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Holm, Rochelle; Wanda, Elijah; Kasulo, Victor; and Gwayi, Simeon, "Identification of the potential opportunities, barriers, and threats within the sector in taking up sanitation as a business: Rural sanitation in Nkhata Bay District (Malawi)" (2014). Faculty Scholarship. 727. https://ir.library.louisville.edu/faculty/727

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Identification of the potential opportunities, barriers, and threats within the sector in taking up sanitation as a business: rural sanitation in Nkhata Bay District (Malawi)

ROCHELLE HOLM, ELIJAH WANDA, VICTOR KASULO and SIMEON GWAYI

Private sector participation in sanitation marketing provides a great opportunity to improve rural sanitation access. Although a number of opportunities for private sector participation within the sanitation sector exist, there are numerous barriers and threats to taking up sanitation as a business. This Note from the Field identifies these opportunities, barriers, and threats in Nkhata Bay District, a rural area of Malawi. These insights emerge from a wider research project entitled 'Private sector participation in the delivery of sanitation and hygiene services'. This note provides background information on the research project on private sector participation and the project location. It goes on to describe the data collection process and present two examples of business activities in the district sanitation sector, before listing the opportunities, barriers, and threats identified and the recommendations that emerge from them.

Keywords: rural sanitation marketing, private sector, Malawi

THE 'PRIVATE SECTOR PARTICIPATION in the delivery of Sanitation and Hygiene Services' project is being implemented by the Centre of Excellence in Water and Sanitation, Mzuzu University, Malawi. The project is funded by the UK Department for International Development through the SHARE Research Consortium. The project will specifically address the following components:

- Identification of private sector institutions and their roles.
- Identification of the potential opportunities, barriers, and threats within the sector in taking up sanitation as a business.
- Identification of funding mechanisms for private sector participation and provision of household sanitation facilities, which among others would include creation of a Sanitation Fund.

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© Practical Action Publishing, 2014, www.practicalactionpublishing.org http://dx.doi.org/10.3362/1756-3488.2014.026, ISSN: 0262-8104 (print) 1756-3488 (online)

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- Identification of initiatives that the district councils are taking to encourage medium- to high-scale entrepreneurs to take up sanitation as a business as stipulated in the National Sanitation Policy.
- Identification of the reasons why lending institutions are not willing to provide financial services.

Nkhata Bay District

Nkhata Bay District is located in the northern region of Malawi. According to the 2008 census, the total population for the district was 215,789 and is mostly rural (Malawi Government, 2009). The most common method of waste (human excreta) disposal in Nkhata Bay is via a non-improved sanitation facility (95 per cent of households) such as a traditional pit latrine. The National Water (Malawi Government, 2005) and Sanitation Policies (Malawi Government, 2008) give District Councils a number of institutional roles and responsibilities for implementation of sanitation and hygiene activities in the district.

District-wide unemployment for women is reported at 28.5 per cent and for men at 10.2 per cent. Fishing and fish farming within the district are a source of income and food for over 90 per cent of the population (Malawi Government, 2009). This poses a unique barrier to increasing demand for household or community sanitation facilities, as much of the population spends up to 12 hours a day on the lake where open defecation is convenient.

Rural sanitation within the district is being addressed by the district council, non-governmental organizations, a local environmental club (Wildlife and Environmental Society of Malawi [WESM]), grass roots women's groups (Malawi Homeless People's Federation [MHPF]), and entrepreneurs.

Data collection

The data collection methods included key informant questionnaires and in-depth interviews, focus group discussions, and non-participant observation. The National Commission for Science and Technology provided ethical clearance for the project.

Key informants from the government, public, and private sector were selected purposively (purposive sampling) based on involvement and participation in the delivery of sanitation and hygiene services at national and district levels. Interviews with sanitation entrepreneurs were also carried out to better understand why they went into the business and current constraints to scaling-up.

Examples of sanitation as a business in Malawi

The study provides a detailed description of district-level business activities in the sanitation sector. Here, we present two case studies of particular interest. First, the work carried out by UNICEF Malawi to enhance private sector involvement

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in sanitation. In 2013, UNICEF Malawi collaborated with Tools for Enterprise & Education Consultants (TEECs) - a Malawian entrepreneurship, economic, and education development consultancy – to hold a two-day technical training session for local entrepreneurs on a new low-cost latrine design known as a corbelled latrine. A total of 32 applications were received, and 18 were selected to participate. Six months after the technical training, the participants were surveyed about their current business success and constraints. Of the 18 original participants, 11 could be reached for follow-up. Nine of the 11 entrepreneurs reportedly had household customers purchasing their products. The occupation of these customers – mostly farmers – suggests some people are willing to pay for improved sanitation in rural areas. However, while households communicated they want improved latrines, the limitations of further build-up of private sector sanitation in the area can be seen in the comment from one entrepreneur: 'People want these latrines for free because they are used to getting free things from organizations'. Nonetheless, the same entrepreneur reports on one adaptation strategy: 'Because people are not willing to pay money to purchase these corbelled latrines, I ask them to pay anything that is equivalent to the price e.g. a goat.' Interestingly, of the nine entrepreneurs within this group currently selling products successfully, currently none uses loans for the business and customers do not currently use loans for purchase of products because there are no funds available for either to borrow for investment.

There was great variability in the prices the entrepreneurs were charging for the same product within the district. Toilets were being sold for as little as MK3000 (£4) if the customer supplied materials (bricks). But the same design, in the same area, was being sold for up to MK30,000 (£44) inclusive of all materials and labour. This great variability in prices charged by the entrepreneurs indicates that they are operating in a truly free market. It could be that some entrepreneurs are working in areas where higher profit margins are possible. This requires further research, but it is promising that some customers are willing to invest in improved sanitation in this rural area.

