Franchising O&M Water Services Infrastructure in the Eastern Cape Province of South Africa

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Abstract

South African research has found that franchising partnerships could alleviate and address many challenges in the operation and maintenance of water services infrastructure. Franchising brings appropriate training to those on-site, and also offers backup off-site skills together with the incentive to both call for those skills and to make them available.

The concept is now being piloted with considerable success in the Eastern Cape province. Under the guidance of a franchisor, trainee franchisees are well advanced with initial cleaning and maintenance of the sanitation facilities at several hundred schools, mostly rural.

INTRODUCTION

The Council for Scientific and Industrial Research (CSIR) and Water Research Commission (WRC) of South Africa, with partners, have over several years developed a partnership concept, borrowing from the principles of franchising, for the operation and maintenance of water services infrastructure (Wall (2005), Wall et al (2008), WRC (awaiting publication)). Through these partnerships --

- owners of infrastructure can access the higher-level expertise in operations and maintenance that is seldom found outside the larger urban areas; while
- microenterprises able to provide locally-based service provider solutions are created and nurtured.

The research and concept development in this very little-explored field has been conducted not by academics but by practitioners who possess day-to-day understanding of water services delivery, and who have consulted with inter alia like-minded practitioners in the conventional franchising sector.

The concept is now being piloted with considerable success in the Eastern Cape province of South Africa. Under the guidance of a franchisor, trainee franchisees are well advanced with initial cleaning and maintenance of the sanitation facilities at several hundred schools, mostly rural.

THE PARTNERSHIP CONCEPT

(IWA asks for "methods/techniques")

The concept has been formulated with a view to improving water services operational quality, reliability and efficiency through introducing a new (to water services) supply-side operation and maintenance provider mechanism. The team has found that a franchise partnership concept can assist the owners of water services infrastructure with their responsibilities.

Water services franchising is a means of --

- assisting infrastructure owners by providing the higher-level expertise in water and sanitation infrastructure operations and maintenance that would very seldom if at all be found outside the metropoles and larger urban areas; while
- creating and supporting small locally-based and efficient service provider solutions.

The concept addresses the lack of higher-level expertise that has so often been identified in South Africa as the key to improvement of service, especially in the more remote areas. The local staff can deal with day-to-day operational needs, but are not able to deal with anything more demanding than that – directly resulting in frequent non-compliance with the laid down performance standards. The essence of water services franchising is the creation of a pool of appropriate expertise upon which the local systems managers can draw, a restructuring of the local responsibility for operation, and the creation of a two-way obligation -- an obligation to call for assistance from the pool, and an obligation to respond rapidly to that call. All of this together with the incentive structures to ensure that it happens.

The franchisees would be small entrepreneurs. The franchisors would be any institutions that have the required expertise, are willing to provide the service, and would not be in a conflict of interest by providing the service.

The team has modelled the franchising of selected elements of the water services value chain -- elements that are suitable for small business in that the components can be readily systematised. This modelling has drawn upon first-hand knowledge of operating these same elements in contexts as close as possible to franchising. It has also drawn upon understanding of the small number of franchises already active in the water services sector, and upon understanding of the very much larger number of franchises in other fields.

While franchising may not be suitable for investment in new water services infrastructure, the ongoing work had identified its suitability for operation and maintenance. Franchisee water service providers, dependent for their livelihood on the success of their business, would have a strong incentive to perform, and would also enjoy the benefit of the franchisor's expert guidance and quality assurance. Some areas for potential franchising include meter management, billing, plumbing services, pressure management, sewer maintenance, operating abstraction points, and operating treatment works.

This help from the franchisor would be of particular value with water services systems away from the major urban centres. Significant improvements would soon be seen if the generally under-qualified and under-resourced locally-based water services staff could have this ongoing support, mentoring and quality control -- or if the owner could enter into partnerships with small entrepreneurs or non-governmental organisations which would, through franchising, enjoy the necessary ongoing support, mentoring and quality control, and which would have quick access to expert assistance when they need it.

All choices of water services delivery institution are between alternatives. The water services delivery model in common use South Africa (heavy reliance on owner's inhouse resources) is not intrinsically flawed. The reason why many of the owners of the water services infrastructure and/or their appointed water services providers are not able to operate this infrastructure satisfactorily lies in the implementation of the model, rather than in the model itself. Franchising partnerships might not be ideal, but would in many situations offer the prospect of improved services.

