

**PROGRAM-FOR-RESULTS INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.:

Program Name	Rural Water Supply Universal Access Program <i>Programme AQUA-VIE</i>
Region	AFR
Country	Benin
Sector	Water
Financing Instrument	Program for Results (PforR)
Program ID	P164186
Parent Program ID	NA
Borrower(s)	Republic of Benin
Implementing Agency	Rural Water Supply Agency <i>Agence Nationale d'Approvisionnement en Eau Potable en Milieu Rural (ANAEPMR)</i>
Date PID Prepared	March 15 th , 2018
Estimated Date of Appraisal Completion	April 6 th , 2018
Estimated Date of Board Approval	May 15 th , 2018

I. Country Context

1. ***Despite achieving solid economic growth, Benin has experienced increased poverty especially in rural areas.*** During the period 2000-2015, real GDP in Benin grew on average by 4.3 percent annually and accelerated slightly during the last five-year period (2011-2015) to 4.7.¹ Population is increasing by 3.2 percent per year, which means that the country is struggling to maintain access to basic social services. Poverty rate increased from 37.5 percent in 2006 to 40.1 percent in 2015.² Important disparities between urban and rural poverty persist and tend to increase, with rates estimated at 35.8 percent and 43.6 percent respectively.³ Per capita income was US\$800 in 2016. The Human Development Index was estimated at 0.48 in 2015, with Benin ranking 166th amongst 188 countries.⁴ Inequality in the distribution of per capita income is moderately high, with a Gini index of 41 in 2015.

2. ***Providing universal access to water supply services is a priority for the Government of Benin (GoB).*** According to the *Plan d'Action du Gouvernement* (PAG), the GoB aims to provide universal access to water supply in both urban and rural areas by 2021, for a total estimated cost of 456 billion of FCFA (US\$820 million).⁵ In the rural water sector, in particular, the GoB is advancing fast. In May 2017, the GoB adopted the National Strategy for Rural Water Supply 2017-2030 (*Stratégie Nationale d'Approvisionnement in Rural Areas, 2017-2030*) to operationalize the PAG 2016-2021 and build on lessons from implementation of the former

¹ Draft Systematic Country Diagnostic (SCD), July 21, 2017

² Draft Systematic Country Diagnostic (SCD), July 21, 2017 & INSAE, EMICoV 2006-15 *National Poverty and Inequality Rates 2006-2015*

³ World Bank. 2016. Benin - Performance and learning review for country partnership strategy for the period FY13-17

⁴ Human Development Index

⁵ Programme d'Actions du Gouvernement : Actions 43 & 44 (PAG 2016-2021)

national rural water strategy that applied to the 2005-2015 period. A National Master Plan for the Development of the Rural Water Supply Sector (*Plan Directeur de Développement du sous-secteur de l'Approvisionnement en Eau Potable en Milieu Rural – PDDAEPMR*) was prepared to operationalize this strategy with support from the Water and Sanitation Program and finalized in May 2017. The total cost for implementing the PDDAEPMR was estimated at FCFA 314 billion (US\$560 millions). To implement this strategy, the GoB set up a dedicated executing agency in charge of delivering on this objective, the Rural Water Supply Agency (*Agence Nationale pour l'Approvisionnement en Eau Potable en Milieu Rural – ANAEPMR*) in 2017. The ANAEPMR is in the process of establishing new rural water services management models to be implemented in parallel with the execution of the investment program.

II. Sectoral and Institutional Context

3. ***Access to Water Supply and Sanitation (WSS) services.*** Benin has a population of 10.8 million inhabitants, of which 45 percent is urban and 55 percent is rural.⁶ While Benin met its Millennium Development Goals (MDGs) targets for access to improved water sources, with 81 and 71 percent access rates in urban and rural areas respectively, significant improvements will be needed to achieve the higher service levels and targets reflected in the Sustainable Development Goals (SDGs).⁷ Access to improved water sources in rural areas is provided through rural piped water supply systems, hand pumps or autonomous water points.⁸ According to JMP, only 30 percent of the rural population has access to piped water, compared to 57 percent for the urban population.⁹ The GoB monitors service coverage in rural areas based on an average number of people per water point and per household connection.¹⁰ As of 2017, average service coverage in rural areas stood at 42 percent countrywide, with high disparities across departments (departmental averages range between 32.6 to 61.6 percent) and even greater disparities between municipalities (municipal averages range from 9 to 71 percent).

