

Case study

Smart water solutions for villages, Ivory Coast

Project: UCD Smart Village Solution	
Where (country/City):	Ivory Coast
When and contract length :	N/A
Goal: Construction and/or operations?	Construction and technical assistance
Scope: Water/ Wastewater?	Water and Wastewater
Scope: plant and or network?	Plant
People served:	Inhabitants of rural communities or peri-urban areas in Ivory Coast (>500 people)
Briefly describe the project	
<ul style="list-style-type: none"> The Ivorian government has signed a contract with SUEZ for the supply and commissioning of 40 UCDs (Decentralized Compact Units) to ensure the supply of drinking water in 32 towns that had a water deficit, representing a capacity of 92,000 m3 per day. UCDs are patented prefabricated and standardized metal water treatment plants. They democratize the surface water (river, dams, lake) treatment and enable large drinking water production capacities to be implemented (up to 100m3/h vs. 10m3/h maximum). These UCDs are also implemented through SUEZ's Smart Village solutions to integrate all the essential services necessary to promote the socio-economic development of rural communities or peri-urban areas. This includes energy-autonomous drinking water supply chain, off-grid energy distribution, sanitation service and upgrading latrine sludge and agricultural organic waste to produce cooking gas. Thus, the Smart Village makes it possible to supply drinking water and energy sustainably and reliably where it is lacking and ensuring sanitation for all. It also helps women gain security, freedom, and autonomy by eliminating chores for water and wood in rural areas. Finally, it makes it possible to provide all essential services to settle rural communities and create economic activity. 	
Is this project unusual or different compared to others?	
Package of solutions (integrated value chain)	
What have been the major outcomes or success so far?	
<p>Nearly 300 UCD stations have been installed worldwide over more than 25 years and producing not less than 1,500,000 m3 of drinking water every day. The multi 40 UCD units has been delivered in less than 10 months. The UCD AERO-G has offered access to drinking water to 1.5 million people living far from the center of Abidjan, achieved a CO2 elimination rate of 87% and won the SUEZ innovation award.</p>	

Has “working in partnership” helped to make the project successful?	
A global and integrated approach was put in place (elaboration of an offer meeting the client's needs from a technical, contractual and financing point of view, dedicated team to define adapted solutions, training). Moreover, through diverse partnerships, Suez can provide different types of distribution systems from rustic water fountains to connected solutions (kiosks or individual counters) using mobile payment.	
Contribution to the United Nations 2023 Conference themes	
1) What Interactive Dialogue themes does the project contribute to?	
Water for Health: Access to safe drinking water, hygiene and sanitation	It provides long term and reliable drinking water where it lacks (UCD technology) and ensures sanitation for all (latrine systems coupled with a micro methanization plant).
Water for Development: Valuing Water, Water-Energy-Food Nexus and Sustainable Economic and Urban Development	With a reliable, clean, access to water, energy and latrines, the rural population benefits from a common base to develop a sustainable socio-economic environment. Moreover, latrines are coupled with a micro biogas plant to supply cooking gas and create value. Finally, SUEZ's Smart Village solution can include additional economic services (wifi, money transfer...).
Water for Climate, Resilience and Environment: Source to Sea, Biodiversity, Climate, Resilience and Disaster Risk Reduction	UCD smart village is an environmental-friendly solution. It reduces greenhouse gas emissions by 23%, especially thanks to the use of green energy during the day, supplied by photovoltaic panels. Moreover, SUEZ Smart Village is using surface water which is flowing to the sea, and which is constantly renewed: it is an alternative to the use of borehole water which can lead to scarcity and disappearance of water bodies.
What topic of the “Global Acceleration Framework” does the project contribute to?	
Optimized financing – did you improve targeting or utilise existing resources more efficiently, or mobilise additional funds	UCD technology represents an attractive solution for impact investors and green / social funds and provides for a better impact optimization of investment portfolio.
Improved data and information – how did you use data and information to improve the service and increase accountability and transparency	UCDs are connected to download operational data and provide technical assistance and after sales services or operate.
Capacity development - did you create new jobs or developed local people's skills and talents?	From the holistic solution to the specific compact unit, our team provides a tailor-made support. Training of local teams by SUEZ teams for rapid and efficient handling of the facilities.
Innovation – how have you used innovation and technologies to make the service better?	UCD technology is a sustainable, resilient, and clean technology that answers the environmental and social challenges of our century. For instance, SUEZ UCD solutions have received the “Solar Impulse Efficient Solution Label”, designed to highlight existing techniques which are both clean and profitable and which have a positive impact on the quality of life, and the UCD AERO-G was awarded the SUEZ Innovation Trophy.

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Governance – what have you done to maintain and strengthen governance around the project?	UCDs technology is a risk averse solution (pre-assembled, fully tested before delivery, delivered and commissioned quickly, limited civil works, enhanced manufacturing control, reliable and robust), which strengthens governance
Has the project in any way supported the development and involvement of young people and/or supported gender equality, and if yes, how ?	
In rural communities, women undertake daily the water and wood duty (for cooking). These duties are sometimes unsecure and above all time consuming. They prevent both little girls and women to respectively go to school and create economic activity. In this context, SUEZ's Smart Village solution helps women gain security and autonomy by eliminating chores for water and wood in rural areas.	