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## **Sustainopreneurship strategies to promote sustainable socially-oriented bottom of pyramid water supply businesses in Kisumu**

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TRANSFORMATION TOWARDS SUSTAINABLE  
AND RESILIENT WASH SERVICES

## **Sustainopreneurship strategies to promote sustainable socially-oriented bottom of pyramid water supply businesses in Kisumu**

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PAPER 2964

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*This paper discusses ‘sustainopreneurship’ strategies that could be adopted by Kenyan bottom of the pyramid (BoP) water sector businesses. The discussion is guided by the findings of a 2017 assessment conducted in the city of Kisumu. Data was collected from Master Operators (MOs) – small-scale and independent water providers – and Kisumu Water and Sewerage Company (KIWASCO) staff using questionnaires and a literature review. The study found that MOs have positively impacted low-income residents in Kisumu as they now pay less for water compared to middle- and high-income residents. However, most MOs remain commercially unsustainable. They lack basic enterprise management skills and strategies and have low capacity to separate commercial and social priorities. To achieve sustainability, it is recommended that MOs register as business entities, and receive training on business management including marketing, financial management and record-keeping – including digitization of their operations.*

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### **Introduction**

Sustainable development has become an increasingly recognized issue worldwide. Creating innovative and sustainable market-based enterprises to serve the bottom of the pyramid (BoP) markets is a challenging task that could be overcome through embedding ‘sustainopreneurship’ in the Sustainable Development Goals (SDGs). Sustainopreneurship – or sustainable entrepreneurship – seeks to create environmental, social and economic value. However, integrating entrepreneurship into a theoretical sustainability framework has still yet to happen in most market environments. Furthermore, entrepreneurship is rarely recognized and understood as a critical driver of sustainable development – the individual’s freedom to choose entrepreneurship as a livelihood strategy is seldom exploited. This notwithstanding, even though much research has been conducted in the field of corporate sustainability, scientific knowledge about such activities in Small and Medium Enterprises (SMEs), especially at the BoP, is scarce – previous studies have mainly been conducted in large, commercial organizations, leaving a gap in the discourse on entrepreneurship and sustainability among SMEs. Small and medium entrepreneurs in the water sector could be potential contributors to the country’s sustainable development as they enhance accessibility, affordability and quality of the products and services which are critically essential for the population’s well-being and improving living standards. However, this perception is the exception in most countries.

### **Statement of the problem**

Kisumu is Kenya’s third largest city, located at the shores of Lake Victoria with an estimated population of 450,262 (KNBS, 2009). The city’s water coverage currently stands at 68%, compared to 48% in 2010. Considering that the city’s average annual growth rate has been 1% for the last four years, the water sector must grow fivefold every year to reach the 2030 target of universal access (WASREB, 2016).

A decade ago, the city faced serious challenges of water supply, largely due to illegal vending and limitations of the distribution network. To solve this problem, Kisumu Water and Sewerage Company

(KIWASCO), the local utility, developed a concept of organizing small-scale and independent providers known as Master Operators (MOs), working under a Delegated Management Model (DMM). The MOs were established to provide the interface between BoP consumers in low-income areas and the utility, by extending the supply network, connecting customers and collecting revenue under a fixed tariff. This positively transformed services, increased formal access for the poor and semi-regulated informal water services in Kisumu. However, MOs' enterprises have been recording poor performance and growth; most become insolvent and cover only 40% of their demarcated areas despite the ever-increasing demand for water connections. The unsustainability of MOs is due in large part to poor marketing strategies and a lack of sustainable entrepreneurial and business management skills.

### **Purpose of the study**

The assessment sought to discover the factors and challenges affecting business growth of the small water business operators known as Master Operators in Kisumu. Building on these findings, the ultimate goal was to design responsive strategies to guarantee the businesses' increased sustainability and profitability.

This assessment sought to:

- Develop sustainopreneurship strategies that can be adopted by socially-oriented BoP businesses.
- Determine the factors affecting business growth strategy implementation.
- Examine the relationship between sustainopreneurship strategies and the growth of water business operators in low-income urban Kisumu City.

### **Literature review**

Entrepreneurship that focuses on social development is a newly emergent sustainopreneurship model that promotes greater public awareness of global wealth disparities, corporate social responsibility, market, institutional and state failures, technological advances and shared responsibility. The main feature that distinguishes sustainopreneurship from generic entrepreneurial activity is a cause-oriented motive that drives a business's activities. To identify and further grasp what is meant by sustainability problems, central sources in the global sustainable development discourse are identified, which guide us to what is meant practically and operationally by sustainability in action (Mohme, 2012).