4. ***Institutional framework for the WSS sector.*** The Ministry of Water and Mines (*Ministère de l'Eau et des Mines – MEM*) is in charge of formulating policy for the water supply sector. There are no formal regulation arrangements currently in place in the WSS sector. Water service arrangements differ between urban areas and rural areas.¹¹ According to the decentralization law, municipalities are responsible for providing water supply services on their territory in rural areas. They are operating under the control and with support of the General Directorate for Water (*Direction Générale de l'Eau - DG-Eau*) within MEM, which has deconcentrated services in operation throughout the national territory providing technical support to municipalities and theoretically in charge of monitoring service provision

5. ***Service delivery arrangements in rural areas.*** Municipalities provide water services themselves or can delegate this responsibility to a different entity, including a private operator or a community-based organization. Since 2007, municipalities have been encouraged to

⁶ Nouvelle Stratégie Nationale d'Approvisionnement en Eau Potable en Milieu Rural (SNAEP_MR) 2017-2030-Annex D page 41

⁷ WHO/UNICEF JMP (2017)

⁸ Approximately 620 piped rural water supply systems currently exist in Benin. They are generally made of boreholes pumping to an elevated storage tank connected to a network distribution system supplying household connections and standpipes. There are approximately 12,200 handpumps *Plan Directeur de Développement du sous-secteur de l'Approvisionnement en Eau Potable en Milieu Rural – PDDAEPMR* (2017)

⁹ WHO/UNICEF JMP (2017)

¹⁰ The coverage rate is estimated by the GoB based on 250 people per water point and 24 people per household connection

¹¹ Benin has 77 municipalities (*communes*) spread across 12 departments. A main town is the seat of each municipality (*chef lieu de commune*).

delegate water supply service delivery to private operators through affermage contracts. In 2017, approximately 55 percent of the 600 existing rural piped water supply systems were operated by a private operator. The affermage model did not bring the full expected benefits in terms of fostering professionalization and sustainability of service delivery, especially due to the following factors: (i) lack of capacity of the municipalities to design and supervise the implementation of affermage contracts; (ii) small scale of the private operators, which limits the extent to which they can attract professional staff and mobilize financing; (iii) difficulties encountered by municipalities to fulfill their financial obligations to rehabilitate and expand the water supply system as part of the affermage agreement. To address identified shortcomings with the affermage contracts and shift more investment responsibilities towards private operators, the Bank supported a pilot project to let subsidized concessions for 10 water supply systems to three local private operators. Under these contracts, private operators are expected to invest in system rehabilitation and expansion and can access public funds to offer subsidized household connections to their customers.¹² These 8-year contracts were signed in 2014 and are currently operating.¹³ The experience with implementation of these contracts has been contrasted, as some of the operators suffered from a lack of predictability in the transfer of public subsidies and invested less than was initially expected. Their operating performance has not been comprehensively tracked, although there is some anecdotal evidence that service quality has improved in their service areas.

6. ***Ongoing reforms in the rural water supply sector.*** In 2017, the GoB created the Rural Water Supply Agency (*Agence Nationale pour l'Approvisionnement en Eau Potable en Milieu Rural* – ANAEPMR) with the objective to expand access to water supply services in rural areas more rapidly and deliver universal access to rural water supply services by 2021. The ANAEPMR was established as an asset-holding company for rural water supply services: it is in charge of investments (to construct new infrastructure and rehabilitate existing ones), of contracting private operators and of monitoring service delivery.¹⁴ The ANAEPMR reports directly to the President of the Republic and its line Ministry is the MEM. The creation of ANAEPMR has created the need to redefine institutional roles and responsibilities in the rural water sector, an ongoing process.

