

The POINT OF VIEW of a major player in OUTSOURCED MANAGEMENT in Burkina Faso

For 8 years, the ADAE (association for the development of water supplies) has supported the management of around twenty rural water networks in Burkina Faso.

The President of the ADAE, Mamadou Diallo, with unique experience, analyses the current context in that country:

One of the objectives of the reform of the management system of hydraulic infrastructures in rural and semi-urban areas in Burkina Faso is to ensure the involvement of private operators in the operation and maintenance of these infrastructures. From this standpoint, the basic hypothesis of the reform is the existence of sufficiently attractive profitability conditions to ensure this involvement over time.

This orientation should be viewed alongside the process of decentralisation which transfers the powers in the matter of creating and managing drinking water supply infrastructures to the local authorities. Under the terms of law n° 02-2001/AN dated the 8th of February 2001

which forms the blueprint law covering water management in Burkina, these local authorities manage the public service of water distribution, themselves or under their responsibility, as a public corporation or in the framework of a management or administration contract (either by means of a concession, or by means of a lease).

Experience has shown that the feasibility of outsourced management is largely based, on the one hand, on a realistic analysis of the economics of the drinking water public service in these localities and, on the other hand, on the implementation of a sufficiently flexible contractual framework that can adapt to the marked weakness of the project management capacities of the local authorities, particularly the rural ones, in Burkina Faso and a number of sub-Saharan countries.

These two parameters are essential for promoting a realistic scheme for involving private operators, with a view to ensuring the durable operation of the equipment. In return, the major challenge for these operators is to find adequate management models.

Mamadou DIALLO
President of the ADAE
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VERGNET HYDRO has moved

2007 saw significant changes at VERGNET. In June, the group was successfully quoted for the first time on the stock exchange, on the Euronext Alternext market.

In the wake of this initiative, the "wind turbine" business left its premises at Saran in order to install itself in a new more spacious and better equipped factory at Ormes.

VERGNET HYDRO then took over the old premises at Saran. To meet the growth in demand effectively whilst at the same time guaranteeing the quality of the products and the respect of the lead times, the production and logistics part of the "water" business, which was previously

handled at VERGNET SA, has been reintegrated within VERGNET HYDRO.

Several new collaborators have joined the team: Hélène Valade in the Purchasing Department, Joël Ménager in the Technical Centre, Erick Houssier (formerly with Vergnet SA) as Workshop Manager, Olivier Chejmo at Inspection-Acceptance, Cédric Dauvillier at Assembly.

We have now gained operational autonomy which will enable us to deal with the growing market whilst at the same time improving our responsiveness and maintaining the quality of our products.



1 Jean-Michel CHABRIAIS, Business manager 2 Véronique VAN HULLEBUS, Assistant 3 Etienne DECHERF, Project manager 4 Cédric DAUVILLIER, Mechanic 5 Thierry BARBOTTE, Managing director 6 Corinne PELLÉ, Assistant 7 Arnaud FRIEDMANN, Project manager 8 Frédéric ARESTÉ, Project manager 9 Joël MENAGER, Technical draftsman 10 Marc VERGNET, Chairman 11 Hélène VALADE, Purchaser 12 Olivier CHEJMO, Controller 13 Romain DUBREUIL, Project manager 14 Brigitte GORONFLOT, Assistant 15 Erick HOUSSIER, Workshop chief 16 Dominique BOUZERMA, Project manager 17 Stéphane DELAMARE, Technical pole chief 18 Jean-Charles COLLIN, Accountant.
Not on the picture: Jean-Michel COUSSEAU, regional director posted in Mali



The Vergnet pump is praised in the 100th Sahel letter issue. "Water for true!" ... and for a yet a long time!

PHOTALIA is born!

It's the brand new company in the VERGNET group specialising in photovoltaic solar energy in Africa and fitting into the VERGNET culture completely: a sustainable development initiative to provide the African rural world with water and power.