However three main priorities need to be addressed simultaneously if the operation and maintenance of public sector water services infrastructure is, in the cause of improved water services provision, and to the benefit of water services users, to be franchised where it is appropriate to do so. A "three-step breakthrough" is needed:

- The first step is the breakthrough to owners' acceptance of outsourcing the operation and maintenance of their infrastructure.
- The second is the acceptance that the institutions outsourced to could be microenterprises.
- The third step is the acceptance that these microenterprises could be franchisees. (This third step should not be a problem once the second level is in place. Franchised microenterprises should be a concept considerably easier to convince clients of the merits of than the idea of microenterprises that are stand-alone.)

Note that what is good or bad for microenterprises is good or bad for franchising partnerships. But the converse doesn't necessarily apply – or, putting it another way, a franchisee microenterprise, given the support it would receive from the franchisor, would in all likelihood find it easier to meet some regulatory and other requirements than would a stand-alone microenterprise, everything else being equal.

Whereas a business based on a single element of the water services delivery value chain might not be viable, a franchisee might be able to make a viable business by offering several water-related services, thereby achieving dual objectives, viz:

- economy of scale; and
- lessening dependence on one or a limited number of clients.

An owner may require contractual recourse not only to the franchisee, but also to the franchisor. This might, if it were deemed to be necessary, require an additional contract, one that closes the loop between the franchisor and the owner. The latter may require this contractual assurance that the franchisee will be supported by strong management, and also that the franchisor is able to make alternative arrangements which will ensure continuity of service should the franchisee for any reason whatsoever fail to meet its contractual obligations to it. Especially this assurance could be sought if

the franchisor's expertise or track record is a significant reason for contracting with the franchisee, and the franchisee is a largely unknown quantity.

In summary: franchising can offer significant potential for improvement in water services quality and reliability, in developed and developing countries alike.

(IWA asks for "results and discussion conclusions (significance, implications)")

THE NEED FOR PILOTS

By the end of 2007, development work had been taken to the point at which the concept of franchising partnerships for the operation and maintenance of water services infrastructure was thoroughly described, including guidelines as to where it could work, and how it would work. At the time it was said that if the environment were favourable, potential franchisors would seize the opportunity, and would do the detailed modelling to suit their abilities and the circumstances to which they see the concept being applied.

It was also realised that, for the benefits to be "proven", pilot projects would be necessary. Also, only through piloting would unanticipated challenges be identified -- and overcome.

There are precedents in South Africa of franchising partnerships to the benefit of private sector owners of infrastructure. The longest-running of these is a Pretoria-based company called The Drain Surgeon which for 30 years has provided plumbing and related services to urban households, businesses and industrial premises. This company has grown to the point that it now has more than 60 franchisees -- it is a nationally-known brand, represented in all of the cities and major towns of South Africa.

Amongst the handful of other examples is a company that provides a range of high-end wastewater solutions in specific sectors of industry. Briefly, it (more correctly, one of its several franchisees) is appointed by a private company to take care of the wastewater stream, treating it for reuse or for discharge to a natural watercourse in compliance with the requirements of the Department of Water Affairs. Typically, the franchisees are highly qualified university graduates, with degrees in chemistry or chemical engineering, and clients include mines and other heavy users of water, such as poultry processing plants.

These partnerships with private sector owners of water services infrastructure have not been replicated with public sector owners of water services infrastructure. As noted earlier in this paper, a "three-step breakthrough" is needed, the first step being the breakthrough to acceptance by public sector owners of infrastructure of the possibility of outsourcing the operation and maintenance of infrastructure that they, the public sector entities, own.

For a number of reasons, that breakthrough has not readily been forthcoming. These include in some instances sentiments antagonistic in principle to outsourcing operation and maintenance to the private sector. Invariably the reasons include ongoing faith on the part of the owners that, despite substantial evidence to the contrary, one day they

will "come right" and start to do the operation and maintenance to a satisfactory standard.

Meantime, evidence of the need for the public sector to seek assistance has continued to mount (inter alia, see SAICE (2006)). The potential for water and sanitation services partnerships in South Africa – and no doubt in many other countries also -- is immense.