III. Relationship to the CAS/CPF and Rationale for Use of Instrument

7. ***The Program is well aligned with the Country Partnership Strategy (CPS) for FY13-FY17***¹⁵. The Program will directly contribute to the CPS's Pillar I "Increasing Sustainable Growth, Competitiveness and Employment" and Pillar II "Improving Service Delivery and Social Inclusion". The design of the Program is also consistent with the conclusions of the performance and learning review of the CPS¹⁶.

8. ***Choice of Financing Instrument.*** The choice of the PforR instrument responds to the GoB's express request to (i) shift the focus towards results rather than investment execution; (ii)

¹² Funding for subsidies were provided by the Dutch Embassy (US\$ 1 million). However, a corruption scandal in 2015 related to Dutch water programs in Benin put those payments on hold.

¹³ World Bank (2015) *Benin – Innovative public private partnerships for rural water services sustainability – a Case Study*, by Sylvain Adokpo Migan with Trémolet Consulting.

¹⁴ Decree No 2017-039 of January 25, 2017.

¹⁵ Report No. 75774-BJ

¹⁶ Report No. 106266

progressively consolidate the execution of all rural water supply activities under harmonized country systems; (iii) take advantage of the preparation of the Program to identify opportunities to strengthen country systems; (iv) create financial incentives to address bottlenecks for the implementation of the Program. It is considered an appropriate instrument to support the proposed Program. The GoB has confirmed its strong commitment towards this instrument.

IV. Program Scope

9. ***GoB's planned investments for universal rural water supply.*** The National Master Plan for the Development of the Rural Water Supply Sector (*Plan Directeur de Développement du sous-secteur de l'Approvisionnement en Eau Potable en Milieu Rural – PDDAEPMR*) estimated investment needed to achieve universal coverage with improved rural water services.¹⁷ According to the Plan, universal coverage will be achieved when all rural population has access to water supply services within a 30 minutes round trip to fetch water. This will be measured based on the number of standpipes and household connections in service, using the assumptions that each public standpipe serves 250 people whereas each household connection serves 24 people. The PDDAEPMR also envisages that, by 2021, half of the rural population will have access water supply at home. Universal coverage will be achieved through the construction of new piped water systems, the rehabilitation or expansion of existing piped water systems as well as through the construction or rehabilitation of hand pumps. The latter are mainly considered to be a transitory solution towards piped water supply, as there is strong demand in rural areas for piped water supply solutions and for household connections in particular. Investments needed for providing universal access to water supply in rural areas were estimated at FCFA 314 billion (US\$560 millions) in the PDDAEPMR and will benefit to approximately 5,500,000 beneficiaries. Those investment needs are split between the construction of new piped water systems, rehabilitation or expansion of existing piped water systems (76 percent of the total of investment estimates) and the construction or rehabilitation of hand pumps (24 percent).

10. To ensure delivery of quality and sustainable services, the GoB also wants to implement reforms to strengthen service delivery arrangements through the ANAEPMR in charge of developing the sector's assets and delegating service delivery to private operators recruited under regional affermage contracts within an appropriate regulatory framework.

11. ***Description of the Program's activities.*** The Program activities are structured in two Results Areas. All activities will be executed by the ANAEPMR.

12. ***Results Area 1: Increase access to water supply services.*** Under this Result Area, the Program will support investments in piped rural water supply systems to rapidly expand access, at a pace not previously experienced in the country. This will be supported through:

- *1.1. Construction of new water supply systems*, including (i) the construction of production, pumping, treatment and storage infrastructure, distribution networks, standpipes, household connections, (ii) associated studies and works supervision. It is estimated that the Program will finance the construction of 270 new water supply systems. The production, pumping, treatment and storage infrastructure, distribution

¹⁷ There are 26,426 rural localities in Benin which are included in 74 of its 77 municipalities.

networks and standpipes will be constructed by works contractors. Responsibility for the operation of the new water supply systems will be delegated to the regional operators at completion of the works. The regional operators will be in charge of maintaining the networks as well as constructing new household connections as part of their performance-based affermage contracts.

