification des Ressources en Eau*, DGPRE) are fulfilling their mandate in supporting the PCU in project implementation, and the recruitment of social safeguards specialists for OFOR and ONAS have been completed during the third quarter of fiscal year (FY)20 satisfactory to the World Bank. The remaining legal covenant is the matching grants mechanism to Developers responsible for building latrines in selected rural areas ("Matching Grants"). The Client has already proposed a draft mechanism which is under review.
5. **The Project is an environmental Category B with limited and reversible environmental impacts.** It will rehabilitate existing rural water supply infrastructure, adding expansion of water schemes to connect public stand posts and



households, and the construction of sanitation infrastructure in rural areas and small towns (both on/off-site). The Project triggered three environmental safeguard policies, namely: (i) OP4.01 Environmental assessment; (ii) OP4.11 Physical / Cultural resources; and (iii) Involuntary Resettlement (OP) (BP 4.12). The Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) have been prepared and disclosed in Senegal and the World Bank website respectively on April 12, 2018 and April 14, 2018. The frameworks are being used, the screening is done and environmental and social impact assessments (ESIAs) have been developed and reviewed by the Directorate of Environment (*Direction de l'Environnement et des Établissements Classés*, DEEC) and the World Bank for the Project on July 2019, as per the provision of the ESMF. The succinct resettlement action plan (RAP) is completed and under review, the project grievance redress mechanism (GRM) has been implemented on October 2020. The recruitment of social safeguards staff has been completed for OFOR and ONAS.

6. **No fiduciary issue has been flagged** so far but procurement processes remain slow, resulting in a low disbursement rate of 9 percent and a disbursement lag of eleven months. With the finalization of the contractors' recruitment, particularly for the sanitation component, civil works will be faster, and disbursement is expected to peak during the first semester of 2021

B. Rationale for restructuring

7. **The Government of Senegal (GoS) is confronting the COVID-19 pandemic and urgently needs to augment its level of preparedness and response to prevent potentially greater loss of life and overall public health impact.** On March 2, 2020, the GoS confirmed its first case of COVID-19. By December 9, 2020, the number of confirmed cases had risen to 16,665 and 341 deaths have been reported. The GoS has developed a comprehensive National COVID-19 Response Plan, which is aligned with World Health Organization (WHO) Strategic Preparedness and Response Plan including preventive approach to contain the spread of the virus. The Dakar region accounts for more than 75 percent of the cases and many hotspots are identified in peri-urban areas. The National Epidemics Management Committee is overseeing the overall coordination and implementation of the Plan.
8. **The Government has requested financial and technical support of donors to help assure appropriate and timely implementation of key activities under this Plan,** the provision of specific supplies and logistical support for the health system to contain the pandemic, as well as mitigation of its effects including appropriate treatment to minimize morbidity and mortality. The Plan complements the longer-term strategy and current interventions in the health sector, including the Regional Disease Surveillance Systems Enhancement (REDISSE) I Project (P154807), which aims to build national and regional inter-sectoral capacities for enhanced disease surveillance and epidemic preparedness and response.
9. **The COVID-19 Response Project (P173838) in the amount of US\$20 million equivalent, approved by the World Bank Board of Directors on April 2, 2020, is in line with Senegal's COVID-19 Response Plan and the COVID-19 Strategic Preparedness and Response Program (SPRP) prepared by WHO.** It intends to fill critical gaps in implementing the REDISSE I Project, strengthen the prevention activities, rapid detection, preparedness and response to COVID-19 outbreak. The budget will be utilized within 12 months to enhance preparedness activities for COVID-19 and strengthen the health system both at national and subnational levels.
10. **Water and Sanitation is an essential element in preventing disease and protecting human health during outbreaks of infectious diseases, including the current COVID-19 pandemic where handwashing has a big role in preventing infections.** Any disruption of the water supply service could have disastrous public health consequences, undermining other efforts to address the current outbreak and possibly leading to secondary impacts and the



spread of other water borne diseases such as cholera. Poor sanitation access makes this risk very high, especially in urban and peri urban areas. It is therefore critical that the water providers (utilities or Community Based Organizations - CBOs) can maintain their current level and quality of service which involves ensuring that they have the financial means to cover their operational expenditure for the short and medium term. In addition to what the Project plans to do in rural areas; the proposed emergency COVID-19 response under this Project in the water, sanitation and hygiene (WASH) sector will focus on peri urban areas of Greater Dakar which is the epicenter of the pandemic in Senegal and on some remote rural areas accounting breakdowns in water supply systems for a while ago. Also, to prevent the spread of future pandemics in remote areas, it is necessary to rehabilitate the existing water infrastructure where needed and expand access to water to those unserved people.

11. After the COVID-19 epidemic hit the country **the Ministry of Water and Sanitation (*Ministère de l'Eau et de l'Assainissement, MEA*) requested support from the World Bank to address urgent needs in the WASH sector** (cf. letter n° 000438/MEA/SG/CPCSP on May 28, 2020). Following this communication, the World Bank team took the opportunity to review with the Client the project components in order to identify WASH activities that can be easily routed quickly to support Senegal authorities' response to COVID-19 and the reform of water services in rural areas. The ongoing Senegal urban water and sanitation project (P150351) closing in 2021 was first considered but more than 95 percent of the funds have been already committed. At this juncture, the restructuring of the Project (P164262) has been considered to help address the emergency while offering an opportunity to maximize and improve the performance of the Project. Funds are proposed to be reallocated from the existing components to fund emergency WASH interventions (maintenance of rural water supply schemes, extension of rural water networks to supply unserved villages, equipment of peri urban areas with hand washing facilities and toilets in public places and equipment of poor households with water connections and toilets), aligning closely with the overall GoS and World Bank actions. The scope of the restructuring proposed is described in the next section.