It was born under a particularly favourable sign. Photovoltaic solar energy has experienced a spectacular boom. In all of the developed countries the amounts of power connected to the grid have grown exponentially. We used to talk about megawatts but now we talk about hundreds of megawatts. Photovoltaics are growing by about 40% a year. This growth makes the technologies develop very fast and lowers the prices.

Africa will be able to profit from it. PHOTALIA is basing its development on this new economic reality and on the group's very strong after sale service presence in Africa and above all on the fact that "nature abhors a vacuum".

In practice, the photovoltaic solar energy manufacturers and assemblers prefer the very large markets of the northern countries. They therefore concentrate once again on their original business, which is the manufacture of modules, and an opportunity arises in Africa.

Faithful to their projects and culture, PHOTALIA and the VERGNET group take up the challenge of replacing them and find a real opportunity with the BP Solar group, which wants to maintain a presence on the continent, without intervening directly.

Deploying the group's usual policy of innovation and imagination, PHOTALIA has become involved in benefiting from the technological developments in order to offer African rural development new pumping tools that are simpler and perform better, new rural electrification systems, new management systems, for pre-payment of water and power, new sea water desalination systems, etc...

It's the start of a great adventure!



From left to right:
Tanguy CADIN, Technical pole chief,
Marc VERGNET, Chairman,
Franck BERNAGE, Managing director

VERGNET HYDRO newsletter

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Editorial

For many years now, we have chosen to take up the challenge of drinking water supplies in the rural world. From the start, we directed our efforts towards Africa, then suffering from the droughts of the 70s.

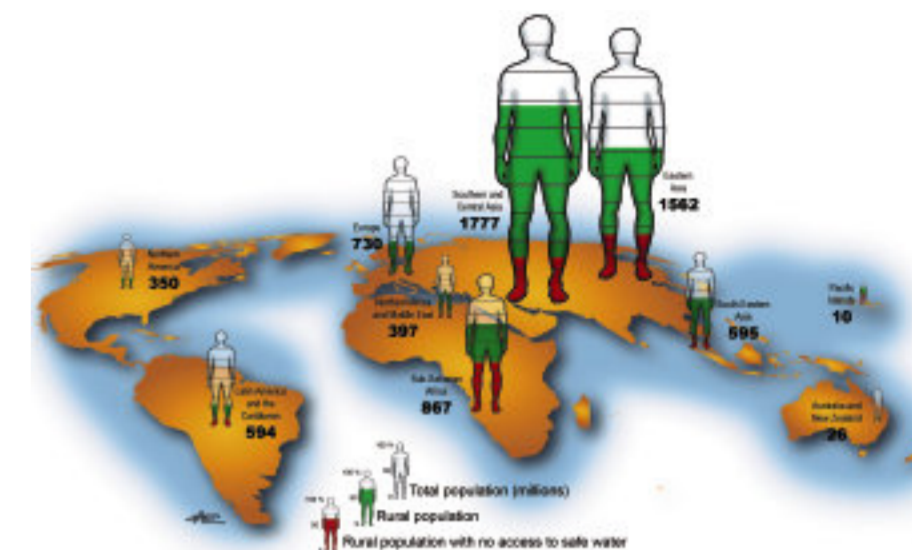
VERGNET pumps, installed on boreholes and wells, have enabled the supply of the isolated rural areas, the most severely affected, where the largest part of the population is living in these countries.

Today, even if Africa remains a priority, other continents suffer from a shortage or lack of drinking water. Whether it is a result of climate changes which generate uncontrollable natural phenomena or pollution directly linked to human activity, good quality water is getting rarer in all parts of the world.

This situation is at the origin of the explosion of demands from rural populations for the right of access to drinking water. In Africa, Asia and Latin America the voices of "unconnected" are making themselves heard more and more.

The Millennium development goals program must answer these expectations.

