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**DELIVERING WATER, SANITATION AND HYGIENE SERVICES
IN AN UNCERTAIN ENVIRONMENT**

**Where there's muck, there's brass: creating sustainable
franchise micro-businesses to do water services operation
and maintenance in South Africa**

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Partnerships, using the basic principles of social franchising, could address many challenges in the operation and/or maintenance of water services. Development of this concept is in South Africa moving from research, through pilots, into practice. Under the guidance of a franchisor, trainee franchisees undertook the routine servicing of the on-site sanitation facilities at 400 schools in the Eastern Cape, paid by the provincial Department of Education (DoE) from the normal departmental budgets for operation and maintenance. Despite difficulties arising directly from DoE inefficiencies, the pilot project has proven the value of social franchising partnerships for this kind of work – the DoE now has a model it intends to roll out to most of the more than 6000 schools across the province. Meantime, the franchisees have undertaken the routine servicing of several hundred household toilets, and much more of the same type of work for municipalities, is being lined up.

Introduction

Year after year, the operation and maintenance of water services infrastructure in South Africa has in far too many cases been found to not comply with the required standards (SAICE 2011; DWA 2012a, 2012b). This research has also shown that the main problem is most likely to be shortfalls in the skills and management of the institution responsible for the services.

The Council for Scientific and Industrial Research (CSIR), the Water Research Commission (WRC) and the private sector water services provider Amanz' abantu Services (Pty) Ltd, acting in concert, have for a number of years funded and undertaken studies of selected institutional options that could assist in the improvement of operation and maintenance. This research postulated that franchising partnership models, developed in the private sector for providing a wide range of services, could be adapted, and the resultant social franchising partnership model could be a valuable and viable addition to the current range of institutional models for the operation and/or maintenance (O&M) of public sector sanitation and water services infrastructure. (Wall 2005; Bhagwan et al 2009; Wall and Ive 2010; Wall et al 2011)

In 2009 Irish Aid, the CSIR, the WRC, the Eastern Cape provincial Department of Education (DoE) and Amanz' abantu signed a memorandum of understanding ("MoU") to implement a three-year pilot for routine servicing (akin to the 15,000 km routine servicing of a motor vehicle) of water and sanitation facilities at the approximately 400 schools in the Butterworth education district of the Eastern Cape.

Amanz' abantu and its trainee franchisees in less than three years greatly improved the condition of the school toilets in this education district. This paper reflects some of the key benefits and lessons learnt, and sets out thoughts as to how this franchise approach might be replicated.

The partnerships

Water services franchising partnerships can broadly be described as business-to-business partnerships, whereby small locally based enterprises enter a business partnership with a larger established enterprise for the purpose of utilising a "tried and tested" approach for undertaking selected activities required to ensure

sanitation and water facilities and systems are operating in a reliable manner and in accordance with suitable availability, hygiene and environmental standards.

The concept of “social franchising” is defined as “the application of commercial franchising concepts to achieve socially beneficial ends” (Montagu 2002) and has been identified in the health sector as a model which can, among other things, assist in the provision of health services and distribution of pharmaceuticals. It can also be appropriate for other sectors, particularly where the quality of the service needs to be driven up and the cost of the service needs to be driven down through standardising on proven delivery mechanisms.

These social partnerships are especially suitable for communities with a large poor population needing infrastructure services, but who are also looking for employment and an opportunity to develop their entrepreneurial and technical skills. The water services social franchising partnership model provides opportunities for linking “local economic development” and job creation with the provision of basic municipal services.

This model provides appropriate training, a quality management system and procedures, and the backup of the off-site skills held by the franchisor. The franchisor identifies people with the skills appropriate to franchisee micro-enterprises, who are resident in the target area and who, once they have been exposed to training, are willing to enter into a franchise agreement. Key to the success of this model is the willingness of the public sector authority owning the infrastructure to outsource its responsibility for routine servicing, and the ability of this authority to procure, appoint and direct micro-businesses to undertake the work under the guidance of the franchisor.

In the Butterworth pilot, trainee franchisees, all local people, with few exceptions first-time entrepreneurs, have been helped to set up micro-businesses which mostly employ women from the rural villages. Under the guidance of the franchisor, these teams are undertaking the initial cleaning and thereafter routine servicing of the water and sanitation facilities at the schools.