II. DESCRIPTION OF PROPOSED CHANGES

A. Summary of proposed changes

12. **The PDO will be expanded to cover urban areas and incorporate the hygiene services.** While the PDO is still relevant for water supply and sanitation (WSS) activities in rural areas, it is proposed to expand it to cover also peri urban areas and include urban areas, the epicenters of the pandemic. Therefore, the modified PDO would be to: increase access to improved water, sanitation and hygiene services in selected rural and urban areas and strengthen capacity for WRM.
13. **As per the GoS request, a reallocation of US\$16.7 million equivalent will be carried out for inclusion of a COVID-19 emergency response.** The reallocation will be made possible by reducing the scope of the rural sanitation latrines construction to enable WASH interventions in Greater Dakar area (the epicenter of the pandemic while rural areas are less impacted) and in remote rural areas where currently many breakdowns are noticed, as well as the need to connect some villages to the nearest water supply schemes. As presented in the project costing table in Annex 1, budget allocation to the COVID-19 emergency response activities will come from Component 2 on "Sanitation". In the Legal Agreement, the budget reallocation will be drawn from the first expenditure categories as shown in the Table in Section IV.
14. **The proposed reduction in project activities will have an impact on the achievement of the rural WSS development objective and outcomes in terms of targeted numbers, although the nature of the activities will have changed.** The new activities planned under the COVID-19 response will in fact reach more beneficiaries than



the canceled rural sanitation activities as it is a mix of water supply, hand washing, and sanitation activities needed to be completed urgently, and some of these interventions are less costly per beneficiary than the envisaged rural latrines program, therefore allowing to reach a greater number of beneficiaries (500,000 people). However, rural latrines are critical to equitable social development in Senegal, including consideration of gender-sensitive aspects. Options for reviewing the technical design and costs of rural latrines will be explored in order to maximize the number of latrines that can be supported with the remaining funds.

15. **The Project Results Framework has been adjusted to reflect the inclusion of the new COVID-19 emergency response.** For the COVID-19 emergency response, “hygiene” has been included in the PDO and the following new PDO indicator is added: (i) People practicing basic hygiene rules in terms of hand washing in public places. This indicator will be computed by the PCU as the sum of the number of handwashing equipment installed in public places under the Project, as validated by ONAS, multiplied by 250 people.
16. **Project institutional arrangements will be revised to include the COVID-19 emergency response activities.** The proposed implementation arrangements will use the same framework as under the Project with a new Specialized Implementation Agency (SIA), National Water Company of Senegal (*Société Nationale des Eaux du Sénégal*, SONES) which will conduct the activities under the urban water sub-component focusing in the greater Dakar area. SONES has been a well performing executing agency of past World Bank projects. The institutional arrangements remain the same, with the only change that SONES will support the newly introduced urban supply sub-component.
17. **Financial management, including flow of funds and financial reporting, remains unchanged.** The financial management arrangement of the parent project will be used. The overall fiduciary risk rating is assessed as moderate. However, in order to maintain an adequate internal control environment and the proper segregation of duties, the existing fiduciary procedures of the PIM of the PCU will be updated to reflect the proposed project’s activities.

Procurement

18. **Procurement arrangements will adopt streamlined procedures for approval of emergency procurement to expedite decision making and approvals.** Procurement under the COVID-19 emergency response activities will be carried out by the PCU in close collaboration with the SIAs. The PCU will be responsible for managing all procurement activities including using the Bank procurement software (Systematic Tracking Exchanges on Procurement - STEP). As such, it will be supported by the SIAs in launching the calls for tenders, evaluating offers, awarding and signing contracts. The SIAs in their respective field of expertise will be responsible for needs identification and definition of technical specifications of goods and works to be procured. They will participate along with the PCU in the evaluation of offers for selection of awardees. The monitoring of contracts performance will be carried out by the SIAs in collaboration with PCU, for reporting purposes. The PCU will be responsible for the payments of all invoices upon review of SIAs as needed.
19. **Categories of procurement and World Bank’s Procurement Framework (August 2018) for fast track emergency procurement.** The major planned procurement is expected to include: (i) goods and civil works activities; and (ii) non-consulting and consulting services to support the implementation of emergency response activities. In terms of procurement, the World Bank’s rules and procedures apply. On this basis, the existing project procurement strategy for development (PPSD) has been updated in October 2020, and a draft Procurement Plan (PP) will be developed by the PCU, in relation to the Ministry’s Procurement Unit in relation to the implementing agencies



and will be the dashboard for the monitoring of acquisitions. However, in view of the emergency context and the need to adapt the procedures for rapid delivery of project outputs, maximum possible simplifications should be adopted in conjunction with the World Bank while ensuring compliance with the principles of transparency, economy and speed. Following the PPSD clearance, the client submitted the PP related to the Covid19 response activities which was approved on November 20, 2020. At the Borrower's request, the World Bank will provide procurement hands-on expanded implementation support to help expedite all stages of procurement – from help with supplier identification, to support for bidding/selection and/or negotiations to contract signing and monitoring of implementation. These different deviations will be documented and included in revised versions of the procurement procedures (including the PPSD) and the PIM.

Environmental and social safeguards

20. **The inclusion of the COVID-19 emergency response activities will not change the Project's environmental and social safeguards category.** The project is still classified as Category B, since the potential negative impacts are expected to be site specific, moderate, and easily manageable. Three World Bank safeguard policies are triggered under the project: OP/BP 4.01 on Environmental Assessment; OP/BP 4.11 on Physical Cultural Resources; and OP/BP 4.12 on Involuntary Resettlement. As the new activities are similar to what the parent project is delivering, and major works will be delivered in households, OFOR sites and in some public places, a COVID-19-specific ESMF has been prepared to cover and mitigate risks associated with these new activities. The updated ESMF has been submitted on December 2, 2020 for approval by the World Bank. It will be cleared and published before the start of activities on the field. All bidding documents for civil works will have environmental clauses embedded in the language including COVID-19 mitigation measures, to enable contractors to follow up on environmental due diligence and to mitigate any anticipated negative impacts and risks. In addition, chance-find procedures will be included in the contractor contracts, and the Contractor Environmental and Social Management Plan (CESMP) will include measures to manage the physical cultural resources. The supervising engineer will be responsible for overseeing the implementation of the environmental and social clauses.
21. **The proposed restructuring would consist of:** i) change in the PDO to include hygiene and expansion of geographic scope to selected rural and urban areas; ii) change in the scope of the project components and reallocation of funds; iii) change in the results framework; iv) revision of the disbursement forecasts; v) amendment of the financing agreement; vi) revision of the integrated safeguards data sheet (ISDS); and vii) update of the economic and financial analysis. These changes are described in more detail below and the cost break-down of the new project scope is presented in Annex 1.