- *1.2. Rehabilitation and expansion of existing water supply systems*, including (i) the rehabilitation and/or expansion of production, pumping, treatment and storage infrastructure, distribution networks, and the construction of new standpipes and household connections, (ii) associated studies and works supervision. It is estimated that the Program will finance the rehabilitation and/or expansion of 360 existing water supply systems. The responsibility for the operation of existing water supply systems in defined regional areas will be progressively transferred to the regional operators where there is no contract officially in place with a local private operator or at completion of those contracts. Once the responsibility of the operation has been delegated to the regional operators, they will be in charge of rehabilitating and/or expanding the production, pumping, treatment and storage infrastructure, distribution networks as part of their performance-based affermage contracts. Regional operators will also be in charge of constructing the new household connections and standpipes. The Program will subsidize the construction of new household connections as water service users will pay to the operators only a portion of the cost of these connections.

13. It is estimated that the Program will give access to piped water to approximately 1,660,000 rural people through the construction of 3,300 new standpipes and 34,500 new household connections.

14. ***Results Area 2: Strengthen service delivery arrangements.*** Under this Result Area, the Program will strengthen service delivery arrangements of the rural water supply sector through:

- *2.1. Establishment of performance-based contracts with regional operators*, including (i) preparation of a Framework Partnership Agreement (FPA) between the Government and municipalities, through which municipalities will delegate their responsibilities for the provision of rural water supply services to the ANAEPMR and will empower the ANAEPMR to award public service delegation contracts to regional operators; signature of the FPA is a pre-requisite for the signing of the performance-based affermage contracts; (ii) technical assistance for the preparation of the bidding documents and bidding process for the recruitment of regional operators that will enter into a performance-based affermage contract with the ANAEPMR for the operation of the rural water systems; the number of regional performance-based affermage contracts will be determined during transaction design and is expected to range between four and six; (iii) preparation of a Planning Contract between the Government and the ANAEPMR defining their multi-year commitments and obligations for the achievement of the development objectives of the rural water supply sector; (iv) definition of a tariff policy that will apply to the regional operators' performance-based contracts taking into account the Operator's Remuneration and affermage fees for the ANAEPMR and for the municipalities; the Operator Remuneration defined by the performance-based affermage contract will include incentives for reducing Non-Revenue Water (NRW) and

improving bill collection; (v) definition and implementation of regulatory arrangements by the DG-Eau; and (vi) a communication campaign among the Program's stakeholders to prepare and accompany the implementation of the above activities.

- 2.2. *Training to rural water supply professionals*, including (i) strengthening of SONEB's existing training center (CFME – *Centre de Formation aux Métiers de l'Eau*), which will be expected to increase its autonomy as part of the on-going reform of the urban water supply sector and whose mandate will be expanded to cover both urban and rural water sectors; and (ii) development of a specific curriculum to train local rural water supply professionals, including local affermage operators who will be co-opted by the new regional operators to expand their workforce so as to take-over the management of a rapidly growing number of water supply systems; training activities will aim at promoting the participation of women in the provision of rural water supply services.
- 2.3. *Capacity-building of the ANAEPMR and overall sector institutional strengthening*, including (i) the capacity-building of the ANAEPMR to fully discharge its functions of asset-holding company for rural water supply services, through the enhancement of its capacity in investment planning and execution, and in service delivery monitoring; (ii) the development of adequate information systems and publication of service monitoring reports; (iii) strengthening of the DG-Eau and DNSP's deconcentrated services that will support service delivery monitoring from the ANAEPMR. The Program will also finance the Program's Independent Verification Agent and financial audit, and operating costs of the ANAEPMR.

V. Program Development Objective (PDO)

15. *The Program Development Objective (PDO)* is to increase access to water supply service and to strengthen service delivery arrangements in selected rural areas.

