

Improving Livelihoods through Micro and Small Agribusiness Enterprises: Analysis of Contributions, Prospects and Challenges of Nursery Gardens in Arusha Tanzania

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Abstract

This paper centers on examining the role of nursery gardens as small scale agribusiness enterprises in improving livelihoods in Arusha, Tanzania. It documents, challenges, prospects and contributions to the livelihoods of actors in the industry. Household improvements, access to education, food, health services, regulating weather and climate are some remarkable contributions. Access to financial services, reliable markets, higher input's prices, room for expansion, institutional support and entrepreneurial skills were challenges noted. The study shows the need for appreciating their existence, increasing productivity and improving the situation which is context specific though applied in other cities of the same milieu.

Keywords: Micro and Small Agribusiness Enterprises, Livelihoods, Nursery Gardens, Arusha and Tanzania.

1.0 Background

Urban nursery garden is an emerging livelihood activity in rapidly urbanizing cities in developing countries where both men and women of different age groups are involved. It is one form of small scale business activities in cities which is promoting economic development in a way which will ultimately spread socio –economic benefits to broader segment of those formerly not employed in formal occupation by the Government in cities. It is increasingly recognized that the sector contributes substantially to job creation and poverty alleviation (Kazungu, 2011). Therefore, our study is focusing on the contribution of nursery gardens as a form of Micro and Small Agribusiness Enterprises (MSAEs) to livelihood of the people in urban areas.

Kazungu et al. (2013) and Richardson and Rhong (2004) show that Micro Small and Medium Enterprises (MSMEs) in Tanzania employs 3-4 million people, which is 20-30% of the total labour force. World Intellectuals Property Organization (WIPO) & Tanzania Chamber of Commerce, Industry and Agriculture (TCCIA) (2005), document that 20% of labor force is engaged in this sector. This data may not be precise when comparing the magnitude of what we see in the streets and everywhere around. Moreover, the SMEs development policy of 2003 shows that 700,000 people enter into labor force yearly, whereby only 40, 000 are employed in public services, leaving about 660,000 absorbed in Small and Medium Enterprises (SMEs) which can be formal and informal sectors.⁹

The Household Budget Survey (HBS) data of 2000/2001 in Tanzania, indicates that 36% of the Tanzanians fall below the basic needs poverty line and 19% below the food poverty line compared to 39% basic needs poverty line and 22% food poverty line in 1991/92 (National Bureau of Statistics, (NBS), 2002). This improvement in living standard is associated with the development of SMEs and their operations in the country. Thus, they encourage small scale business operation as an effective way of fostering growth and improving livelihood in urban settlements, since they contribute 12% and 34% of rural and urban employment Wangwe and Semboja (1997). However small businesses in Tanzania are facing challenges such as being inhibited by access to finance Kessy and Temu (2009) and Green et al., (2002), poor managerial skills, and lack of training opportunities and high cost of inputs Cook and Nixon (2000). Others include services related to marketing, technology, business training, and information (URT, 2003). This study sought to examine the contribution of nursery gardens as a form of small scale businesses in livelihood sustainability by looking at the prospects and challenges facing micro and small enterprises dealing with nursery gardens in Arusha Tanzania.

2.0 Theoretical Underpinnings

Small businesses are classified into formal, informal, and survivalist based on the degree of informality, sales turnover, capital investment and number of employees (King and McGrath, 1999). In Tanzania various scholars have attempted to come up with different definitions of what constitutes (MSMEs). Wangwe and Semboja (1997)

⁹ The definition of formal and non formal MSMEs is based on Scarborough and Zimmerer (2003), whereby contrary to informal, formal small businesses are those which conform to regulations, exhibits relatively (and often absolutely) high levels of human capital and integrated into the structure of the formal economy.

argue that the definition of MSMEs is slippery and has not been universally agreed. They define Micro Enterprises as those engaging 1-5 persons and small enterprises as those which engage 6 - 20 persons. This paper adopts the definition by the SMEs development policy of 2003, which was also used by King and McGrath (1999). They defined SMEs in terms of annual turnover, capital investment and the number of employees. It explains Micro Enterprises as those with one (1) to four (4) employees and a capital up to Tshs 5 million, while Small Enterprises have between 5 and 49 employees and a capital investment ranging between Tshs.5 million to Tshs. 200 million and Medium Enterprises with 50 – 99 employees and a capital ranging between Tshs. 200 and 800 million (see table 1). Basing on this definition, the current study deals with the category of Micro and Small enterprises (MSEs) dealing with nursery gardens, they fall in this category following the size of their capital investment and number of employees.