Changes in project components:

Component 1: Water Supply, US\$40.88 million (increased to new amount of US\$52.52 million equivalent)

22. The new activities planned under the water supply component are focusing on two main streams in rural and urban water supply sub-sectors.

Upgrading of piped water systems 1.1 - new activities (US\$6.49 million)

23. The areas targeted for the emergency interventions are in the epicenter of the pandemic (peri urban Greater Dakar) and in some remote rural areas highly populated without water system or whose water supply systems have failed some time ago.

The first part of this activity managed by OFOR will help communities located in remote rural areas to benefit quickly from improved water services in the COVID-19 context across the following interventions:



- Conduct emergency operations to rehabilitate and strengthen existing piped systems under breakdown through the renewal of 15 boreholes and 15 water towers, the supply and the installation of 30 electric pumps and 40 generators, as well as the reinforcement of four other existing piped systems. Regarding the awarding of contracts, various allotments will be established for targeting successful companies that have not recorded failures in the implementation of similar contracts at least during the last three years.

The second part of this activity will be managed by SONES in the peri-urban areas of Rufisque city:

- As part of the transitional measures adopted by the MEA pending the entry into service of the KMS3 water transfer infrastructure, SONES has built in 2018/2019 a new water catchment center for 15 boreholes and two pumping stations with a total capacity of 35,000 m³ per day in Bayakh and Thieudème located 40 km from the city of Rufisque. The mobilized water resources are distributed between Dakar and Rufisque cities. However, the volumes dedicated to Rufisque area require restructuring and prior strengthening of the distribution network to enable daily reliable service delivery in some neighborhoods and localities like: Sangalkam, Zac of Kounoune, Keur Djaraf / Darourahmane, HLM of Rufisque, Cité Imprimerie, Déni Birame NDAO initially connected to the ALGs feeders. Currently these localities are frequently under water shortages. After works, around 250,000 people will benefit from more pressure and better service delivery than now.

The third and final part will be managed also by SONES on behalf of OFOR, as the main water feeder in the area belongs to SONES:

- This activity is relating to the connection of villages crossed by the water transfer pipe between the Tassette catchment area and the Thiès reservoirs where the Senegal urban water and sanitation project (P150351) had already completed manholes for these connections. The works will be done by SEN'EAU under the supervision of OFOR and AQUATECH the rural private operator in Thies-Diourbel perimeter; and concern laying of pipes between the manholes and the existing water towers of Sanghé and Kissane villages to reduce the water deficit of these hydraulic systems. Then, an extension of the rural distribution networks will allow the connection of new villages like Keur Balla, Mbobaye and Keur Bara Kaéré.

Development of access to water 1.2 - new activities (US\$4.82 million)

24. SONES, the urban water asset holding company, will manage the works in the urban areas.

- This intervention will cover the greater Dakar perimeter (DTPC) with some work to build 8,000 social connections and 120 km of extension of the distribution network in order to meet the demand of households living in some peri-urban areas poorly covered by the network.

At a second stage, OFOR will manage the development of access in targeted rural areas under this restructuring:

- Develop access for unserved rural households through installation of 1,800 social connections, 27 km of network extension for connections and another 100 km of network extension aimed to connect 43 new localities which total around 30,000 inhabitants. These works will provide households with safe drinking water to improve hygienic conditions and home maintenance to prevent the spread of the COVID-19 disease. In terms of contracting, OFOR will be able to contract directly with the private operators under *affermage* contracts in rural perimeters as what is practiced in urban areas.

Component 2: Sanitation (US\$69.13 million equivalent) (decreased to new amount of US\$55.15 million)

Development of access to improved sanitation in selected rural areas 2.1 (previously US\$39.33 million, new estimation of US\$20.35 million)

25. This sub-component will provide on-site sanitation facilities to the rural population in four regions (Diourbel, Fatick, Kaffrine and Kaolack), both at home and outside the home, in markets, schools and health centers. The previous budget (US\$39.33 million) was targeting the construction of 100,000 latrines and 100 public toilets in the



four regions. After adjustment, an amount of US\$16.74 million will be routed to cover the works planned under the country WASH COVID-19 response. So, the rural sanitation component will be reduced to 49,000 latrines and 60 public toilets with a new estimation of US\$20.35 million. This reduction will enable implementation of the COVID-19 response activities in the epicenter of the pandemic (peri urban Greater Dakar) and in some remote populated rural areas. The intervention will reach around 500,000 beneficiaries (61,000 for safely managed urban sanitation services; 128,000 for water supply services; 50,000 for hygiene services in public places and 250,000 people for enhanced water supply services both in rural and urban areas). The timeline of the COVID-19 response (12 months) is shorter than the 100,000 latrines implementation (36 months) in the rural sanitation sub-component.

Urban sanitation and promotion of WASH services in public areas 2.5 - new activities (US\$4.72 million)

26. The new activities under the sanitation component will be focused in poor neighborhoods of greater Dakar to provide access to individual and collective sanitation through: (a) the installation of household latrines and handwashing facilities; (b) the supply and laying of sewer pipes, and related construction of connections to the sewer network; (c) the installation of public toilets and hygiene kits; and (d) awareness-raising and communication to support handwashing and hygiene. This activity will be under the supervision of the National Sanitation Company (ONAS) operating now both in urban and rural areas. It is planned to develop secure access to individual and collective sanitation in greater Dakar. This will involve strengthening access to sanitation services at household level through the construction of fully equipped toilets with hand washing devices (4,000 manual flush toilets, 300 toilets adapted to flooding zones and 400 septic tanks); all coupled with their superstructure. In addition to individual sanitation works, the project will support the construction of 1,000 connections to the sewer network including supply and installation of 15 km of sewers. The implementation of these activities will require the deployment of support missions to carry out information, education, communication (IEC) and social mobilization actions as well as the supervision and control of the works.
27. The promotion of WASH services will support the realization of 40 public toilets including the management of menstrual hygiene (GHM) consisting of 7-8 separate toilet boxes for a differentiated use between boys, girls and teaching staff. These works will comply with the standards of access and ease of use for people with reduced mobility, will be tiled and all connected to running water to facilitate maintenance. Emphasis will be placed on schools and health facilities to better support the resumption of classes and the conditions for receiving patients and places that have benefited from public entrances. In the choice of sites, ONAS which has a database will work with local communities, health districts, academy inspections and regional sanitation departments to best meet needs. Complementary IEC and training activities will be carried out to strengthen respect for barrier gestures against COVID-19 and support the establishment of management committees for public sanitation facilities. These entities will be offered hygiene kits in the form of start-up stocks which will be renewed by the beneficiary entities. Supervision and control of the works will also be ensured in order to guarantee the sustainability and durability of the civil works.