THE EASTERN CAPE PILOT -- PRELIMINARY MOVES

Some public sector officials, when approached by members of the WRC and CSIR research team, declined even to consider franchising partnerships, and others said that they would be interested but only at some later time. Others understandably said that it would be easier to convince their principals (in the case of municipalities, the municipal councillors) if they could be shown a successful pilot.

Meantime, a few large water services providers began to take interest in franchising partnerships. In particular, during 2007 Amanz'abantu Services (Pty) Ltd, a provider based in East London and with a footprint covering the whole of the Eastern Cape province, extrapolated into the franchising concept its well-established and very appropriate expertise, and its long experience of working alongside rural and developing communities. It set up a subsidiary, Impilo Yabantu Services (Pty) Ltd, to be a franchisor, and began to assess the potential market, and to approach selected owners of public sector infrastructure in the province.

At the same time, Irish Aid, whose South African-based water services specialist had for several years been convinced of the potential of the concept, agreed to provide substantial funding for advocacy, situation-specific development for a pilot, and general support over a period of three years, starting in 2009. Aid's intention was that the funding would be used to add value to public sector budgets -- for example that, by employing franchising principles, selected water services infrastructure operation and maintenance funding that is already in public sector budgets, but is not being spent effectively and efficiently, would be unlocked.

During 2008 these initiatives came together. Contrary to WRC and CSIR expectations when undertaking the research over the last few years, that the public sector entity willing to pioneer a franchising partnership pilot would be a municipality, it was the Department of Education of the Eastern Cape provincial government that was the first to prove receptive. Its officials responsible for infrastructure indicated great interest in a pilot that would see franchisees doing planned cleaning and maintenance of schools toilet facilities. Early in 2009, a memorandum of understanding was signed between five parties: the Department of Education (DoE), Irish Aid, the CSIR, the WRC, and Amanz'abantu.

In this memorandum it was inter alia stated that:

• The DoE wished to utilise small, locally based enterprises, in partnership with an established provincially based service provider, to provide identified maintenance services for its facilities.

- Research indicates that the franchising model offers public authorities "a contractual mechanism for improved efficiency, flexibility and accelerated resource mobilisation".
- Amanz' abantu would contract with the DoE in order to set up and run a pilot programme, using the principles of franchising partnerships, for maintenance of schools sanitation facilities in the Butterworth Education District.
- Impilo Yabantu would perform the role of the franchisor for the pilot programme.
- The DoE would, from its budgets normally allocated to this purpose, provide the funding for maintenance of the facilities.
- WRC and CSIR, funded by Irish Aid, would provide policy, technical and other
 assistance necessary to facilitate the pilot programme including drafting the
 terms of reference, formulating contractual documentation, monitoring its
 progress, and disseminating results with a view to replication in other areas of
 franchising partnerships for operation and maintenance of water and sanitation
 facilities.

The WRC and CSIR team had over the years come to realise that the breakthrough, in terms of where the first pilots could be negotiated, would be with infrastructure owners least resistant to change because --

- the extent of their inability to operate and maintain their infrastructure had become apparent even to themselves; AND
- existing public sector jobs would not be threatened.

Thus it is that the first major pilot is in respect of the maintenance of schools sanitation facilities in the Eastern Cape. Matters have come to the point that there is little disagreement that most schools, and especially the rural schools in that province, are unable to operate and maintain this infrastructure. Furthermore the infrastructure has degenerated to this sorry state because at many schools no staff members have taken responsibility for the infrastructure, and it is clear that they have no intention of taking such responsibility in future.

THE EASTERN CAPE PILOT -- CHRONOLOGY

From April 2009 onwards there was rapid progress with implementation of the Butterworth pilot project. Throughout, the Amanz'abantu and Impilo Yabantu team worked closely with the DoE managers.

During May, substantial progress was made in exploring the practicalities of how to manage the process and the allocation of tasks. Also in that month, advertisements were run calling for interested parties to come forward. A condition was that they had to be resident in the Butterworth area -- for two reasons: it was important that the work would be done by "local" people, from the communities that they would serve; and in order to minimise travelling time and cost to Butterworth and to the schools that they would be servicing. Distinct areas, determined on accessibility and scope, would be identified within the Butterworth District, one for each franchisee – and each franchisee would be required to have its home base at a central location in the service area allocated to it.