Faithful to its initial mission, VERGNET HYDRO is involved in proposing solutions, alongside other players in the development field. We have



Sources: UN Statistics division, WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation

started to enlarge our area of activity to the whole of Africa. We will go further, to Latin America and Asia.

Simultaneously, in order to satisfy all of the potential demands, VERGNET has decided to add the photovoltaic solar power component to its range of products. PHOTALIA, a 100% subsidiary of the group, has been founded for this purpose. By the end of 2007, a complete range of systems will be proposed.

Offering long lasting solutions for supplying rural areas and small centres with drinking water is still more than ever VERGNET HYDRO's main concern.

Thierry BARBOTTE
Managing Director

We should ask two questions when we assess programs:

- what capacity do rural communities have for managing the water service?
- who are the local players that may contribute their management skills, at technical level and in terms of logistics?

On the basis of the answers to these two questions what can then be proposed is not a single scheme of an omnipotent agent but a form of collaboration between the rural local authorities or inter-authority groups and private, voluntary group or public players who are delegated all or part of the water service according to their level of competence.

VERGNET HYDRO is now becoming involved alongside these players. And not in their place, because it is a question of training local business people in operating drinking water supply systems, local authorities in project management and water supply point managers in promotion with their "clientele". For all of this to work, we must, of course, guarantee the quality of the installation and the after sales service.

There have been various experiments that can be used as inspiration for new projects. Of course there are risks of failure but there are also chances of success. What we have to do, as players in the drinking water field, is to realise that maintaining the status quo may prevent failure but cannot bring success and that we should not be scared of turning over a new page.



The outsourced management of small towns WATER SUPPLY systems

Outsourced management: what is it?

How can we ensure the management of water pumping, storage and distribution infrastructures in the middle of the Sahelian desert, in the villages of south-east Asia or in island environments? Many different situations and behaviours in terms of a resource that has always been rare and precious in some places but which is abundant but badly controlled in others, and is also becoming rarer in other places...

Water management in rural areas has been at the heart of VERGNET HYDRO's preoccupations ever since it became aware that installing water pumping and distribution systems was not enough to ensure durable access, i.e. almost from the moment the VERGNET pump first made its appearance. Let's be clear: drinking water cannot do without neither national management of resources, essential for controlling the use of the water resources and ensuring the fairness of distribution, nor making the users responsible in terms of these exogenous infrastructures that they cannot operate on their own. To find the link between

these two levels, the political world and the village microcosm, we have to look to professional management of the systems. This is outsourced management.

People are talking about it... But why does nothing get done?

In reality, simply mentioning "outsourced management" frightens a good number of players in the drinking water sector very simply because it is wrongly associated with the idea of "privatising public property", whereas, on the contrary, it should be considered as the definitive, and therefore sustainable, acquisition of a collective tool. As funding agencies, politicians and business people from the North, we are still asking ourselves: "have we got the right to get involved in the method of managing village water supplies?" In reality, as soon as we set the Millennium goals and with every public penny spent in the sector, we do not have the right but indeed we do have this duty.



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All design, fabrication, distribution, installation and maintenance services for VERGNET HYDRO hydraulic systems are ISO 9001 version 2000 certified.



Vergnet Hydro widens its field of action

At VERGNET HYDRO, geographical diversification is not an empty word. At start of 2006, we launched commercial operations outside our traditional area of activity. We took the decision to start by exploring Africa, which is dear to us because it is part of our history. We looked towards English and Portuguese speaking Southern Africa (Angola, Zambia, Malawi and Mozambique). Our first contacts enable us to envisage repeating the good results acquired from the experience in Western and Central Africa in this part of the continent.

We then decided to cross the Atlantic Ocean destined for Peru. There, on the coastal plain and the Andean part of the country, in particular, many people are confronted with the problem of access to drinking water every day. VERGNET HYDRO can provide these rural populations with long lasting solutions. The same situation can be found in Colombia, Equator and Bolivia.