Component 3: Water resources management (US\$7.33 million equivalent) (No change)

28. This component aims to improve the knowledge and planning of the development of water resources through the following sub-components: (i) Strengthening the Recipient's capacity to assess and monitor water resources (groundwater and surface water in the eastern regions of Senegal and Casamance) through (a) carrying out hydrogeological and hydrological studies; (b) construction of piezometers, trial boreholes and hydrometric stations; and (c) consulting services and the provision of IT equipment and software for the establishment of a water quality mapping system; and (ii) Supporting the Recipient's capacity in planning the development of water resources



through consulting services and technical assistance for the preparation of water resources development master plans in selected water basins.

Component 4: Program coordination and institutional support and capacity building (US\$12.66 million) (increased to US\$15.00 million equivalent)

29. This additional resource routed to this component (US\$2.34 million) managed by the PCU will ensure coordination of the interventions with the implementing agencies and ensure the day-to-day management of the WASH COVID-19 response in the project area. The allocated resources will finance the organization of field supervision missions, the provision of technical assistants to the contracting authority (SONES, OFOR, ONAS). Project monitoring and evaluation activities will also be carried out in order to collect, process, analyze and monitor project indicators. Environmental and social aspects will also be analyzed from the start of the activities with an individual consultant and will then be monitored by ad hoc missions. A satisfaction survey will be carried out at mid-term and at the end of the intervention in order to measure the satisfaction of the beneficiaries.

30. The institutional support sub-component is updated as follows: The Urban WSS Project (P150351) closing in December 2021 will not be able to finance some critical new activities because of lack of funds and change on the delivery timeline. The proposal is to route these new activities to the RWSS Project (P164262) under restructuring. This will include: (a) support to Directorate of Sanitation (*Direction de l'Assainissement*, DA) in auditing the operation and maintenance of the wastewater and drainage infrastructure in urban areas; (b) support to OFOR in the evaluation of the rural water sector reform and an action plan for communication support to the Ministry; (c) the provision of goods and services for communication activities of DGPRES and the update of the water code; (d) the provision of technical assistance to the MEA in designing its sectorial program for the Sustainable Development Goals (SDGs) and to conduct strategic and technical studies on the urban water and sanitation sector including the water security issues; and (e) technical assistance to SONES through consulting services. The former institutional support activities of the project remain unchanged and will be implemented as planned: (a) support to Directorate of Hydraulics (*Direction de l'Hydraulique*, DH) through consulting services for the preparation of a feasibility study of water transfers to the central regions and the update of the rural water supply master plans of selected regions; (b) technical assistance to ONAS through consulting services; (c) support to OFOR through: (i) consulting services for inventory and management of rural water supply assets, the update of the financial model and the design and implementation of a reporting system for monitoring private operators; and (ii) the design, construction and supervision of OFOR's offices; and (d) the provision and installation of monitoring and laboratory equipment for DGPRES.

31. The total project amount will not be changed under the restructuring, remaining at US\$130 million equivalent.

Change in the PDO and results framework:

32. The PDO will be revised to reflect the change in scope and activities under the project including COVID-19 response. The full results framework is included in Annex 2. Below is a summary of the changes:

Current PDO: The objectives of the proposed project are to increase access to improved water and sanitation services in selected rural areas and strengthen capacity for water resources management.

Proposed PDO: The objectives of the proposed project are to increase access to improved water, *sanitation and hygiene services in selected rural and urban areas* and strengthen capacity for water resources management.

Change in indicators:



- New PDO indicators added: People practicing basic hygiene rules in terms of hand washing in public places: target 50,000 people with a ratio of 200 people per hand-washing station.
- New Intermediate Results Indicator added: Public toilets constructed for health centers and schools. This indicator will measure public toilets that are sensitive to the management of menstrual hygiene: target 100 public toilets
- Revised targets: i) new piped household water connections (rural and urban) that are resulting from the project intervention revised from 30,500 to 40,300; ii) improved community water points constructed under the project revised from 200 to 300; iii) water production facilities rehabilitated under the project revised from 371 to 421; iv) household latrines/toilets constructed under the project revised from 100,000 to 53,700; v) household sewer connections constructed under the project revised from 5,100 to 6,100; and vi) on-site sanitation facilities constructed under the sanitation marketing approach revised from 8,500 to 12,750.

Table 1. Revision of the Project Indicators and Targets

PDO indicators			
Indicator name		Old Target	New Target
People provided with access to improved water sources	Number	365,000	485,000
People provided with access to improved sanitation services	Number	1,136,000	725,500
Operator monitoring system generating regular reports on performance/key indicators	Yes/No	Yes	Yes
Water resources development master plans completed and approved	Number	5	5
Number of women provided with access to improved sanitation under the project	Number	568,000	362,750
People practicing basic hygiene rules in terms of hand washing in public places	Number	N/A	50,000
Intermediate Results Indicators			
Indicator name	Number	Old Target	New Target
Component 1: Water supply			
New piped household water connections that are resulting from the project	Number	30,500	40,300
Improved community water points constructed or rehabilitated under the project	Number	200	300
Piped water systems equipped with chlorination devices under the project	Number	580	580
Water production facilities rehabilitated under the project	Number	371	421
Water sample tests meeting bacteriological standards	Percentage	98	98
Component 2: Sanitation			
Household latrines constructed under the project	Number	100,000	53,700
Household sewer connections constructed under the project	Number	5,100	6,100
Additional wastewater treatment capacity installed under the project	Cubic meter	4,900	4,900
Additional sludge treatment capacity installed under the project	Cubic meter	145	145
On-site sanitation facilities constructed under the sanitation marketing approach	Number	8,500	12,750
Satisfaction rate of users of WSS services provided	Percentage	80	80
Satisfaction rate of female users of WSS services provided	Percentage	80	80
Public toilets constructed under the project: public places, health centers, schools, etc.	Number	100	100
Component 3: Water resources management			
Water quality mapping system in use	Yes/No	Yes	Yes
Piezometers, trial boreholes and hydrometric stations installed under the project	Number	54	54