The primary objective of the Butterworth schools sanitation and water servicing pilot project was to develop and test an outsourcing model which can be used for rolling out similar services to most of the more than 6000 schools across the 23 education districts in the province.

Research findings from the pilot indicate that many opportunities lie in applying the principles of franchising to a range of suitable operation and/or maintenance activities within the water and sanitation services delivery chain – that is, of readily systematised repetitive operation and maintenance activities.

The Butterworth pilot project

During 2009, the scope of work was agreed with the DoE, and training and operation plans were developed. Advertisements called for parties interested in becoming “water services franchisees” to come forward. A condition was that they had to be resident in the Butterworth area for two reasons:

- to ensure that the work would be done by ‘local’ people drawn from the communities that would be served; and,
- in order to minimise travelling time and cost to Butterworth and to the schools that would be serviced.

Prospective franchisees were screened, and those shortlisted were interviewed in more depth. Those selected received initial training in East London. Thereafter the trainee franchisees and franchisor met with the DoE Butterworth District staff and school principals in order to plan their programme schedules, and for works orders to be agreed. These franchisees were required to operate under Amanz' abantu's franchise brand “Impilo Yabantu” (“Hygiene for the people”).

Impilo Yabantu also established and trained an in-house team. One purpose of this team was (and still is) to be available as a back-up should a franchisee drop out. The other purpose of the team has been to provide the franchisor with benchmark costs and an opportunity to develop and test methodology and procedures.

Impilo Yabantu developed and adopted a Quality Management System (QMS), which is applicable to all work conducted by both Impilo Yabantu as the franchisor and the franchisees. The QMS provides a framework to ensure regular audits are undertaken, as well as providing a controlled management system which enables the franchisor to manage the documented works procedures. Spot checks are conducted by the franchisor on randomly selected schools to ensure standards of work are being maintained.

A key component of the service provided by the franchisees has been that of inspection and reporting on the serviceability and suitability of the facilities. Photographs taken have assisted the process of inspection and assessing schools future repair (in some cases, replacement, the toilets having been found in such a poor structural condition) and maintenance needs. Reports compiled from these inspections have been submitted

to the district managers of the DoE at monthly meetings, and repair and maintenance lists then agreed for implementation over the next month. In this manner, ongoing service relationships have been developed between the franchisees, the school principals and the DoE's district managers.

In terms of the MoU, the franchisees billed the schools (or the DoE on certain schools' behalf) each time they did cleaning and maintenance. But all of the development costs – i.e. developing the concept, developing the training schemes, doing the training, preparing the operations manuals, and so on – were funded by Irish Aid, WRC and also the in-kind contributions of Amanz' abantu and the CSIR.

The franchisees themselves took out loans to fund the capital outlay for equipment and so on. Because banks much prefer lending to businesses which follow proven models, it was found that franchisees have a far better chance of securing bank loans than stand-alone small businesses do. Where loans have been taken out, it was estimated that these loans will be paid off over about three years from the revenues received from providing the maintenance service. Due to the burden of the start-up costs, as well as their uncertain workload, franchisees were not expected to make net profits until their third year. Nor did they. Only continuity of work would resolve this.

During the pilot, Impilo Yabantu, as franchisor, found it necessary to take direct responsibility for defining and securing the work orders, and it then instructed the franchisees-in-training to perform the work. In effect, each maintenance order was a small contract – for the first round of maintenance, each order was between R 2000 and R 5000 (£200-500). Effectively the potential franchisees were managed as subcontractors during this start-up phase, although they were treated as franchisees for all other aspects of the operations. Impilo Yabantu assisted the franchisees through the setting-up phase, including the basic business and administrative training, and the development and training of the operational methodology.

Post-pilot the franchisees no longer need the comfort and safety net of a subcontract arrangement, and the switch to a full franchising-like arrangement is taking place, with the franchisees being appointed directly by infrastructure owners. The franchisees have proved themselves capable of seeking new clients and generating new and repeat business, and managing their own interactions with clients. In particular, this means that they will have to manage their interactions with the DoE district officials and they will need to ensure the school principals and the school governing bodies are satisfied with the result and approve the work done. The franchisees have also been able to offer their services to clinics, other public authorities, and to private business and households.