Asia, with its large population, also faces serious drinking water problems, on another scale than Africa. We went to the Philippines and Indonesia where the solutions that we propose were received favourably.

Of course, we now have to convert these first results into realities. We have already identified local partners who will help us to succeed.

VERGNET HYDRO's experience and the quality of its products, its historical approach to the maintenance of human powered pumps, its wish to develop "turnkey" solutions that include the management of systems in the long term, are all elements that enable us to propose convincing solutions that are suitable for the diverse local problems.



The first pump in Peru (with our local partners Amador Del Aguila and Olivier Leseul)

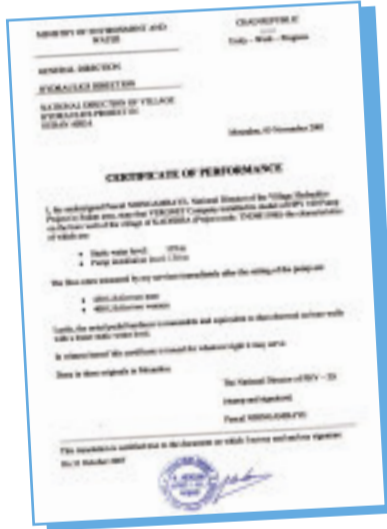


Hydro India discharge pump in Zambia



Fair in the Philippines

Very great depth in rural water supply



The currently accepted classification for human motricity pumps (HMP) talks about very great depth for pumps operating beyond 40 m (131 ft), considering therefore that after 60 m (197 ft), there are no feasible human powered pumps. Where does this leave

villages where the water supply is at a lower level? Should they be excluded from rural water supply programs?

Certainly not! Several manufacturers, including VERGNET HYDRO, have developed human powered pumps that can ensure a supply of drinking water for depths of 60, 80 (262 ft), or 100 m (328 ft) and even deeper.

The HPV100, developed in 1992, meets the following three constraints:

- Installation up to 100 m (262 ft),
- Flow greater than 500 l/h (132 gal US/h),
- Fits into the standard range of hydropumps (easy to install and maintain, reliable, wearing parts shared with the other models).

Though there are several models of pumps for levels between 40 (131 ft) and 60 m (197 ft), the evidence shows that today the HPV100 is the only pump whose operation has been pro-

ved on a large scale and over time at depths beyond 60 m (197 ft).

More than 4,000 units of the HPV 100 have been sold so far to meet the daily needs of thousands of users. It is commonly installed in Benin and Niger and specifically in other countries.

A world record: In Chad, VERGNET HYDRO has installed a HPV 100 at 130 m (426 ft) in a borehole with a dynamic level of 119 m (390 ft)! This pump, installed in 2004, works to the great satisfaction of users, thus proving that the HPV100 is a technical response for very great depth which enlarges the field of application of rural water supply programs.

Vergnet HPV60 & Hydro India 60

The discharge pumps in the service of bush schools and health centres

The unique design of foot and hand operated Vergnet hydropumps means that they can supply raised tanks without using the not very long lasting packing glands inherent in pumps with rods.

The water tower kit, screwed onto the Vergnet hydropump's lift, can supply either a bucket directly or a water tower. The maximum height for raising the water is 10 m (33 ft) for a dynamic water level in the borehole of 50 m (164 ft) and a flow of about 850 l/h (187 gal US/h) (1200 l/h (264 gal US/h) for a total discharge head of 40 m (131 ft)).

Optionally, the water tower kit can be fitted with a diaphragm that enables the pump to supply a bucket and a water tower simulta-

neously. This unique solution enables users to contribute to the collective needs of the water tower at the same time as satisfying their personal needs.



Hydro India in Angola (region of Huila)



HPV 60 in Malawi



In Angola, fountain supplied by a tank filled using the hydropump



Haiti: 2 years after the first projects, where have we got to?

The pilot village water supply project announced in Vergnet Hydro newsletter n°2 including the first wind powered generator for pumping when the wind blows is continuing on schedule.