Other changes: Change in project scope and components:

33. Based on the new activities added in the rural water perimeter (rehabilitation of breakdown rural water systems), the project area will be extended from five regions (Thiès, Diourbel, Fatick, Kaolack and Kaffrine) to the entire country including the peri-urban areas of the greater Dakar for WSS activities. The aim is to prioritize investments in those rural/semi-urban areas not benefiting or with poor access to improved WSS services in this context of COVID-19 pandemic.

Revision of disbursement forecasts:



New disbursement table

34. The revised disbursement table is below:

Fiscal year		2020	2021	2022	2023
Annual	(actual/revised)	4.0	35	50	35
Cumulative		10.0	45.0	95.0	130.0

Financing agreement:

35. The financing agreement will be updated to include the changes in the PDO, project scope and components, implementation arrangements to include SONES as one of the implementing agencies, eligible expenditures per category, addition of disbursement condition on ESMF and RPF, and others.

Update to the environmental and social analyses:

36. The environmental and social analyses were updated and disclosed in ISDS to reflect the COVID-19 response activities particularly the complementary program in rural and peri-urban areas focusing in water network reinforcement/extension, social connections and facilities for secure access to individual and collective sanitation in poor neighborhoods. There is no change in the safeguards policies applicable to the project which is still classified Category B because the magnitude of the potential negative impacts and risks are expected to be low to moderate and can be mitigated. The ESMF and the RPF were completed, approved by the World Bank and the DEEC; and disclosed on April 2018. For known sites, the Borrower carried out the screenings and elaborate the ESIA and the succinct RAPs. For the project restructuring the updated ESMF and RPF are being finalized and will be published locally and on the World Bank website. Payments under Category (4) related to civil works for new activities will not be authorized, until and unless the ESMF and the RPF documents have been updated and disclosed in form and substance satisfactory to the World Bank.

Update to the economic and financial analysis:

37. The updated economic and financial analysis assesses the economic and financial benefits and related costs arising from investments implemented under the project restructuring. Given that the total funding is unchanged, the economic and financial analysis conducted in May 2018 remains the reference for the project. However, the results of the analysis should be considered at lower bound estimate of the Economic Internal Rate of Return (EIRR) of the project that is estimated at 8.2 percent (with the net present value, or NPV, using a discount rate of 6 percent is estimated at US\$9.5 million). New water supply schemes will be constructed under the project restructuring, this will increase water demand, and an upward adjustment should also be considered given the COVID-19 context where water supply and hand washing have become even more important to the broader protection of public health. (See Annex 2A for further details).¹

Institutional arrangements

38. Institutional Arrangements and Implementing Agency are being changed to record addition of SONES as part of the implementing agencies list. Institutional arrangements of the parent project will remain, the only change is related to embedding SONES as implementation agency of the urban water sub-component. SONES will assist the PCU in carrying out the project new activities in urban water sub-sector, mainly around Rufisque and Thies cities.

Technical analysis

¹ SARS-CoV-2 is known to be transmitted via respiratory droplets and contact with infected surfaces ([WHO, July 2020](#)). For this reason, hand hygiene is considered an important behavior in health communication to mitigate the spread of SARS-CoV-2



39. The water and sanitation investment programs supported by the proposed project originates from programs designed by the implementation agencies in close coordination with the PCU. No major technical issues are expected because the technologies being considered for WSS are proven and well established. The restructuring will include a large activity of 15 rural boreholes renewal in a short time schedule, this will be the major change in term of technical issues; other activities will be implemented as usual.

Conditions and legal covenants

40. Disbursement condition on update and disclosure of ESMF and RPF is added:

- Payments under Category (4) related to civil works for new activities will not be authorized, until and unless the ESMF and the RPF documents have been updated and disclosed in form and substance satisfactory to the Association and in accordance with Section I.D. of this Schedule, to reflect COVID-19 response activities.

41. Legal covenants will be revised to include revised covenants as follows:

- Section IV of Schedule 2 is hereby deleted in its entirety and replaced with the following: In order to monitor the implementation of Part 4.2 of the Project, the Recipient shall ensure that ONAS, OFOR and SONES each have their financial statements audited. Each audit of the financial statements shall cover the period of one fiscal year of the Recipient, commencing with the fiscal year in which the first withdrawal is made. The audited financial statements for each such period shall be furnished to the Association not later than six (6) months after the end of such period.



III. SUMMARY OF CHANGES

	Changed	Not Changed
Implementing Agency	✓	
Project's Development Objectives	✓	
Results Framework	✓	
Components and Cost	✓	
Reallocation between Disbursement Categories	✓	
Disbursement Estimates	✓	
Overall Risk Rating	✓	
Legal Covenants	✓	
Institutional Arrangements	✓	
Implementation Schedule	✓	
Other Change(s)	✓	
Economic and Financial Analysis	✓	
Technical Analysis	✓	
Social Analysis	✓	
Environmental Analysis	✓	
DDO Status		✓
PBCs		✓
Loan Closing Date(s)		✓
Cancellations Proposed		✓
Disbursements Arrangements		✓
Safeguard Policies Triggered		✓
EA category		✓
Financial Management		✓
Procurement		✓

**IV. DETAILED CHANGE(S)****IMPLEMENTING AGENCY**

Implementing Agency Name	Type	Action
Direction de l'Hydraulique (DH)	Implementing Agency	No Change
Office des Forages Ruraux (OFOR)	Implementing Agency	No Change
Direction de Gestion et de Planification des Ressources en Eau (DGPRE)	Implementing Agency	No Change
Project Implementation Unit (PIU)	Implementing Agency	No Change
Office National de l'Assainissement du Sénégal (ONAS)	Implementing Agency	No Change
Direction de l'Assainissement (DA)	Implementing Agency	No Change
Société Nationale des Eaux du Sénégal (SONES)	Implementing Agency	Marked for Deletion
Société Nationale des Eaux du Sénégal (SONES)	Implementing Agency	New

PROJECT DEVELOPMENT OBJECTIVE**Current PDO**

The project's development objective is to increase access to improved water and sanitation services in selected rural areas and strengthen capacity for water resources management.