The second case study is of the Malawi Homeless Federation Nkhata Bay Chapter (MHPF). The MHPF started in 2003 and has 17 centres (groups) and 292 members within the district. The operation model is as follows: MHPF initially conducts a sensitization campaign within a given community, which creates demand for household sanitation and, as a result, spurs households to approach MHPF for the construction of improved latrines. MHPF has so far constructed 50 Skyloo latrines in households using a sanitation fund, which they get from the Centre for Community Organisation and Development (CCODE). The sanitation fund operates so that a household contributes MK3,500 (£5) which is matched by a MHPF material loan of MK35,000 (£52). The loan is payable within two years with an interest rate of 2 per cent per month. The MHPF does not get paid for its services, which are voluntary within the group.

MHPF has found a number of opportunities in Nkhata Bay that make the sanitation market an appealing one to invest in. There is a very high demand for eco-san latrines around the city centre, and there is a readily available market from individuals and institutions that use the manure for landscaping and urban

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agriculture. Manure is being sold at MK2500/50 kg (£4/50 kg) bag to people within Nkhata Bay and also farmers and landscapers from Mzuzu. Furthermore, MHPF is well supported by the District Council, which has provided a site for the construction of a paying eco-san toilet at the market place, and has a good working relationship with the community. MHPF also has a good working relationship with CCODE, which provides training and funding, and with local builders and plumbers, who are involved in the construction of toilets.

There are also a number of challenges to a successful business model in the sanitation sector. While there is a good market, this market does not exist within the city centre where there are not many gardens, and thus clients, because the land is rocky and sandy in most parts.

Opportunities, barriers, and threats

This section summarizes the study results regarding the opportunities, barriers, and threats in taking up rural sanitation as a business in the Nkhata Bay District.

Opportunities

- Low cost technologies suitable for rural areas. There has not been much done on innovative, durable, low-cost latrines. The status quo is typically used, and there is an opportunity for additional innovative improved latrine designs.
- *Improved sanitation for public facilities*. Currently MHPF is building toilets to meet the needs of the Nkhata Bay market area. Yet, the hospital still has a major problem with sanitation.
- Pit latrine emptying. There are no service providers for emptying septic tanks in Nkhata Bay.
- Tourist facilities. Nkhata Bay is a tourist attraction centre, which increases demand for sanitation services. There are a number of hotels and lodges within the district. There is scope for these facilities to hire private sector sanitation businesses to meet their sanitation and gardening/landscaping needs, as well as generating added revenue through the sale of surplus manure. Mayoka Village in Nkhata Bay has eco-san latrines and is able to sell the harvested manure.
- Entrepreneurs. There is still space within the sanitation market for emerging sanitation businesses and motivated entrepreneurs who are willing to invest in sanitation and hygiene promotion in Nkhata Bay District.
- *High population growth rates*. This leads to high volumes of waste production, which could be recycled and provide items of high value such as compost and hu-manure for sale or agricultural use.
- *Partners*. Existence of motivated development partners who are willing to promote sanitation and hygiene in Nkhata Bay District.
- *Monitoring and evaluation*. A certification programme for private sector sanitation services was recommended to be initiated within the district to allow monitoring and evaluation of the private sector within the district.

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Barriers

- Willingness to pay. There is an unwillingness to pay toilet fees leading to frustrated would-be entrepreneurs who are otherwise willing to invest in sanitation services.
- *Culture*. Cultural barriers, which retard adoption of sustainable sanitation solutions such as eco-san or new low-cost latrine designs, which may need community sensitization for further scale-up by the private sector.
- *Physical environment*. Existence of thick forests promotes open defecation and unwillingness of some residents to construct their own latrines. Also, latrines easily collapse since land is rocky and sandy in most parts of Nkhata Bay.
- *Political interference*. Political interference when slow in allocating land to would-be entrepreneurs.
- *Funding*. Lack of a sanitation fund for sanitation and hygiene promotion both for build-up of business and for customers.
- *Collaboration*. Empowering rural communities with good sanitation and hygiene practices through community-led total sanitation and rural sanitation marketing needs to be a united approach by NGOs, local clubs, grass roots groups, and entrepreneurs as led by the district.

Threats

- *Population growth*. Anticipated land scarcity for latrine construction due to increasing population growth rates.
- *Lack of financing mechanisms*. Very few financing and microfinance institutions supporting sanitation entrepreneurs in the district.
- *Limited research*. Few sanitation marketing researchers to help sanitation sector professionals better understand rural consumer's constraints and aspirations to further build the sector.
- Available national and district policies and structures. The National Sanitation Policy does not at present include language supporting public–private partnerships.

Conclusion

The findings from this research have demonstrated that there are significantly more opportunities than there are barriers or threats to entrepreneurs taking up sanitation services as a business. With appropriate training and funding it is possible to bring in new entrepreneurs to provide sanitation services in a rural setting without service subsidy. Furthermore, the barriers that have been identified can be overcome with improved training for potential entrepreneurs, as well as the creation of a sanitation fund to enable further scale-up of private sector sanitation services in the district.

While this research has answered some important questions regarding the current state of private sector involvement in sanitation services, additional research is needed to enable solutions to the barriers and threats highlighted. This will be addressed in the research questions forming part of the overarching project (see above).

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References

Malawi Government (2005) *National Water Policy*, Lilongwe, Malawi: Ministry of Irrigation and Water Development.

Malawi Government (2008) *National Sanitation Policy*, Lilongwe, Malawi: Ministry of Irrigation and Water Development.

Malawi Government (2009) Nkhata Bay District Assembly Socio-Economic Profile (2010–2012), Malawi: Nkhata Bay District Assembly.

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