

**Investing in essential
services in rural areas**



UDUMA is an impact-driven enterprise improving access to essential services in rural and remote areas through an innovative business model

Rural and remote areas are becoming increasingly **attractive markets** as economic growth and demographic developments are spurring demand for **essential services such as water, energy and internet**.

Traditionally, entrepreneurs and investors have however neglected these underserved markets, assuming that services requiring considerable investments are only profitable in areas with adequate infrastructure and high population density.

UDUMA is reversing this assumption.

Bringing together local public authorities, international donors and private investors, UDUMA forges partnerships to provide basic services **cost-effectively** in even the most remote, widely dispersed areas. Through its innovative business model based on economies of scale and technological advancements, UDUMA is providing traditionally deprived regions with clean drinking water, improving the lives of hundreds of thousands of people all whilst ensuring a healthy return on investment.



“UDUMA is creating a new market. Capitalizing on technological advancements, it is collecting data and revenues efficiently in even the most dispersed remote areas. Delivering essential services to rural populations in Africa is becoming a viable business and UDUMA is seizing the opportunity”

465 million

people in rural Sub-Saharan Africa
without access to basic **WATER** services yet

480 million

people in rural Sub-Saharan Africa
without access to **ELECTRICITY** yet

**a potential market of
10 billion euros**

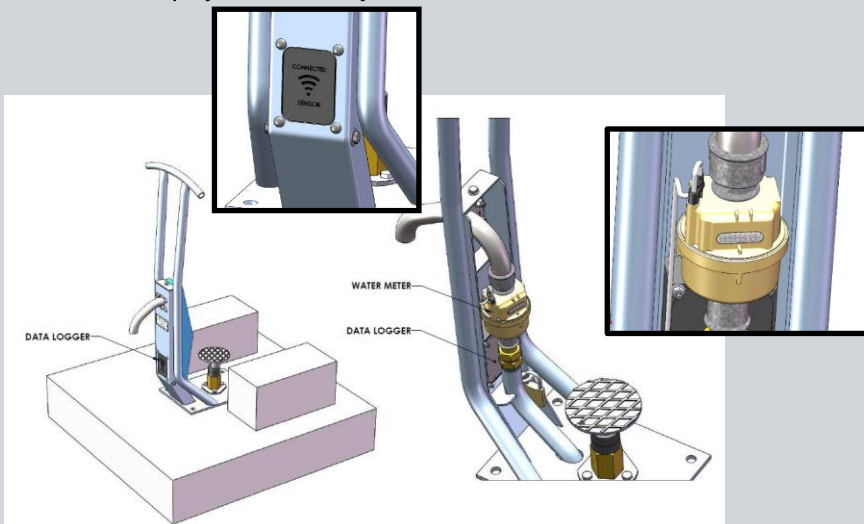
UDUMA proposes operation and maintenance schemes for rural water supply infrastructure, ensuring the modernization of pump equipment and a high-quality service for its users

Sustainable solutions for managing rural water supply

Based on the 40-year experience of sister-company Vergnet-Hydro in the domain of rural water supply, UDUMA proposes a number of solutions to improve management of rural water points and public access to potable water.

O&M of manual pumps

Local communities can delegate the operation and maintenance of their manual water pumps to UDUMA, which modernized the pumping equipment, guarantees the quality of water and ensures a continuous service with a minimum number of breakdowns. In exchange, users pay an affordable fee, using a cashless payment facility.



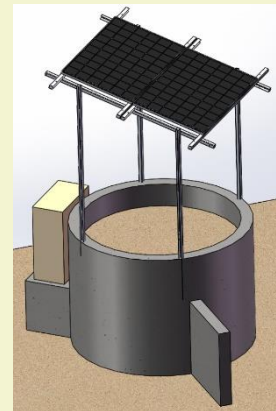
O&M of small-piped water networks

UDUMA operates and manages small and medium-sized water networks in rural and semi-urban areas. UDUMA promotes a Design-Build-Operate approach, for which it collaborates with Vergnet-Hydro, to ensure long-term sustainability of the pumping equipment.



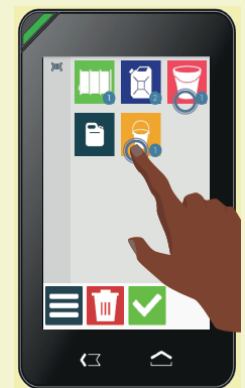
Water – Energy nexus

Addressing the needs and aspirations of Africa's rural populations, UDUMA offers a combined water-energy service, through which the traditional water points will be transferred into local hubs with affordable essential services, including manual or solar pumped water, lightning and recharges of electronic equipment



Solutions for SMART water services

UDUMA provides different tools to facilitate O&M of rural water equipment, including cashless revenue collection systems, digital water quality testing solutions, soft- and hardware for remote monitoring of water consumptions and for infrastructure inventory and mapping purposes.