Table 1: Categories of SMEs in Tanzania

Category	Employees	Capital invested in millions	Turnover (Tshs. in millions)
Micro Enterprises	1-4	Up to 5 millions	12.0
Small Enterprises	5-49	Above 5 million to 200 millions	150.0
Medium Enterprises	50-99	Above 200-800 millions	300.0
Lager Enterprises	100+	Above 800 million	Above 300.0

Source: SME Development Policy (2003)

From these definitions majorities of Small scale businesses fall under the informal sector, mainly performing activities such as trading, manufacturing, agriculture, mining and services with little or no access to organized markets, credit institutions, formal education and training. This is supported by Maliyamkono and Bagachwa (1990), who describes them as businesses that are primarily unregistered and thus not covered in official statistics.

2.1 Operating Environment for Micro and Small Scale Businesses in Cities

SMEs cut across almost every sector but in the context of Tanzania their operations are influenced by various policies. As for nursery garden enterprises their operations are influenced by agricultural policy of 2004 since they are in the agricultural sector. However, the SME development policy of 2003, the Trade policy of 2003, and legal regulatory frameworks are the key influencers of the operation of small business in the country, they provide means by which government can manage the economy so as to achieve sustainable social and economic outcomes. The poor infrastructure including working premises, roads, cold rooms, serviced land warehouses, power, even locations where these services are available, the supply is unreliable and costly. This according to Ngasongwa (2002) has been a critical obstacle in promotion of SMEs especially in rural areas despite the fact that infrastructure is a very important tool in promoting private sector as it lowers the costs of production incurred by small enterprises and increases goods in the markets.

2.2 Constraints Facing Operators of Micro and Small Scale Business

Charantimath (2006) categorized the constraints facing small business in two groups- external and internal. The former are those which result from variables beyond the control of an entrepreneur, such as the availability of power and other infrastructure facilities. The later are not influenced by external forces but are related to organizational structure, production channel, distribution channel, technical knowhow training, industrial or business relations, and inadequacy of management. However, the two kinds of problems are not mutually exclusive, they are co-related (Charantimath *Ibid*, 2006).

2.3 The Concept of Livelihood

Livelihood refers to how people structure their means of living, – how they use capabilities, assets, and activities in a resilient manner to sniff around and look for opportunities, to diversify by adding enterprises, and to multiply activities and relationship for stability (Ellis (1998) cited by Kazungu (2011)). Practically, livelihood implies the means, activities, entitlements and assets by which people make a living. Asset, in this particular context, are defined as not only natural/ biological (i.e. land, water, common – property resources, flora and fauna) but also social, (i.e. community, family, social networks), human (i.e. knowledge, creation by skills), and physical (i.e. roads, markets, clients, schools, bridges) UNDP (1999). However, Programme for Agricultural and Natural Resources Transformation for Improved Livelihood (PANTIL) (2006) analyses livelihood in terms of vulnerability, assets, policies, livelihood strategies and livelihood outcomes. These livelihood outcomes according to Ellis (1998) include more income, improved food security, improved shelter, education and reduced vulnerability.