As the franchisor, Impilo Yabantu played a very intensive role, not only managing the administrative part of the process (checking and compiling invoices and ensuring payment from the DoE), but also being responsible for ensuring random checks on franchisees for quality control, and processing the vast array of 'before' and 'after' photos from each school. Another key role of the franchisor is that of "fire fighting" - addressing problems and issues as they arise, which was a common occurrence during the development of the process, with problems such as payment delays, failure of equipment and the logistics of schools "not existing" or "not having any latrines".

The pilot over and over again proved the value of the franchise arrangement. Not only was this in respect of the anticipated advantages such as the training and mentoring, but it was demonstrated in the form of the protection that the franchisor provided against the inefficiencies of the DoE. For a particular example: when payments by the DoE were late, the franchisor followed up on behalf of all franchisees – it was not necessary for each individual franchisee to come in from the field, costing time and travel expenses, and losing production. Given the difficulties encountered with the DoE payment regime, it is unlikely that stand-alone micro-businesses would have survived for long.

Benefits

Franchising incentivises a professional approach to business on the part of micro-entrepreneurs. Many subsidised programmes have enjoyed limited success that does not last beyond the periods of financial support and are not scalable models (Bramley and Breslin 2010). This restructuring of the relationship between the user, client and service provider transforms a social service into an established business which is guaranteed through the support of the franchise arrangement. The driving force behind success is the franchisees' ambition to succeed, as they have a clear incentive to achieve set standards, be paid when they achieve these standards, and grow their own business. Reinforcing this, management systems ensure quality control over the operations, sustainability through economically viable pricing systems, and responsible health and safety and environmental management systems.

Factors affecting viability and costs

The pilot has underlined that rolling out of the programme must sink or swim on financial viability – and costs of undertaking the servicing, while not the main contributor, have a significant bearing on that.

Not unexpectedly, the amount of effort involved in undertaking the servicing of sanitation facilities – including time, training required, equipment required, and ingenuity – varied enormously from site to site. The main variables included the type of top structure, the nature of the pit contents, whether there was or was not broad consistency of type and contents in an area, distances (between pits, from home base to work site, from pits to disposal site, from location of specialised equipment to work site), logistical delays (e.g. non- arrival of equipment), and bureaucratic hold-ups (especially payment delays).

The biggest single influence on cost was continuity of work – or lack thereof. To illustrate – once the franchisees were able to get into a routine, they could each empty up to five household toilets each day, and dispose of the contents. Obviously, ability to work at this pace brought the cost per toilet down substantially.

It would not be untrue to say that 90% of the worst problems on the pilot related to DoE payment delays and slow decision-making. Payments to the franchisees had thus to be initially covered through partner funding and by Amanz' abantu, these costs being recovered much later from the DoE. In contrast, the franchise partnership's performance of training, safety, efficiency and of course infrastructure operation and maintenance service delivery has been excellent.

Establishing Impilo Yabantu as designated project manager, an independent structure, ensured a focus was kept throughout the project on overcoming issues and challenges. It was accepted from the outset that Impilo Yabantu would not make a profit during the pilot, its purpose was to pioneer the franchise approach in such a project, and to overcome hurdles, ensuring that the project stayed afloat.

The DoE has stated that it is keen to roll this programme out to other areas in the Eastern Cape. However there is a need for greatly improved willingness on the part of departmental officials to make commitments and stick to them, and in particular to pay suppliers (all suppliers – only franchisees or even only all water services providers) on time and in full. Most importantly, changes are needed in order to better support the development and partnership with small businesses, so that contracts and payment can be facilitated in an effective manner without some of the pitfalls that were encountered (and overcome) during the pilot.

Four of the MoU partners carried all of the pilot's research and development costs (it was never intended that DoE could carry any part of these costs). While DoE, in terms of the agreement, undertook to pay in full and on time, according to pre-agreed standard tariffs, for the services rendered, it was in practice, as noted above, extremely slow to pay, and Amanz'abantu was forced to bridge-finance the work of the franchisees. This is not the way it should be – franchisees, being small businesses, must be paid within 30 days of tendering invoices. If they are not paid timeously, cash flow problems will drive them under.