These prospective franchisees were screened, and those shortlisted were interviewed in more depth. Those selected received initial training in East London during the first week of June. Immediately thereafter the trainee franchisees met with the DoE Butterworth District staff and headmasters to plan their programme schedules, and for works orders to be agreed.

Impilo Yabantu also trained an in-house team, and intends to keep it in the field even when the franchisees are working satisfactorily. The one purpose of this team is to be available as a back-up should a franchisee drop out. The other purpose of the team is to provide the franchisor with benchmark costs.

Whereas approximately half a dozen franchisees would be sufficient for the task of regular servicing of the schools sanitation facilities in the Butterworth District, eight underwent training -- on the assumption that a couple would drop out over the course of time. Many of the trainee franchisees are in business on their own for the first time.

Meantime Impilo Yabantu set up an office and stores in the town of Butterworth.

The work of cleaning and maintaining schools sanitation facilities began around the middle of June. Apart from the basics (cleaning equipment and protective clothing), and a light delivery vehicle emblazoned with the Impilo Yabantu logo, each franchisee was supplied with a digital camera. The purpose of the camera is to take photographs of "before" and "after" the maintenance service, and it is on the basis of these photographs, and a signing off of the works order by the school principal, that the franchisees are paid. Nonetheless, spot check visits to randomly selected schools are also undertaken by the franchisor.

A key component of the service provided by the franchisee is that of inspection and reporting on the serviceability and suitability of the facilities. Reports are submitted to the district managers of the DoE following each visit, and repair and maintenance lists are then agreed for implementation at the next visit. In this manner, ongoing service relationships are developed between the franchisees, the school principals and the DoE's district managers.

At the time of writing (August 2009), the toilet facilities of 150 of the 400 schools in the Butterworth District have been attended to in a first round of maintenance (some of them had been in a dreadful state – some even totally unusable). The trainee franchisees are already earning, and turnover is increasing month by month.

Potential total turnover of all the Butterworth District franchisees is estimated at R 4 million (US\$ 550,000) per annum. That is estimating their turnover on work which it is clear is pretty much the minimum that they need to do on school sanitation, and assuming that they need to visit schools on a six or seven week cycle. If they are asked to do more by the school (e.g. maybe add solid waste, or water), or if they start working for other clients, then their turnovers will increase accordingly.

The franchisees are being paid for the services they render -- that is, the schools (or the DoE on their behalf) pay them each time they do the cleaning and maintenance. But all of the development costs -- developing the concept, developing the training schemes,

doing the training, preparing the operations manuals, and so on -- are being funded by Irish Aid and also by the in-kind contributions of Amanz'abantu and the CSIR.

The franchisees themselves have taken out loans to fund the capital outlay for vehicles, equipment, and so on. Because the banks much prefer lending to franchisees rather than to stand-alone businesses, the franchisees have had no difficulty in obtaining these loans. These loans they will pay off over the next few years from the profits they make from providing the maintenance service. Due to the start-up costs, franchisees are not expected to make net profits until the second or third year.

It has been decided that it is too soon to expose the franchisees other than as subcontractors. So, for the first six months at least, the potential franchisees will be managed subcontractors. Managed, that is, by the main contractor, which to start with will be Amanz'abantu, to be replaced by Impilo Yabantu once the latter has completed the setting-up phase, including the design and implementation of training, and preparation of operation methodology.

Initially, Amanz'abantu is receiving the works orders directly from the DoE. In effect, each order is a small contract. (For the preliminary round of maintenance, each order is between R 2000 and R 5000 (US\$ 250-650).) Amanz'abantu then instructs the subcontractors to perform the work.

When Amanz'abantu and Impilo Yabantu are confident that the franchisees no longer need the comfort and safety net of a subcontract arrangement, the switch will take place to a franchising arrangement, with the franchisees being appointed directly by DoE for the small contracts. Once fully fledged franchisees, they will be expected to manage their own interactions with the DoE -- in particular that they will have monthly meetings with the DoE district officials and will need to ensure the school principals are satisfied with the result and approve the work done.

It is envisaged that once the system is working smoothly, the franchisees will be able to offer their services to clinics, other public buildings, and to the private sector.