Proposed New PDO

The project's development objective is to increase access to improved water, sanitation and hygiene services in selected rural and urban areas and strengthen capacity for water resources management.

COMPONENTS

Current Component Name	Current Cost (US\$M)	Action	Proposed Component Name	Proposed Cost (US\$M)
Component 1 : Rural Water Supply	40.88	Revised	Component 1 : Water Supply	52.52
Component 2: Sanitation	69.13	Revised	Component 2: Sanitation	55.15
Component 3: Water Resources Management	7.33	No Change	Component 3: Water Resources Management	7.33



Component 4: Program coordination, Institutional support and Capacity building	12.66	Revised	Component 4: Program coordination, Institutional support and Capacity building	15.00
TOTAL	130.00			130.00

REALLOCATION BETWEEN DISBURSEMENT CATEGORIES

	Current Allocation	Actuals + Committed	Proposed Allocation	Financing % (Type Total)	
				Current	Proposed
IDA-62810-001 Currency: EUR					
iLap Category Sequence No: 1		Current Expenditure Category: GD,WK,NCS,CS,OC,TN except Part 2.4			
	105,400,000.00	3,687,455.29	91,369,000.00	100.00	100.00
iLap Category Sequence No: 2		Current Expenditure Category: Matching Grants under part 2.4			
	2,100,000.00	0.00	2,100,000.00	100.00	100.00
iLap Category Sequence No: 3		Current Expenditure Category: GD,NCS,CS,OC,TN except Part 2.4 under COVID emergency response			
	0.00	0.00	931,000.00		100
iLap Category Sequence No: 4		Current Expenditure Category: WK, except Part 2.4 under COVID emergency response			
	0.00	0.00	13,100,000.00		100
Total	107,500,000.00	3,687,455.29	107,500,000.00		

DISBURSEMENT ESTIMATES

Change in Disbursement Estimates
Yes

Year	Current	Proposed
2018	0.00	0.00



2019	7,000,000.00	6,000,000.00
2020	25,000,000.00	4,000,000.00
2021	35,000,000.00	35,000,000.00
2022	35,000,000.00	50,000,000.00
2023	28,000,000.00	35,000,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating at Approval	Current Rating
Political and Governance	● Low	● Low
Macroeconomic	● Low	● Low
Sector Strategies and Policies	● Moderate	● Moderate
Technical Design of Project or Program	● Moderate	● Moderate
Institutional Capacity for Implementation and Sustainability	● Substantial	● Moderate
Fiduciary	● Moderate	● Moderate
Environment and Social	● Moderate	● Moderate
Stakeholders	● Moderate	● Moderate
Other		
Overall	● Moderate	● Moderate

LEGAL COVENANTS

Loan/Credit/TF	Description	Status	Action
IDA-62810	Schedule 2.1.A.3 In order to ensure proper implementation of the Project, the following entities each under their respective mandates shall assist the PCU in the carrying out Project activities: (i) OFOR for the water supply, (ii) ONAS for the sanitation and (iii) DGPRES for the water resources management (“Specialized Implementation Agencies” or “SIAs”). The Recipient shall ensure that each SIA maintains, throughout Project implementation, (i) staffing, including by the recruitment of a social safeguards	Complied with	No Change



specialist for OFOR and ONAS no later than six (6) months after the Effective Date and (ii) resources satisfactory to the Association, as further described in the Project Implementation Manual.

The SIAs shall be responsible for (i) assisting the PCU with the quality control of procurement documents; (ii) the technical management of activities, including the provision of quality control for infrastructural work and ensuring that appropriate safeguards requirement and standards are maintained; (iii) the review of contractors’ payment requests for approval by the PCU.

Schedule 2.I.B Matching Grants

1. For the purposes of carrying out Part 2.4 of the Project, the Recipient shall make available part of the proceeds of the Credit through a matching grants mechanism to Developers responsible for building latrines in selected areas (“Matching Grants”).

2. The Recipient shall ensure that the Matching Grants shall be made available only upon the Recipient’s determination, on the basis of an appraisal conducted in accordance with the criteria, guidelines and detailed procedures set forth in the Project Implementation Manual, inter alia: (i) appraised on the basis of an environmental and social assessment and other guidelines acceptable to the Association (and be accompanied by appropriate Safeguard Documents, if required); (ii) approved by the Recipient and the Association, unless with respect to the Recipient’s approval, the Association has notified the Recipient in writing that its prior approval is not required; and (iii) included in the Annual Work Plan and Budget approved by the Association in accordance with Section F of this Schedule.

IDA-62810

Expected soon

No Change

IDA-62810

Schedule 2.I.C.1 No later than one month after the Effective Date, the Recipient shall: (a) prepare under terms of reference acceptable to the Association, and furnish to the Recipient and the Association, an implementation manual for the Project containing detailed arrangements and procedures for: (i) institutional coordination and day-to-day execution of the Project; (ii) Project budgeting, disbursement and financial management; (iii) procurement; (iv)