UDUMA services

Investing in UDUMA is investing in IMPACT

Through UDUMA services, hundreds of thousands of people in traditionally disadvantaged regions can finally benefit from clean drinking water and reliable energy sources. UDUMA is the only organisation providing such services with a long-term perspective.

- 💧 **Universal access to safe water:** rural populations benefit from a reliable source of safe water at an affordable price, genuine contribution to SDG 1 and SDG 6.
- 💧 **Health benefits for the most vulnerable:** safe drinking water significantly reduces the contraction of waterborne diseases.
- 💧 **Adaption to climate change:** ground water sources are little influenced by climate change and their sustainable exploitation therefore contributes to community resilience strategies.

HOW IT WORKS

UDUMA proposes different operation and maintenance (O&M) models for rural water supply infrastructure. UDUMA modernizes water pumping equipment, guarantees the quality of water and ensures a continuous service with a minimum number of breakdowns. In exchange, users pay an affordable fee, using a prepaid cashless payment facility.

- 💧 **Poverty reduction:** the UDUMA model provides cash revenues for one woman on each water point.
- 💧 **Sector transparency:** water consumption data is made available to the public. The closed cashless payment system minimizes corruption and clientelism.

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“Being one of our most precious global public goods, *access to safe drinking water* is a fundamental right. Access to safe water and affordable energy are key pillars of the UN Sustainable Development Goals.”

1. An affermage contract with local public authorities grants UDUMA the right to operate water services in selected areas.
2. UDUMA secures funding from public and private sources to finance the modernizing of the pump equipment.
3. Local pump caretakers and mechanics are recruited and receive on-the-job training.
4. The UDUMA mechanics guarantee a maximum 72h downtime of the equipment and do preventive maintenance.
5. Mobile technologies are employed to generate data on pump functionality and water consumptions.
6. A prepaid cashless payment facility based on NFC cards and POS terminals ensures revenue collection.
7. Users pay for the water services by volume, representing a fraction only of their income.

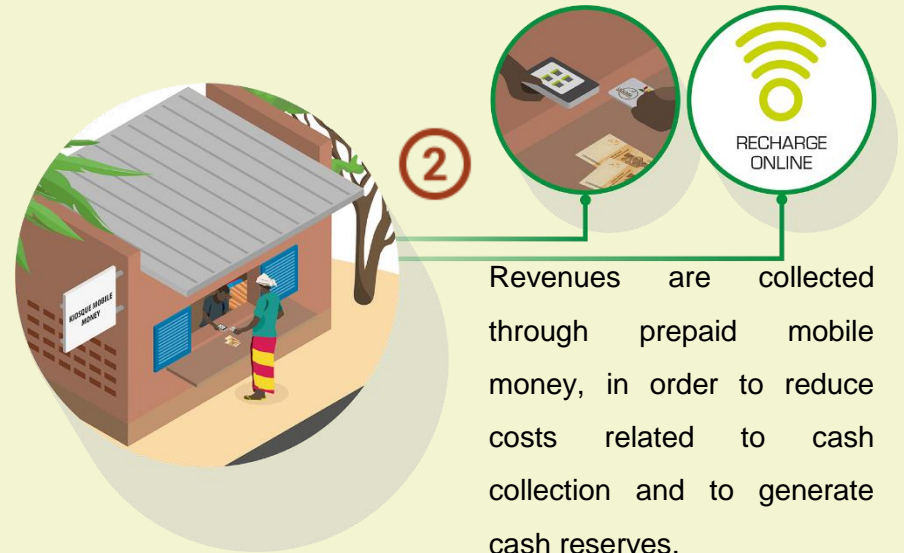
Transforming traditional distribution networks through innovation and technology

The affermage contracts for public water services put UDUMA in charge of a dense network of village water points. These are often located in the most populated settlements, visited by the entire population on a daily basis. **The UDUMA model** is capitalizing on the potential offered by such public gathering spaces by aligning its distribution network to it.



1 **The UDUMA model** is based on establishing local management teams which ensure both maintenance of equipment and the flow of data. One mechanic covers approximately 50 sites.

Users pay for the water and energy services through their personal NFC card.



2 Revenues are collected through prepaid mobile money, in order to reduce costs related to cash collection and to generate cash reserves.



