



afrialliance socialinnovation

*Social innovation: Access to drinking water
in Guinea*

Name of Participant: Ahmed Amara KONATE

DESCRIPTION AND BACKGROUND

The water sector is supposed to meet social, environmental and economic needs. Access to drinking water is one of the central and predominant challenges of sustainable local development. The lack of a source of drinking water impacts many areas of daily life: health, education, food sovereignty, social peace, etc.(BAD, 2000). The increased demand linked to rapid population growth will weigh heavily on Africa's water resources. African countries are facing water stress or water scarcity and this phenomenon will affect twenty-five countries by 2025 due to the high population growth rate of African countries (BAD, 2000).

Guinea is characterized by heterogeneous soils and an abundant hydrographic network. However, access to clean water remains a problem for the majority of Guineans. The hydrographic network includes 1,161 rivers, grouped into 23 watersheds, 14 of which are international (Camara and Bangoura, 2017). According to Diallo(2015), renewable surface water resources, including the shared part, are estimated at 226 km³/year. Those in groundwater are estimated at 72 km³. The amount renewable annually due to rain is estimated at 38 km³. In urban areas, 86% of the water produced is distributed in Conakry. However, the obsolescence of the equipment, the deficit in electrical energy, the strong urbanization leading to a demographic increase in the population and the weakness of the production capacity do not allow ensuring a correct supply of drinking water in urban areas (Camara and Bangoura, 2017).

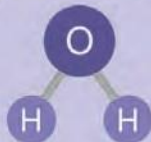
Groundwater is the main sources of drinking water for urban and rural areas (SEG, 2014). In 2014, only 52.4% of the rural population had access against 79.6% in urban areas. The rate of access to drinking water decreased from 67.8% in 2012 to 61.8% in 2014 (Camara, and Bangoura, 2017 and reference therein). This decrease is linked to the difficulties of maintaining drinking water access, especially in rural areas (PNDS, 2016). Despite the efforts made in this sector, there is still a big step to take. The objective is that every Guinean should have access to drinking water.

AfriAlliance
MOOC#2
Final
Assignment

Abstract

Guinea is characterized by heterogeneous soils and an abundant hydrographic network. However, Guinea access to drinking water is still far from the universality of access for all wanted by the Sustainable Development Goals (SDGs).

Despite the efforts made in this sector, there is still a big step to take. If the number of households with access to drinking water has experienced a significant increase during the last ten years, the objective is that every Guinean should have access to drinking water wherever he lives.



TECHNOLOGICAL SOLUTIONS

Ensure that the technologies adopted are well understood and easy to maintain.

HYDROPUR treatment station, designed and manufactured by ALTECH and 20 of which are already in operation in Guinea, will be set up to make surface water drinkable. This technological solution is for areas which are not accessible to the equipment which would allow drilling to be carried out, because they are very isolated and their access routes are too complex, or their hydrogeological characteristics do not allow drilling to be carried out with human-powered pumps. HYDROPUR installations occupy around 20 m² and combine treatment techniques by coagulation, flocculation, disinfection with bleach, then filtration on sand and activated carbon. Each of the stations can treat 1 to 2 m³ per hour, that is to say to supply 250 to 1000 people.



CAPACITY DEVELOPMENT



The main Government structures involved in the management of water sector lack relevant measures following sustainable water management. Therefore, they need transfer of knowledge, technology and expertise to enhance capacity building for sustainable water management and the sharing of research findings, lessons learned and best practices. Capacity building is necessary to address current and future issues.

Education in the form of training and awareness programs for the population on the use and good management of water resources is an essential element for improving health.

For good management of water points, the training of repairers in each zone for which it builds a water point. This ensures a certain sustainability of the water works. The communities are made responsible for these works and contribute to their maintenance. By managing the small breakdowns, they feel more involved.



SOCIAL INNOVATION



GOVERNANCE STRUCTURES

Knowledge of available resources, their quality and their variation over time and the state of other physical and socio-economic conditions is a fundamental prerequisite for rigorous planning and design of sustainable and economically efficient water projects. It is therefore essential to set up a mechanism for acquiring data and knowledge on the water sector at all levels institutional.

The Government of Guinea upholds the view that sustainable water resources management must feature high on the country's development agenda. The current reform process is therefore to provide institutions with renewed legal authority and technical and administrative instruments they need to manage the resource. The National Service Water Point(SNAPE) is responsible for rural water supply activities and for groundwater prospecting and evaluation. The National Water Service is responsible for water development plan of the country.

Guinea's water policy addresses two issues: Access to water, particularly for the poorest population groups, and development of village water supplies. Efforts to develop village water supplies up until now increased the number of water points. In coming years, the policy will call for continued infrastructure development, delegation of authority to SNAPE regional branches and the installation of antitheft devices to protect pumping equipment and greater responsibilities for local communities in infrastructure management. In medium and long term, water development will be based on a strategy for gradually reducing production costs and cutting the fees charges for water. This effort will be in addition to the subsidized rates currently charges for water. The national process is in convergence with the Economic Community of West African States (ECOWAS) regional water policy and Water vision.

BUSINESS ROAD MAP



By making it easier for communities to access water, women and girls can spend more time on other activities that will increase their economic and social power. These are literacy programs, vocational training and the promotion of income-generating activities, which aim to improve the quality of their lives.

Facilitate private sector participation and the implementation of cost recovery measures without prejudice to the poor's access to drinking water. Private sector participation in the water sector can be an effective way to mobilize investment and strengthen the autonomy and accountability of service providers. In principle, the private sector can participate in all water subsectors. Public authorities should encourage its participation in this subsector.

Guinea occupies almost all of the upper basins of the rivers which drain many countries in West Africa (Niger, Senegal, etc.), which makes Guinea known as the "water tower" of West Africa. However, the production of drinking water is insufficient to cover water needs.

Despite the enormous water resources and progress made to maintain the public drinking water distribution service in both urban and rural areas, people continue to experience difficulties in accessing a source of drinking water.

To meet the challenges facing the sector, the Government's strategic objectives are as follows: (i) provide the country with a national water policy; (ii) create a political, institutional and legal environment favorable to the development of the sector and initiate the reforms leading to better organization at the strategic and operational level; (iii) use innovative and sustainable approaches and technologies for water sector management and monitoring; (iv) develop and implement a capacity building program for the main structures involved in the management of the sector; and (v) set up an effective financing mechanism for the sector (the development of the Public Private Partnership and the promotion of south-south cooperation).

Camara, S and Bangoura, A (2017) Valorization of the water resources in Guinea for the sustainable economic and social development, J. Wat. Env. Sci. Vol. 1, (Numéro spécial COP22) (2017), 106-114

Diallo D. M. (2015). Présentation du processus de la gestion intégrée des ressources en eau (GIRE), Guinée, 2016.

PNDS (2016) Rapport Eau potable Conakry.
SEG (2014) Rapport annuel de la société des eaux de Guinée, Conakry.

Recensement General de la population et de l'habitat (2014), Conakry (RGPH).

BAD(2000) Politique de Gestion Intégrée des ressources en eaux 2000

<https://www.icrc.org>

<https://www.vergnet-hydro.com>

<https://afrialliance.org/knowledge-hub/afrialliance-social-innovation-factsheets/social-innovation-factsheet-11-monitoring>



 AFRIALLIANCE HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 689162