16. *Key Results Indicators*. Achievement of the PDO will be measured through the following indicators:

- People provided with access to improved water sources (including female) [Number]
- Piped rural water supply systems managed by regional operators [%]

VI. Environmental and Social Effects

17. *Environmental and Social System Assessment (ESSA)*. An ESSA of the Program has been conducted by the Bank in close collaboration with counterparts to identify potential environmental and social impacts under the Program. In accordance with the requirements of Bank's policy, the ESSA assessed the national systems with respect to institutional capacity and performance, policy and regulatory bases, consultation mechanisms and Grievance Management to mitigate the impacts. The portfolio of the Program's activities to be undertaken was also analyzed to identify expected environmental and social effects. The ESSA was based on a review of the legal, regulatory and institutional framework related to environmental and social matters, broad consultation of the Program stakeholders, and information collected during on-site visits.

The assessment also drew on experience from implementation of safeguard instruments under other previous Bank projects in Benin.

18. ***Environmental and social risks.*** In terms of environmental and social risk management, the proposed Program is considered adequate for PforR financing. The Program will have limited environmental and social impacts. The Program is not financing any investment posing a potentially significant environmental and social risk and various negative, varied, irreversible and unprecedented negative impacts (e.g., Category A type projects).

19. ***Environmental and social impacts.*** The Program's supported activities are expected to have an overall positive effect that should be maintained over the long term, including: access to drinking water, less hardship in drinking water supply and time savings for women, reduced waterborne diseases, improvement of living conditions, fight against poverty, and reduction of unemployment. Adverse social impacts are anticipated to be moderate. Investments may include some forms, more or less temporary, of involuntary resettlement of residential or business households, acquisition of private lands or restrictions on access to local social and economic infrastructure. However, their negative social impacts will be time-limited and spatially restricted (due to the relatively low land requirements of the various investments planned under the program). Adverse environmental impacts, which are expected to be typical construction impacts that are site-specific and generally limited to air or water pollution, production and management of waste, use and disposal of hazardous materials, etc., will be minimal and easily mitigated. Other non-construction works could have some adverse environmental impacts or risks (on water uptake, water contamination, etc.), but adequate measures (including modeling studies) will be taken during the preparation and implementation phases.

20. ***Environmental and social Program systems.*** The Beninese system for environmental management systems is relatively comprehensive and is in many ways consistent with the core principles of Bank's PforR policy. Benin's legal framework and related action plans are conducive to environmental protection. Environmental management tools are aimed to address environmental aspects connected to development activities and investments. The ESSA analyzed the strengths, gaps, risks and opportunities of these systems against the core principles and key planning elements intended to ensure that PforR operations are designed and implemented in a manner that maximizes potential environmental and social benefits, while avoiding, minimizing, or otherwise mitigating significant adverse environmental or social impacts that are diverse or unprecedented

VII. Financing

21. ***PforR Program financing.*** The Program has an estimated total cost of US\$240 million. The World Bank will provide the majority of financing (US\$220 million) whereas the GoB will provide US\$20 million from its own resources. The total budget represents 42 percent of the total estimated financial needs to implement the PPDAEPMR.

Table 1: Program financing (US\$ million)

Source	Amount
Borrower	20
IDA	50
IDA Scale-Up Facility	170
Total Program financing	240

VIII. Program Institutional and Implementation Arrangements

22. *Institutional Implementation Arrangements of the Program.* The ANAEPMR will be in charge of implementing the Program, including the execution of all Program’s activities, the management of the environmental and social effects, monitoring & evaluation, handling result-based disbursements requests and Program’s financial reports consolidation. To perform its functions, the ANAEPMR will count on its internal structure and on a substantial deployment of technical assistance. Technical assistance provided to the ANAEPMR will be financed by different sources including the Program’s itself, Development Partners and by the PEPRAU.¹⁸ The GoB will also organize the delegation of responsibilities for the provision of water supply services in rural areas through regional affermage from municipalities to the ANAEPMR through the signing of a Framework Partnership Agreement. The ANAEPMR will prepare and let contractual arrangements signed with regional private operators.

IX. Contact point

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¹⁸ PEPRAU’s activities will not be considered as an expenditure under the Program.

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