3.0 Material and Methods

This study was carried out in Arusha¹⁰ northern Tanzania. Arusha Municipal was selected as it is a hub of

¹⁰ Located at latitude and longitude of 03 20S, 36 40E respectively with a population of 1,694,310 (2012 Tanzania Population and Housing Census) with an elevation of 1,400 meters on the southern slopes of Mount Meru which keeps temperatures relatively low (between 13 and 30degrees Celsius) and alleviates humidity.

tourism in the country and it comprises flowering nursery gardens along the road strips. This motivated authors to explore what are the activity's contribution, prospects and challenges in achieving livelihood outcomes, greening the city and consolidating the aesthetic value for sustainable city development. A case study research design was employed in this study in order to allow an in-depth examination of the phenomena under investigation. The population of study consisted of all owners and operators of nursery gardens in Arusha, Tanzania. A sample size of 40 was drawn using stratified simple random sampling and purposive sampling. Data were collected through interviews, questionnaire, documentary review and observation from the owners of nursery gardens along road peripheral, and their employees. Data analysis was done through the use of descriptive statistics, aided by Statistical Package for Social science (SPSS) version 14.0 software and Microsoft excel. Findings were then presented by using pie charts, bar charts and distribution tables.

4.0 Results and Discussions

4.1 Characteristics of Sampled Population

The study observed that 60% of operators of nursery gardens were female. This is due to poor perception and categorization of work according to the gender that "this is the work for male and that for female". Many of operators of these gardens falls under the age of 30-39 as depicted in table 2.

Table 2: Respondents age

Age Interval	Gender		Total	Percentage
	Male	Female		
20-29	7	10	17	42.5
30-39	6	12	18	45
40-49	1	2	3	7.5
Above 50	2	0	2	10
Total	16	24	40	100

As per table 3 50% of the respondents' posses primary education, 40% with secondary education and 10% did not attend school at all. This signifies that operating nursery gardens does not require much of formal skills from classes due to the fact that administration and management of its operation does not demand much of formal skills.

Table 3: Education Level

Education level	Gender		Total	Percentage
	Male	Female		
No school	1	3	4	10
Primary	9	11	20	50
Secondary	6	10	16	40
Total	16	24	40	100

The study findings depict that 75% of the nursery gardens are owned by men and 25% by female. This signifies that more men are owners of small scale businesses than women due to gender imbalances as the result of cultural and traditional practices, inferiority complex, and the notion that women are more dependent.

4.2 Challenges facing micro and small scale businesses operating Nursery gardens in Arusha Municipal

Shortage of capital: The findings in figure 1 reveal that 79% of respondents claimed that access to loans from Financial Institution by nursery gardeners have been a problem due to lack of collateral as security for loan. This makes them to operate under very minimal capital and this hinders the growth potential of these agribusiness enterprises.

Access to reliable Market: Findings from figure 1 reveals that 100% of respondents claim that unreliable market as well as limited access to market information has been a great barrier for their success. The study also reveals a more of irregular state of demand for flowers and trees marked by seasonal or volatile fluctuations. The demand increases during rainy season as the weather condition supports planting and growing of nursery flowers. However, during the drying season demand fall tremendously and this affects the market.

Higher price of inputs- The finding from the figure 1 reveals that 87.5% of respondents claim that uneven increase in farm inputs prices especially the price of fertilizers, fungicides, insecticides, plastic bags and water cans, pipe rollers and water that is always a burden to them and this lowers their productivity.

Fungi, insects, and pests: The findings from the figure 1 disclose that 62.5% of the respondents claim that fungi, insects and diseases have been a problem. Flowers are highly affected by fungi which cause diseases, and thus a challenge to productivity, profitability and sustainability of business ventures.

Shortage of water: Results in figure 1 depicts that 75% of respondents claim a severe shortage of water services especially during dry season which hinder their operations. Productivity goes down due to the fact that young seedling flowers and trees requires enough water for their survival, it also lead to dying of seedlings, flowers and

garden trees that are ready for sale.

Room for expansion: The study disclose that 86% of entrepreneurs working in nursery gardens along roads peripheral have no enough space for expanding their operations; they only operate within the number of feet provided and registered by municipal council. This according to Arinaitwe (2006) is one of the great problems that are facing entrepreneurs as with no room for expansion it stagnate their capacity of thinking and their desire for expansion by bounding themselves within the given areas.