4 Sales, production and equipment status data are generated on-site and uploaded to the cloud.

Distribution network

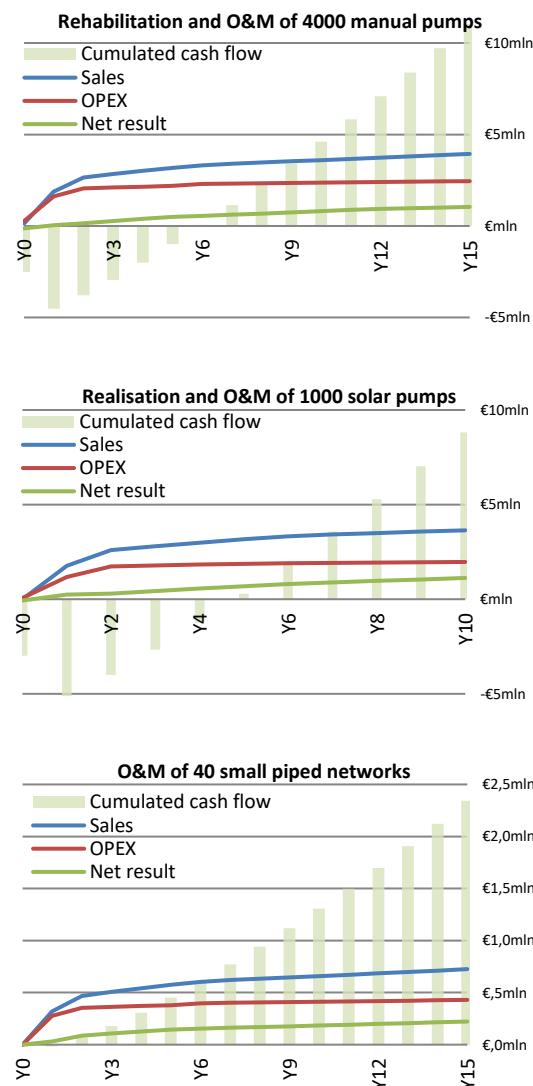
A business model allowing private investors to venture into rural Africa

UDUMA offers public and private parties the possibility to invest in high-impact rural water and energy supply projects in Africa – in exchange for an attractive return on investment. Preferred financing structures include **project equity (SPV)**, **senior debt** and **grants**.

Funds are primarily invested in the modernization of water infrastructure managed by UDUMA. CAPEX for an affermage contract for manual pumps amounts up to €4.000 per water point.

Operating costs. The majority of operating expenditure is relative to turnover realized, such as the remunerations of the mechanics and pump operators whom are paid a percentage of the sales. Other OPEX stem from the cashless payment system and periodic water quality analyses.

Revenue generation. The UDUMA model collects revenues directly from the end users of the water and energy services provided. Tariffs are set in agreement with the contracting authorities and generally represent less than 2% of households' income. The average annual turnover per water point is €800.



Different investment scenarios.

A 15-year project for rehabilitation and O&M of **4.000 manual pumps** with 50% public subsidy has an internal rate of return of 15%. Total cost: €14,2 mln.

- Total private capital invested (50%): €7,1 mln
- Number of clients: 1,6 mln
- Annual turnover: €3-4 mln
- Positive cash balance achieved after: 6 years
- 15-year cumulated cash balance: €9,4 mln

A 10-year affermage contract for water and energy services with 100% private investment in **1.000 new solar powered pumps**.


- Total private capital invested: €5,9 mln
- Number of clients: 400.000
- Annual turnover: €3-3,6 mln
- Ten-year cumulated treasury: €7 mln


A 15-year O&M contract for **40 small piped networks**.


- Total private capital invested: zero
- Number of clients: 300.000
- Annual turnover: €500-750k
- Net annual profit: €150-200k
- 15-year cumulated cash balance: €2,5mln

In order to achieve its expansion objective of servicing 5 million people by 2023, UDUMA is looking to raise a total of €10 million in project finance in the coming years.

1. Summary

 **Sector:** Water supply


 **Activity:** Innovative rural water supply services


 **Mission:** Providing rural populations with a sustainable access to safe drinking water, at an affordable price. Water for life!


 **Established:** 1988 (manufacturing of pumping equipment)


 **Country:** France


 **Geographical market:** rural West-Africa


 **Legal structure:** Odial Solutions owns Uduma and Vergnet Hydro, both limited companies.

 **Employees:** 45

 **Development stage:** Expansion

 **Current deployment:** +100 000 pumps

 **Target deployment:** 5mln people serviced


 **Technology:** Connected smart water pumps, water-energy nexus, cashless payment system, data treatment


“UDUMA brings together water users, local authorities, international donors and the private sector to setup an innovative PPP benefiting all parties”


2. Financing structure Group

Turnover 2017	Net profit 2017	EBIT 2017	Debt / Equity	Funding needs
€8,2 mln	€377k	€806k	0,5	€40 mln


Funding needs are expressed as an overall total needed for investing in different projects in 3-4 West-African countries.