Partially complied with

No Change



	<p>monitoring, evaluation, reporting and communication; (v) safeguards monitoring and mitigation; (vi) the responsibilities and mandate of each SIA; (vii) the selection criteria of the Developers, the financial management, procurement and disbursement procedures of the Matching Grants and (viii) such other arrangements and procedures as shall be required for the Project; (b) affords the Recipient and the Association a reasonable opportunity to exchange views with the Project Implementing Entity; and (c) thereafter adopts such Project implementation manual as shall have been approved by the Association (“Project Implementation Manual”).</p>		
IDA-62810	<p>Schedule 2.IV In order to monitor the implementation of Part 4.2 of the Project, the Recipient shall ensure ONAS and OFOR have their financial statements audited. Each audit of the financial statements shall cover the period of one fiscal year of the Recipient, commencing with the fiscal year in which the first withdrawal is made. The audited financial statements for each such period shall be furnished to the Association not later than six (6) months after the end of such period.</p>	Complied with	Revised
Proposed	<p>Schedule 2.IV In order to monitor the implementation of Part 4.2 of the Project, the Recipient shall ensure ONAS, OFOR and SONES have their FS audited. Each audit of the FS shall cover one fiscal year of the Recipient, commencing with the fiscal year in which the first withdrawal is made. The audited FS for each such period shall be furnished to IDA not later than 6 months after the end of period.</p>	Not yet due	
IDA-62810	<p>Payments under Category (4) will not be authorized, until and unless the ESMF and the RPF have been updated and disclosed in form and substance satisfactory to the Association and in accordance with Section I.D. of this Schedule, to reflect COVID-19 response activities.</p>	Not yet due	New



Results framework

COUNTRY: Senegal

Senegal Rural Water Supply and Sanitation Project

Project Development Objectives(s)

The project's development objective is to increase access to improved water and sanitation services in selected rural areas and strengthen capacity for water resources management.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Increase access to improved WSS services in selected rural areas and strengthen capacity for WRM							
People provided with access to improved water sources (CRI, Number)		0.00	0.00	85,000.00	235,000.00	385,000.00	485,000.00
<i>Action: This indicator has been Revised</i>							
People provided with access to improved sanitation services (CRI, Number)		0.00	0.00	17,000.00	257,000.00	497,000.00	725,500.00
<i>Action: This indicator has been Revised</i>							
Operator monitoring system generating regular reports on performance against key indicators (Yes/No)		No	No	Yes	Yes	Yes	Yes



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Water resources development master plans completed and approved (Number)		0.00	0.00	3.00	5.00	5.00	5.00
Number of women provided with access to improved sanitation under the project (Number)		0.00	0.00	7,750.00	127,750.00	247,750.00	362,750.00
Action: This indicator has been Revised							
People practicing basic hygiene rules in terms of hand washing in public places. (Number)		0.00	0.00		30,000.00	50,000.00	50,000.00
Action: This indicator is New		Rationale: For the COVID-19 emergency response, "hygiene" has been included to the PDO and the following new PDO indicator is added: (i) People practicing basic hygiene rules in terms of hand washing in public places.					

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Component 1: Water supply							
New piped household water connections that are resulting		0.00	0.00	8,000.00	19,000.00	30,000.00	40,300.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
from the project intervention (Number)							
Action: This indicator has been Revised							
Improved community water points constructed or rehabilitated under the project (Number)		0.00	0.00	50.00	150.00	250.00	300.00
Action: This indicator has been Revised							
Piped water systems equipped with chlorination devices under the project (Number)		0.00	300.00	580.00	580.00	580.00	580.00
Water production facilities rehabilitated under the project (Number)		0.00	0.00	20.00	180.00	340.00	421.00
Action: This indicator has been Revised							
Water sample tests meeting bacteriological standards (Percentage)		0.00	0.00	98.00	98.00	98.00	98.00
Component 2 : Sanitation							
Household latrines constructed under the project (Number)		0.00	0.00	3,000.00	23,000.00	43,000.00	53,700.00
Action: This indicator has been Revised							



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Household sewer connections constructed under the project (Number)		0.00	0.00	0.00	2,000.00	5,000.00	6,100.00
Action: This indicator has been Revised							
Additional wastewater treatment capacity installed under the project (Cubic Meter(m3))		0.00	0.00	0.00	1,500.00	4,900.00	4,900.00
Additional sludge treatment capacity installed under the project (Cubic Meter(m3))		0.00	0.00	0.00	80.00	145.00	145.00
On-site sanitation facilities constructed under the sanitation marketing approach (Number)		0.00	0.00	0.00	3,000.00	9,000.00	12,750.00
Action: This indicator has been Revised							
Satisfaction rate of users of WSS services provided (Percentage)		0.00				80.00	80.00
Satisfaction rate of female users of WSS services provided (Number)		0.00	0.00	0.00	0.00	80.00	80.00
Public toilets constructed under the project for public		0.00		10.00	70.00	100.00	100.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
places like health centers, schools, etc. (Number)							
<i>Action: This indicator is New</i>	<p>Rationale: <i>The initial number of 100 public toilets in rural areas was revised to 60, while the COVID response in peri-urban allows the construction of 40 new public toilets. The total to be constructed under the project will be 100.</i></p>						
Component 3 : Water resources management							
Water quality mapping system in use (Yes/No)		No	No	No	Yes	Yes	Yes
Number of piezometers, trial boreholes and hydrometric stations installed under the project (Number)		0.00	10.00	20.00	35.00	54.00	54.00



ANNEX 1: PROPOSED COST OVERVIEW OF RESTRUCTURED PROJECT (US\$)

Activity	Estimated cost
Component 1- Water Supply	52,518,000
Upgrading rural water systems (1)	24,363,000
<i>Upgrading rural water systems (2)</i>	<i>4,760,000</i>
<i>Upgrading urban water systems (3)</i>	<i>1,733,000</i>
Development of access in rural water (1)	14,211,500
<i>Development of access in rural water (2)</i>	<i>1,662,500</i>
<i>Development of access in urban water (3)</i>	<i>3,192,000</i>
Works control and supervision (1)	2,308,000
<i>Works control and supervision (2)</i>	<i>288,000</i>
Component 2 – Sanitation	55,152,000
Rural sanitation adjusted to 49,000 latrines	20,355,000
Condominium sewerage & wastewater system (Gandiaye)	3,470,000
Sewerage, wastewater and sludge disposal in small towns	18,658,000
Pilot of sanitation marketing	2,700,000
<i>Development of access in urban sanitation greater Dakar</i>	<i>4,336,000</i>
<i>Promotion of WASH in public places</i>	<i>385,000</i>
Works control and supervision (1)	4,300,000
<i>Works control and supervision (2)</i>	<i>948,000</i>
Component 3 – Water Resources Management	7,330,000
Knowledge of water resources	4,560,000
Planning	2,770,000
Component 4 – Project Management/Institutional support	15,000,000
Project management	6,175,000
Institutional support	6,090,000
Capacity building	2,365,000
<i>Covid19 response actions management</i>	<i>370,000</i>
<i>Cost of new activities under the restructuring</i>	<i>16,740,000</i>
Total Project Cost	130,000,000

(*) Items on italic font show the changes/new activities added to the project restructuring.