According to Schaltegger and Wagner's (2011) typology, social entrepreneurship and sustainable entrepreneurship both have a core motivation to solve social problems, with sustainable entrepreneurship having the additional motivation of addressing environmental issues. They argue that environmental problems are social problems, as the impact of choices made regarding sustainability have far reaching societal implications. Social entrepreneurs measure success by creating social capital, social change and whether they address social needs. A social entrepreneur does not focus on quick economic profits, but rather on social improvement and well-being, which does not necessarily align with high-risk activities. Haugh (2015) found that profit-making is not the primary goal of a social entrepreneur and that profits generated from market activities should be used for the benefit of a specific disadvantaged group.

### **Methodology**

A descriptive cross-sectional design was employed in this assessment. The assessment targeted Master Operators and KIWASCO staff who are commercial managers, coordinators of pro-poor activity, zonal managers, billing staff. Data was collected from 23 MOs and KIWASCO staff using questionnaires which were then analysed using descriptive statistics. Primary data was obtained through key informant interviews, focus group interviews and questionnaires. Secondary data was obtained from KIWASCO's commercial and operational reports.

The areas of assessment included business management and entrepreneurship skills, governance structure, operational efficiency, financial business management, human capital efficiency and customer relations. This was to establish MOs' strengths regarding initiating strategic business partnerships that would encourage growth, expansion and profit maximization.

### **Findings and discussions**

The key challenges identified among the MOs included weak business management and entrepreneurial skills, impacting their ability to maximize profit from their water business. The assessment found that 90% of the MOs lacked the business management and development skills required to build commercial viability. A significant percentage (80%) had weak business growth strategies; only 20% had written business plans,

leading to business stagnation. Despite the potential for new connections, coverage in their respective areas of operation remains low for the most part (see Figure 1 below), which the assessment attributed to lack of proper marketing strategies and initiatives.

The majority of the MOs (80%) did not have valid business registration certificates; most had expired and had not been renewed. This impacted operations as the businesses could not enter any contractual agreement with strategic partners such as financing institutions. This has subsequently affected the financing capacity of the business operators, further hindering growth.

The assessment further revealed high operational costs across the MOs. This was attributed to low uptake of technology, and in particular the non-digitization of operations which led to high costs resulting from printing, distributing and tabulating bills. This lowered businesses' profitability, to the point that some are not profitable at all. Only 30% of the MOs assessed were able to break even monthly.

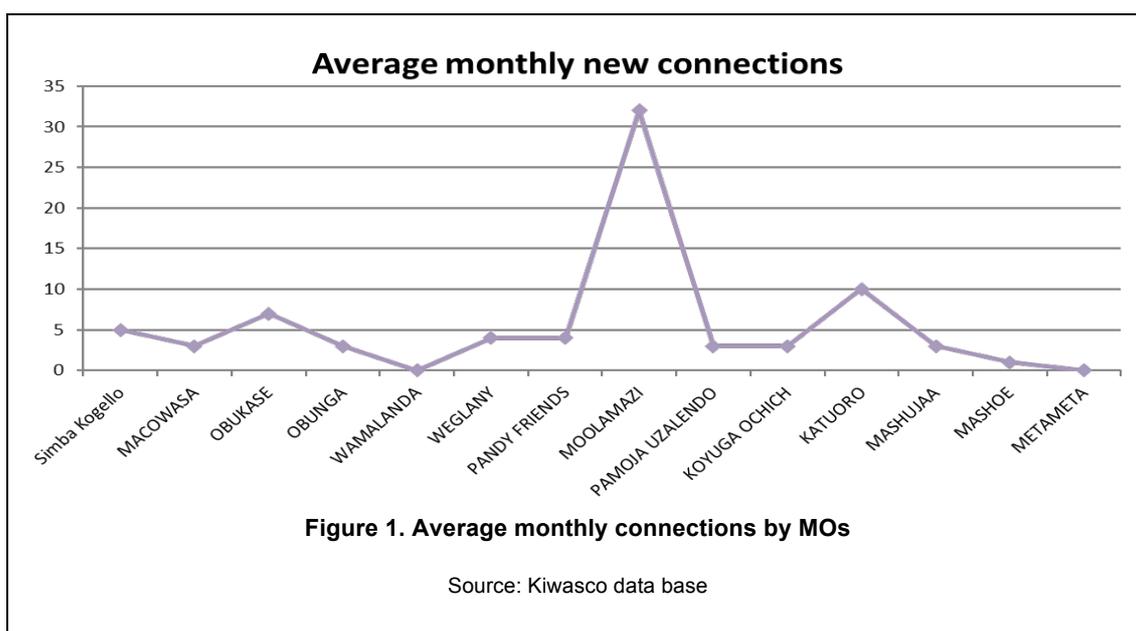
Human capital efficiency is also low, as MOs' employees were commonly casual labourers with no valid contract. Employees' remuneration varied between MOs, with some MOs only paying employees' allowances based on percentage of surplus received from water sales. This lowered employee motivation and left them less committed.