The franchisor and franchisees are mutually dependent in many ways, particularly in respect of financial viability. Thus, for example, if the franchisees cannot cover their costs, the franchisor will find it difficult to remain in business and provide them with a service.

All of this is crucial to any post-pilot phase. Rolling out the programme to further education districts in the Eastern Cape cannot be contemplated unless the DoE becomes a more reliable payer of its bills. This finding can be readily transposed outside the education sector – owners of infrastructure must pay on time and in full for services rendered.

While nothing of the above list is unique to franchising partnerships, this serves to underline the point that service providers, when pricing the service, have to be keenly aware of all of the above, because the cost to them of providing a service can vary between very wide limits.

Next steps

The pilot has developed a usable and replicable business plan with tried and tested operating procedures. This is being documented, and the information placed in the public domain (Note 1). It is hoped that other reputable, competent and ethical service providers will thereafter enter the market and create competition for Impilo Yabantu. The management systems are vital to ensuring quality control over the operations, sustainability through economically viable pricing systems, and responsible health and safety and environmental management systems. These systems attract additional cost but on the other hand they ensure responsible governance and enhance efficiencies throughout the franchise.

Technical methodology also needs further development. Impilo Yabantu and the pilot study research team have been monitoring developments relating to the management of biological processes of the pit contents

as well as developments relating to mechanical equipment and techniques for pit emptying and sludge handling and disposal.

Impilo Yabantu is currently in the process of expanding its operations to provide a wider range of services, initially by introducing additional services such as solid waste disposal. Expanding outside of the schools environment, the services to local government, for example, already include servicing of household level sanitation, solid waste management and water loss management. An initial trial appointment to empty 400 pit toilets for Amathole District Municipality was completed early in 2012, since which time the municipality has made several further appointments to do the same kind of work in other areas. Buffalo City Metropolitan Municipality, amongst others, has opened discussion about a series of projects that could be outsourced to franchised service providers. These include undertaking water and sanitation servicing in dense settlement and areas and communities living on the rural fringe, as well as solid waste collection, recycling and disposal. The solid waste service is a natural extension to the on-site sanitation programmes – without a collection service, toilets rapidly fill up with inorganic waste.

The earlier studies by the CSIR/WRC/Amanz'abantu team analysed the water services delivery value chain, and identified 40-something types of opportunities for micro-businesses (Wall and Ive, 2010). The social franchising partnerships concept is now set to expand beyond its current tried and tested comfort zone of routine servicing of low-technology water and sanitation infrastructure.

Conclusion

In spite of administrative and political hurdles which have delayed progress, the pilot has been very successful in operation and maintenance of both institutional and household sanitation, and building small business. There is clear potential that, the delays, costs and frustrations of the pilot notwithstanding, there are benefits to social franchising partnerships' operation and maintenance of sanitation infrastructure, and potentially other utility type services as well.

Being a successful franchisor operating at the bottom of the pyramid requires patience and benevolence, whilst at the same time insistence on compliance with predetermined standards. Unlike working with contractors, where there are clearcut conditions and contracts, working with franchisees requires nurturing, guidance and most of all (again) patience, to ensure that an environment conducive to stimulating learning and the growth of the franchisees is maintained.

Apart from providing essential operation and maintenance services to skills-short public sector authorities, the partnerships create jobs, provide training, and nurture micro-entrepreneurs. Future pilots must be structured so that when they come to their end the franchisees employed in them will be sustainable micro-business entities, with the necessary skills and sufficient workload and income streams to continue as viable and profitable (Note 2) businesses.

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Notes

1. For example, see: ftp://ftp.csir.co.za/SS/ICT/Thomas/vids/VTS_02_1.wmv "Household sanitation" ftp://ftp.csir.co.za/SS/ICT/Thomas/vids/VTS_03_1.wmv "Using social franchising in the water and sanitation sector"

ftp://ftp.csir.co.za/SS/ICT/Thomas/vids/VTS_04_1.wmv "A franchisee's story".

2. People in the North of England say that "where there is muck, there is brass". "Brass" means money. "Muck" means dirt of one sort or another – in this case, solid waste (trash) and faecal sludge. The franchisees can be profitable, because money can be made from cleaning water and sanitation facilities. Especially if it is a task that nobody else wants to – or can – do.

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