ANNEX 2: UPDATED ECONOMIC AND FINANCIAL ANALYSIS

1. The restructuring of the project is directly informed by the needs emerging from the COVID-19 crisis and particularly the need to target urban and peri-urban areas with respect to water supply. The project total financing is unaffected by the reallocation (US\$130 million) and the main change concerns the sanitation component from which the reallocation is made towards the new activities planned in the project restructuring. The rural sanitation sub-component is reduced from US\$39.33 million to US\$20.35 million. The difference of US\$16.74 million is the object of the restructuring.
2. Given that the total funding is unchanged, the economic and financial analysis conducted in May 2018 remains the reference for the project. However, the results of the analysis should be considered a lower bound estimate of the EIRR of the project. New water supply schemes will be constructed under the project restructuring, this will increase water demand, and that an upward adjustment should also be considered given the COVID-19 context and the broader protection of public health perspective.
3. The economic analysis conducted in May 2018 was composed of two components. First, a cost-benefit analysis (CBA) to assess the economic impact of the rural water component of the project. The economic benefits include incremental revenues (water sales valued with current tariffs), consumer surplus accruing to water users and cost savings resulting from the upgrading of systems. And second, a sanitation component, where the benefits are obvious but notoriously difficult to quantify, a cost-effectiveness (CE) analysis has been conducted based on the annual per capita costs (annualized investment costs and annual operations and maintenance (O&M)) costs of the various sanitation solutions that provide identical results concerning excreta disposal and wastewater and sludge disposal.
4. In 2018, at approval, the EIRR of the water-related activities was estimated at 8.2 percent and the NPV using a discount rate of 6 percent is estimated at US\$9.5 million.² The sensitivity analysis conducted also constitute a basis for upward assessment of the EIRR and NPV of the restructured project. Indeed, the initial analysis tested the sensitivity of the EIRR to the main elements of the economic cash-flows using three main variables: (i) investment costs; (ii) operating costs; and (iii) water demand. The outcome of the scenarios (Table A2.1) shows that the project is markedly sensitive to the reduction of water demand, which exhibits the lowest switching value. With the restructuring of the project aiming to increase the number of service connection, the risk will not only be mitigated but a higher return can be expected (Table A2.2).

Table A2.1. Results of the Sensitivity Analysis conducted in May 2018

Scenario	EIRR	NPV@6% (US\$ M)	Switching value
Base scenario	8.2%	9.46	
Investment cost increase 20%	6.4%	2.04	25.5%
O&M costs increase 20%	7.7%	7.20	83.8%
Overall demand decrease 20%	6.1%	0.43	21.0%
Combined 10%/10%/10%	6.0%	0.20	

² Albeit modest, this EIRR was nonetheless higher than the one observed in previous interventions in rural areas in Senegal (for instance, 7 percent in the Water and Sanitation Millennium Program (*Programme d'Eau Potable et d'Assainissement du Millénaire*, PEPAM-IDA)). These calculations were also been conducted separately for the sub-components. Both yielded identical EIRRs (8.2 percent), the sub-component devoted to the improvement of access generates a NPV of US\$3.6 million, and the sub-component devoted to systems upgrading a NPV of US\$5.8 million.



5. For sanitation, the CE analysis could also be expected to play out favorably with the restructuring of the project towards water supply. Of the remaining rural sanitation component, 49,000 latrines and 60 public toilets will continue to be funded. Additionally, the restructuring envisions the construction in urban areas of fully equipped toilets with hand washing devices (4,000 manual flush toilets, 300 toilets adapted to flooding zones and 400 septic tanks); all coupled with their superstructure. In addition to individual sanitation works, the project will support the construction of 1,000 connections to the sewer network including supply and installation of 15 km of sewers. Finally, the restructuring also envisions the realization of 40 public toilets including the GHM consisting of 7-8 separate toilet boxes for a differentiated use between boys, girls and teaching staff.

Table A2.2. List of changes in activities in the context of the unchanged financing restructuring

Area	Water	Sanitation
Rural	<ul style="list-style-type: none"> + Renewal of 15 boreholes and 15 water towers, the supply and the installation of 30 electric pumps and 40 generators, as well as the reinforcement of 4 other existing piped systems. + Develop access for unserved rural households through installation of 1,800 social connections, 27 km of network extension for connections and another 100 km of network extension aimed to connect 43 new localities which total around 30,000 inhabitants. + Connection of villages crossed by the water transfer pipe between the Tassette catchment area and the Thiès reservoirs where the urban water project (PEAMU) had already completed manholes for these connections. 	<ul style="list-style-type: none"> - 51,000 latrines - 40 public toilets (→ updated total : 49,000 latrines; 60 public toilets)
Peri urban/ urban	<ul style="list-style-type: none"> + 8,000 social connections and 120 km of extension of the distribution network in order to meet the demand of households living in peri-urban areas of the Greater Dakar perimeter (DTPC) poorly covered by the network. + Works for reinforcement under this second assignment will cover the localities of Sangalkam, Zac of Kounoune, Keur Djaraf / Darourahmane, HLM of Rufisque, Cité Imprimerie, Déni Birame NDAO initially connected to the ALGs feeders. 	<ul style="list-style-type: none"> + In poor neighborhoods of greater Dakar to equip households and public places, like schools and health centers, with toilets and hand washing facilities. + Secure access to individual and collective sanitation in greater Dakar. This will involve strengthening access to sanitation services at household level through the construction of full equipped toilets with hand washing devices (4,000 manual flush toilets, 300 toilets adapted to flooding zones and 400 septic tanks); all coupled with their superstructure. In addition to individual sanitation works, the project will support the construction of 1,000 connections to the sewer network including supply and installation of 15 km of sewers. + realization of 40 public toilets including the GHM consisting of 7-8 separate toilet boxes for a differentiated use between boys, girls and teaching staff.