The majority of MOs lacked basic financial management skills; 80% did not keep proper financial records, or performed basic book keeping and record keeping. These businesses were therefore not able to track expenses and were not aware of whether they are making losses or profits. Furthermore, the assessment established that of the MOs interviewed, only one has been able to access finance from a commercial bank for business expansion. 90% of the MOs had never attempted to access financing for business expansion and depend solely on the monthly billings and members' contributions.

The assessment revealed that none of the MOs held interactive sessions with customers, making it difficult to properly gauge customers' opinions and outstanding issues. This caused delays in handling customer complaints, and some complaints are not handled at all. The assessment also established that there were no policy guides or documentation regarding how customer complaints should be dealt with by MOs. This has left customers with unresolved issues, which has greatly contributed to business loss due to accounts going dormant or inactive.

However, the MOs have positively impacted on low-income residents in Kisumu settlements as they now pay less for water compared to middle- and high-income consumers. However, most MOs have remained commercially unsustainable. They lack basic enterprise management skills and strategies, have low capacity to separate commercial and social priorities and continually seek support through members' contributions to sustain the businesses despite having a monopoly of the good and the market.

Finally, the assessment concluded that there was a significant relationship between sustainopreneurship strategies and growth of water business operators in low-income areas of Kisumu City, Kenya.



## Recommendations

The assessment's findings recommend that socially-oriented BoP water supply businesses be targeted with efficient business support systems to promote sustainability. To achieve the delicate balance of commercial and social sustainability, it is recommended that:

- MOs' business registration status should be updated regularly, and those operating as Community Based Organizations (CBOS) should have functional committees. This will give them an added advantage in term of entering contractual agreements with potential partners such as financing institutions which are key to business growth.
- KIWASCO and partners consider tailor-made business management training to enhance the MOs' skills such marketing, financial management and record keeping. The MOs operators need to be supported to ensure that the market is fully covered, and every potential customer is being served. This will go a long way in improving the business profitability of the master operators by bringing in more customers as well as promoting better management of the financial resources.
- More efforts should be made to ensure that CBOs operate as teams, with clear roles among the executive for effective staff coordination and supervision.
- MOs should establish links with local financial institutions to aid access to micro-loans. This will assist the MOs in expanding their operations as most of the MOs are operating below optimum due to financial constraints.
- MOs should be supported to design business growth and business development strategies that will increase their customer base and revenue. Business growth strategies should include well-formulated marketing and consumer engagement strategies to grow the customer base.
- Regular community business clinics should be held in order to sensitize the consumers about new products and proper complaints procedures. This will make the customers aware of the services offered by the MOs, increasing chances of service uptake.
- MOs should consider digitizing their operations in order to achieve efficient billing management and revenue collection. This will improve their operational efficiency as well as cut down the cost of operations hence improving profitability.
- The MOs need to be trained on customer care and customer handling skills to be able to better serve customers and promote customer retention.

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## References

- MOHME, J. 2012. *Disrupting structural constraints. The influence of sustainable entrepreneurship on the transition towards a more sustainable economy*. Journal of International Social Research, 3(1), 33-44.
- SCHALTEGGER, S. & WAGNER, M. 2011. *Sustainable entrepreneurship and sustainability innovation: categories and interactions*. Business strategy and the environment, 20(4), 222-237.
- WASREB 2016. *A Performance Review of Kenya's Water Services Sector 2014-2015*.
- KIWASCO 2017. *Pro-Poor Capacity Assessment Report*.

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