It has now been totally absorbed into the Drinking Water and Sewerage sector reform initiative launched by the MTPTC (Transport and Communications Public Works Ministry) and the SNEP (National Drinking Water Service). The project has even taken on an added dimension, due to co-financing by the European Delegation in Haiti which is added to that of the World Bank. All of these institutions will be attentive to the management model that will set up a partnership between the village committee and a private operator.

Furthermore, autumn of 2007 saw the second anniversary of the installation of VERGNET hydropumps in Haiti. The ratio of pumps in perfect working order has reached 95% and the installers-repairers, far from complaining about the few repairs that they provide, want to actively promote them.

VERGNET hydropumps installed in 2005: 63
Financing: FLM, ACF, Solidarités
Ratio of pumps in working order in 2007: 95 %

Corrosion

Corrosion, the result of the action of water on certain metals, is well known by all of the players in hydraulics and is often wrongly considered as an inevitable threat for the equipment, in particular human powered pumps.

Not only is corrosion the cause of break-downs of the pump but its by-products may make the taste of the water from the borehole or well unacceptable. This phenomenon has led to the abandon or restricted use of the water resources polluted in this way.

Yet there is a simple solution for preventing any corrosion problems: using stainless materials that guarantee satisfactory longevity



when faced with this problem. In particular, everywhere where the use of a specific grade stainless steel is specified no case of corrosion has been found.

Other materials can be used to make parts of human powered pumps: plastics, metal alloys etc... It is important to check that all of these materials resist corrosion by getting hold of their material certificates.

The surface treatment of steel, such as hot galvanisation, is certainly less expensive but has proved to be insufficient in the long term: the quality of the water pumped, a knock during transport, alternating exposure to air and water lead very quickly to the appearance of rust, which may go as far as a breakage, threatening the village's water supply and leading to replacement costs that are often too high for the users.

True, the use of stainless steel is an extra cost but this is largely counterbalanced by the resulting longevity of the equipment and the guarantees then provided by the manufacturers. VERGNET HYDRO has always guaranteed its pump bodies (stainless steel) and command and discharge pipes (columns made of PEHD) against any breakages due to corrosion over its whole range of pumps.

¹ There are different types of stainless steel and the obligation to use 304L stainless steel combined with minimum thicknesses (12 mm diameter for the rods, 2 mm for the columns, 1.5 mm for the pump bodies etc...) is the only guarantee of correct resistance over time.

Niger: the KODO water supply system: after 1 year's operation, the first results are encouraging



Diesel consumption*	958 L
Running time of the GU*	798 h



* in 12 months

Jacques Komoye, Director of Emapech, is in charge of the leasing of the Kodo water supply system from September 2006 to 2013

The Project's main lines:

- Financing: COOP92
- Project owner: Commune of Fakara - Dosso Region - NIGER
- Delegated project owner: Kodo AUE
- Turnkey project (1), carried out by the Vergnet Hydro / Emapech group of companies

Volume of water in 12 months	m ³
Produced	5,287
Sold	5,277

Specific context of the village of KODO:

- Located next to national road 1,
- Water supply system does not face competition from another competitive water resource,
- It is the home of the main market of the commune of FAKARA.

Results of activity	KFCFA
Turnover in 12 months	3,409
Expenses and charges provided for over 12 months	2,667
Operating margin in 12 months	742



(1) design, delegated project management, supply and works, operation

Population of Kodo	2,000 people
Selling price of water (Sept 06)	750 FCFA/m ³
Selling price of water (Sept 07)	625 FCFA/m ³
Average consumption per head of population	7 litres/day



Mast-mounted tanks: 69 units installed in the context of the PRSII (Regional Solar Program) in Burkina Faso and in Mali, in 20 months duration.

Tanks on fill: a clever idea and so easy to erect that 10 units were installed in the desert in Chad in less than 3 months.