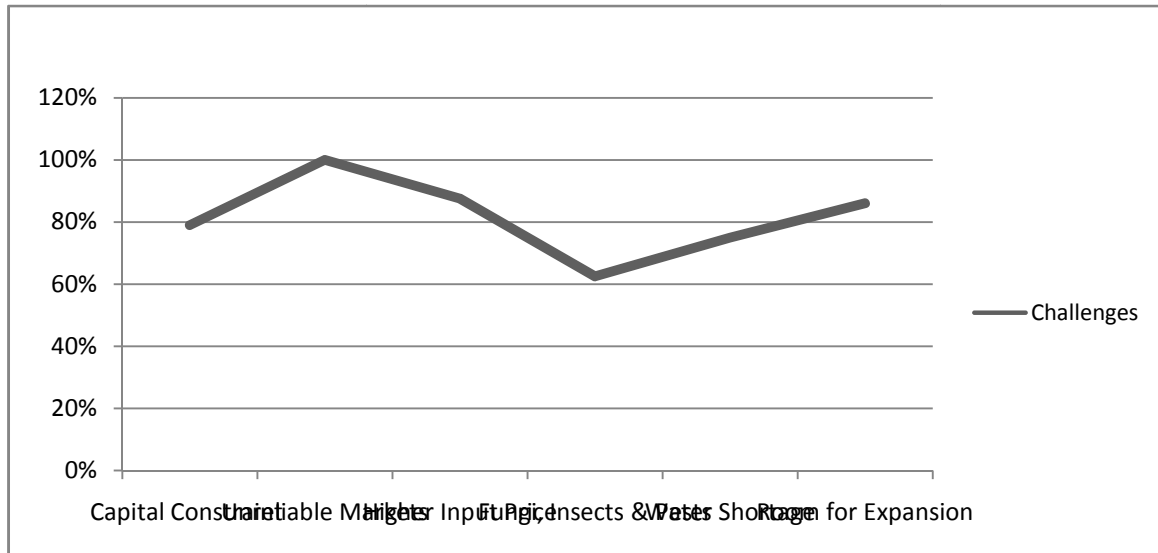


Figure 1: Challenges facing Small Scale Businesses operators

4.3 The contribution of small scale businesses in improving livelihood

Availability of food: Findings in figure 2 reveals that all those involved in garden businesses have an assurance of daily meals, this has been a great achievement of small business operations. Further, it was observed that 65% of studied population has assurance of three meals per day that includes breakfast, lunch and dinner while the rest (35%) have an assurance of two meals per day.

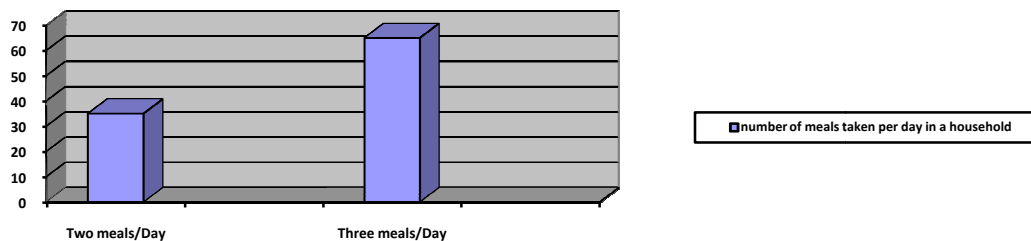


Figure 2: Households Number of meals in a day

Shelter: The study findings in table 4 show that most of the people in the study population live in decent houses where about 55% of the sampled population lives in their own houses with their families and about 30% of the studied population rent houses while the rest (15%) lives with their parents.

Table 4: House ownership and type

Ownership	Number	Percentage	Type of house	Number	Percentage
Own houses	22	55	Muddy	10	25
Rent houses	12	30			
Parent houses	6	15	Concrete	30	75
Total	40	100		40	100

The study also reveals that 75% of them live in concrete houses and 25% lives in muddy houses (table 4.2) but both roofed with iron sheet and those who live in rent houses are able to pay utility charges including electricity and water bills through the income generated from their nursery gardens as a form of small scale business.

Clothes: The study also intended to measure the impact of nursery gardens in enabling operators in accessing clothing as one of livelihoods outcomes, and it was observed that 98% of the garden operators and their families managed to have an access to clothing. This signifies the contribution of garden income in accessing clothing for gardeners and their families.