THE EASTERN CAPE PILOT - AN EMERGING ISSUE

Apart from the need for constant attention to be paid to the process of payment, and to cash flow, a number of issues are emerging, and these need to be addressed. In the short term, the biggest issue is the need to address water and solid waste at the schools.

Whereas current activity is focused on the sanitation facilities at the schools, it is abundantly clear that attention must soon be given to the water facilities, and to solid waste disposal. Both of these will have to be tackled sooner than was envisaged. Taking solid waste for example, it turns out that many of the schools have no solid waste facilities, and much of the trash ends up in the toilets.

Most of the schools are not on a reticulated water supply system, and are reliant on rainwater harvesting. That is, when they were built, gutters were in place to collect roof water and channel it to storage tanks. But the gutters on many schools are now broken -

- therefore no collection, therefore no water in the tank. The tanks themselves in many instances are broken or fouled.

CONCLUSIONS

The franchising partnerships concept, as it is being applied in the Eastern Cape pilot, is promising to be very successful in terms of the quality and reliability of the service that it delivers, and in terms of the viability of the franchisor and franchisees. However this pilot is benefiting from an extraordinary amount of management attention from Amanz'abantu (and Impilo Yabantu), CSIR and WRC – but enabling this is the purpose of the Irish Aid funding. The management attention is manifested in many ways, not least in the great assistance given to the trainee franchisees in respect of ensuring that the processing of payments to them is running as smoothly as it is, and in the bridging finance that they have had to receive from their main contractor, up to now Amanz'abantu.

The principal lessons learned from progress with the pilot so far are:

- Task-specific concept development (for example the specifics of the business model, the training programme and the operations manuals) can only be done by a franchisor that has the knowledge, based on first-hand experience in the same or a similar community, of the details of performance of that task.
- Potential franchisees must be chosen on the basis of willingness to work hard and to commit to the business principles. More potential franchisees must be chosen for training than will be needed to undertake the work attrition during the training period will reduce their number.
- Because water is an essential service, provision must be made in the franchising agreement for prompt replacement of non-performing franchisees.
- Cash flow problems will quickly put any microenterprise out of business. Therefore careful attention must be paid to resolving any procedural issues around the payment process and ensuring prompt payment of invoices submitted by the franchisees.
- In order to facilitate rapid and dissension-free agreement that the work has been performed according to contract, and that payment can be authorised, tasks must be as standardised as possible, and assigned standard prices.

References

Franchise Association of Southern Africa. 2005. How to franchise your business. The Association, Johannesburg.

Illetschko, Kurt. 2005. Become a franchisee. Frontrunner Publishing, Johannesburg.

Moat, C, van den Voorden, C, and Wilson, I. 2003. *Making water work for villages: Community-managed water service provision. A handbook for municipalities.* Water Research Commission, Pretoria, October 2003.

Mvula Trust. 2006. Community-based organisations, gender and water provision: Report for the Charles Stewart Mott Foundation. The Mvula Trust, Johannesburg, February 2006.

Roche, R, Revels, C, and Amies, M. 2001. Franchising in small town water supply. The World Bank, Washington DC, February 2001.

Ruiz-Mier, F and van Ginneken, M. 2006. Consumer cooperatives: an alternative institutional model for delivery of urban water supply and sanitation services? Water supply and sanitation working notes. The World Bank, Washington, DC, January 2006.

SAICE. 2006. The SAICE infrastructure report card for South Africa: 2006. The South African Institution of Civil Engineering, Midrand, November 2006.

Van Ginneken, M, Tyler, R, and Tagg, D. 2003. *Can the principles of franchising be used to improve water supply and sanitation services? -- a preliminary analysis.* Water supply and sanitation sector board discussion paper series. The World Bank Group and Bank Netherlands Water Partnership/World Bank, Washington, DC, January 2004.

Wall, K. 2005. Development of a framework for franchising in the water services sector in South Africa. WRC Report No KV 161/05, Water Research Commission, Pretoria.

Wall, Kevin, Bhagwan, Jay, and Ive, Oliver. 2008. "Through franchising, uplifting the operation of smaller locally-managed water services systems". World Water Congress, International Water Association, Vienna, Sept 2008.

WRC (awaiting publication). Water Services Franchising Partnerships: WRC Research Project - K5/1610. Water Research Commission, Pretoria. Consisting of a set of seven research reports.