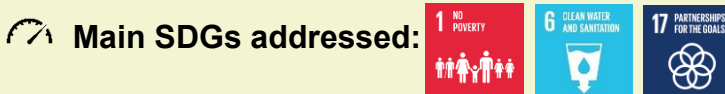
 **Current type of funding:** Debt


 **Investment project:** Help finance CAPEX for first rehabilitation operations

 **Preferred financing:** Project Equity (SPV), debt


3. Impact

 **Impact opportunity:** Providing safe drinking water to hundreds of thousands of people on the long term (*for example, 560.000 people during 15 years in Mali*)

 **Main SDGs addressed:**

 **Human right check:** Independently assessed by Geneva-based Waterpreneurs

5. Local enabling environment

 **Key partners:**

Private sector: Local installation companies

Public sector: Local government e.g. municipalities and Ministry of Water International community e.g. Dutch MFA, UNICEF

Civil society: International NGOs e.g. Akvo Foundation and SNV

Local civil society e.g. trade unions, women's groups

5. Corporate Social Responsibility

CSR will be at the heart of UDUMA's strategy for the period 2018 to 2023. The holding company of UDUMA, Odial Solutions, recently embarked on an ambitious roadmap to integrate the CSR in the operational processes of its subsidiaries, following the 10 principles of the United Nations Global Compact, to which it is a signatory.

UDUMA's daily concerns consist of meeting the water users' needs, keeping employees and partners committed, strengthening our reputation and improving efficiency. Putting in place a CSR strategy enables us to tackle these challenges. The following domains will receive particular attention:

Labour conditions: continuous investment in capacity strengthening and well-being of the 1500 UDUMA field-staff

Good governance: a focus on enhancing transparency of UDUMA operations and the rural water sector in general, through open data.

Environment: encourage the development and diffusion of environmentally friendly technologies such as our manual pumps and solar-pumps.

Business summary

Delivering essential services to deprived population attracts interested parties from across the globe

UDUMA expands its business supported by a diversified network of financial partners, sector expert organizations and public authorities. Together, we can contribute to a world in which rural populations have access to essential services and can aspire to sustainable local development.

UDUMA S.A.S.

UDUMA is a subsidiary of **Odial Solutions**, which traditionally manufactures and installs its **Vergnet-Hydro** manual pumps, known for their quality and durability. Over 100.000 Vergnet-Hydro pumps have been sold worldwide through a network of thirty subsidiaries and partners. Odial Solutions is mainly stock owned by Demeter partners, Sofimac partners, Nass & Wind, BPI, CFL and the Odial employees.

Under the banner of **UDUMA**, Odial is now venturing into operation and maintenance of these water infrastructures.

UDUMA S.A.S. is a simplified joint-stock company registered in 2015 under French law and wholly owned by Odial Solutions. The latter employs 45 people and has an annual average turnover of €10 mln with solid EBIT margins.

DEAMETER
PARTNERS

bpifrance



SOFIMAC partners
capital investissement

N&W GROUPE
NASS & WIND

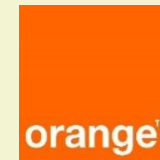

LA COMPAGNIE FINANCIÈRE DU LION

“The private sector has a central role to play. The innovations, technologies and global reach of business can galvanize our work for the Sustainable Development Goals. The investment community is also an indispensable partner; pension funds, institutional asset managers, banks and insurers can help unlock the capital we need.”

António Guterres

Secretary-General of the United Nations

Partners



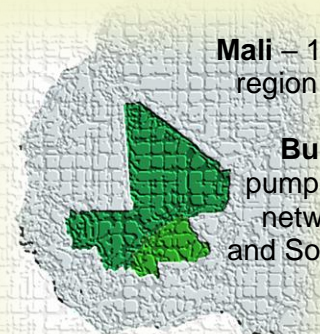
akvo.org



Current UDUMA projects

Mali – 1400 manual pumps in the region of Sikasso (started 2017)

Burkina Faso – 200 manual pumps and 2 small piped water networks in the Central region and South-West Cascade region (started 2015)



Partnerships

“Prospects for delivering essential services in Africa’s rural areas are infinite. Tapping into this underserved market means addressing 650 million potential clients and contributing to real human development. Over 1 million hand pumps across Africa are waiting to be regularly maintained... at least as many villages aspire to obtaining stable energy sources and internet connexions. What’s next?”



6, rue Lavoisier – 45140 Ingré – France
Tél. : + 33 (0)2 38 22 75 10 • Fax : + 33 (0)2 38 22 75 22

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