Access to health services: Table 5 shows the impact of income generated from nurseries on accessibility of household health services, the study findings shows that the health status changed to 70% by garden income and 20% reports no changes. However, health status of 10% of the respondents is changed by other sources of income. 93% uses health services from hospitals and health centers, while 7% do not use at all, but served by local and tradition healers. 10% get free health services, 60% always buy these services from health services and hospitals, while 23% get them through cost sharing and only 7% who have an access to all means.

Table15: Business Incomes and Access to Household Health Services

Variable	Category	Frequency (N=40)	Percentage (%)
Health status	Changed by garden income	28	70
	Not changed at all	8	20
	Changed other income sources	4	10
Hospital services	Use	37	93
	Not use at all	3	7
Means of access	Always free	4	10
	Always buy it	24	60
	Cost sharing	9	23
	All of them	3	7

Access to education: In this section, respondents were to indicate their degree of agreement with the given statement. For business income on education as illustrated in table 6, 60% disagreed with the statement that income generated from the nurseries is enough to support personal education, 10% had no option while 20% agreed that their garden income has some positive impact on personal education. Moreover 40% disagreed that business income enable their children to get better education, 8% were neutral and 52% agreed. Besides, it was observed that 68% disagreed with the fact that school fees are cheap given their incomes, 18% were neutral while 14% agreed. This implies that garden income is not enough to support family education, and there is a weak association between school fees and nursery garden income.

Table 6: Business Income and Access to Education and Training Services

Attribute	Value/Response	Frequency (N=40)	Percentage (%)
Business income support personal education	Strongly disagree	6	15
	Disagree	18	45
	Neutral	4	10
	Agree	11	28
	Strongly agree	1	2
Business income enable children to get better education	Strongly disagree	2	5
	Disagree	14	35
	Neutral	3	8
	Agree	20	50
	Strongly agree	1	2
School fees are cheaper	Strongly disagree	7	18
	Disagree	20	50
	Neutral	7	18
	Agree	6	14
	Strongly agree	0	0

5.0 Conclusion and Managerial Implications

5.1 Conclusion

Small scale businesses make effective use of available local resources, simple and affordable technology and contribute substantially to job creation, income generation, income distribution and effective utilization of available local resources. As in the case of nursery gardens, this is a venue for poor-resource people with limited skills and education and among the most useful livelihood strategies. In light of the findings of this study it is imminent that income generated from small scale business dealing with nurseries enabled operators and owners to have an access to services such as health and education services. It also enabled them to access basic human needs such as food, shelter and clothing. However, operators in this sector are facing a number of institutional constraints which includes but not limited to lack of room for expansion of the business (land for expansion), market, knowledge to financial services (capital) and access to capital. Others include expensive business development services, lack of business management and entrepreneurial skills, as well as financial management and higher price of input and technology.

5.2 Managerial Implications and Recommendations

Based on the study findings we recommend the following;

Financial assistance and advisory services: Financial institutions should open a new window for operators of agricultural-based small businesses as a way to enhance the move towards commercialization of farming activities and achieving the laid down Millennium Development Goals (MDGs) and the vision 2025. Along with this the Government should moderate the lending policy to enable those groups operating in small scale businesses get financial service.

Economic use of water: We recommend the Government to encourage the economic use of water by teaching these groups so formed on different methods of irrigation and means of collecting rainwater to be used on future time especially during dry season without much cost on them as it is now where they have to pay high water bills to the urban water authority.

Business Premises: Government through Municipal councils need to accommodate this very important economic sector in the land use planning and realize the importance of allocating special business premises within the urban centres and peri-urban areas for entrepreneurs, this will increase the tax base, make more attractive and clean cities, it will also reduce chaos and result into happy and habitable cities.

Subsidies: Government should find the means to subsidize the inputs used in nursery gardens so as to minimize operational cost and improve productivities and profitability as well. These inputs includes fungicides, pesticides, insecticides, fertilizers, aiding instrument like shovels, rakes, hoes, trolley, also special plastics bags, water tapes, sprinklers etc.

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