Commercialisation of Agro-business Enterprises in Malawi : An Analysis

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ABSTRACT

Malawi is a small, developing country located in Southern Africa. Agriculture is the mainstay of its fragile economy, providing livelihood to 80 per cent of the population and generating 35 to 45 per cent of GDP. The rural poor, largely women are the players in informal sector in agriculture, as cultivators, vendors and buyers of agro-based products. The sector is informal in the sense that the units involved are mostly unregistered, not recorded in official statistics, and have little or no access to formal markets. The sector plays central function in addressing challenges of rampant unemployment and small incomes. This study was conducted to understand the commercialisation status of the informal sector farmers and identify the factors contributing to transition between different levels of commercialisation. The study was conducted in Balaka district and Ntcheu district in Malawi. Four local markets were purposively sampled considering the volume of agro-based businesses carried out. Thirty farmers involved in the informal sector were randomly selected from each of the markets as respondents, making a total sample size of 120 farmers. The computed household commercialisation index (HCI) revealed existence of three levels of commercialisation among respondents; subsistence, semi-commercial and commercial and also that the largest chunk was in subsistence level. Computation of crop commercialisation index (CCI) indicated that vegetables were the best option for commercialisation. Ranked second, third and forth were tubers, fruit and food grains in that order. Multinomial logistic regression revealed that credit facilities, farmer business orientation, innovativeness, commodity transportation, monthly income and information source utilization were the significant factors influencing the transition from subsistence to semi-commercial. Education and extension services were significant factors contributing to the transition from semi-commercial farming to commercial.

Key words: *Informal sector; Income;Commercialisation; Food security;*

Malawi is a land-locked country located in the Southern Africa along the Great Rift Valley. The country has a population of approximately 14 million people, of which 51 per cent are women. Agriculture is the mainstay of the economy, providing livelihood to 80 per cent of the population and generating 35 to 45 per cent of GDP.

The rural poor, largely women are the players in informal sector in agriculture, as cultivators, vendors and buyers of agro-based products. The sector is informal in the sense that the units involved are mostly unregistered, not recorded in official statistics, and have little or no access to formal markets for goods and credit facilities. The informal sector activities have widely been recognised for their important role in promoting food security and poverty reduction. The sector plays central function in addressing challenges of rampant unemployment and small incomes. This study was conducted to understand the commercialisation status of the informal sector farmers and identify the factors contributing to transition between different levels of commercialisation.

The market places have played pivotal role in aggregating small volumes of produce from individual farmers and further improving redistribution to other places where the supply is limited. According to *Acharya and Agarwal (2010)*, transport helps in the widening of markets by bridging the gap between the producers and consumers located in different areas. They further argued that transportation of produce creates employment and helps to transform economy from subsistence to commercialised farming.

Smallholder farming can help contain poverty by providing an affordable home platform from which poor households can improve their livelihoods. It also helps to ensure a degree of food security in rural areas where high transport and marketing costs can drive up food prices, while at the national level their higher land productivity has the potential to help Malawi attain greater self-sufficiency in staples. (*GoM and World Bank, 2006*).

The current study was conducted in order to explore potential ways of transforming smallholder subsistence farming into commercialised farming. The specific objectives of the study were as follows:

i.   To study the commercialization status of smallholder farmers

ii. To examine the factors affecting commercialization of smallholder farmers

METHODOLOGY

In this study, the informal sector refers to agri-business enterprises owned by individuals or households that are not constituted as separate legal entities. Some of their key features are;

*   They lack complete sets of accounts;
*   All or at least some of the goods or services produced are meant for sale or barter
*   Their size in terms of employment is below a certain threshold to be determined according to national circumstances;
*   They are not registered under specific forms of national legislation.
*   They are engaged in agricultural enterprises.

Balaka and Ntcheu districts in Malawi were purposively selected for the study because the districts display most typical activities of informal sector by way of rural people engaging in farming activities as well as doing small scale businesses. From each of the districts, two local markets were chosen according to volumes of agricultural commodities transacted. Thus, total of four local markets were studied. The study targeted farmers engaged in informal sector activities. In this, the respondents were farmers who were earning their livelihoods by relying on informal sector activities. From the four local markets, thirty farmers involved in the informal sector were randomly selected as respondents making a total sample size of 120 farmers.

Responses were collected using a structured,

pretested interview schedule. Personal interviews were conducted during the months April and May 2012. The collected data were scored, tabulated and analysed using SPSS version 11.1. The statistical tests and indices used for analysis and interpretation of data included;

i.   Household Commercialisation Index (HCI)

ii. Multinomial logistic regression

iii. Crop Commercialisation Index (CCI)

Household commercialisation index (HCI): HCI was used to measure, analyse and understand the determinants of commercialization of smallholder farmers. It helped to determine to what extent a given farm household is commercialized in its overall production, marketing and consumption decisions. (*Govereh et al., 1999*). It was computed as follows;

$$HCI = \frac{GCS_{hh\,i'\,year}}{GVS_{hh\,i'\,year}} \times 100$$

Where;

GCS= Gross value of crop sales

GVS = Gross value of all crop production

hh i' year denote per household per year

Multinomial logistic regression: It assisted to analyse the relationship between the dependent variable (HCI) and the combination of independent variables. HCI value of each household was examined against the selected socio economic factors.

Crop commercialisation index (CCI): CCI was computed to determine the quantity of produce per enterprise that is marketed by the individual household (*Strasberg et al., 1999*). It was calculated as;

$$CCI = \frac{Gross\ value\ of\ all\ crop\ sales}{Gross\ value\ of\ all\ crop\ production} \times 100$$

RESULTS AND DISCUSSION

Household Commercialisation Index (HCI) : The index was computed based on the size of farming field and production trends for the past three years of each household. Season wise production for 2008-2009, 2009-2010 and 2010-2011 were determined for different enterprises. The study targeted food grains (maize as staple crop), tubers, vegetables and fruits because they were commonly produced and transacted by farmers in the study areas. The impact of commercialisation was therefore examined in relation to other variables because it directly influenced the success of informal sector activities. Experience indicates that farmers who invest in farming as a business have high likelihood of achieving smallholder commercialisation.

Table 1. Results of household commercialisation index (N=120)

Value of HCI	No.	%
>50	35	29.2
35 - 50	39	32.5
<35	46	38.3
Total	120	100

Table 1 indicates that only 29.2 per cent of the households were above 50 per cent in commercialisation of their farming enterprises. This category is known as "Commercial" farmers. The farmers regard farming as business and take due interest to produce for consumption as well as surplus for sales. They contribute largely towards regional as well as national production of crops as a result of using high yielding varieties, fertilizers and other technologies. The farmers tend to own specialised enterprises and are market-oriented in order to maximise profit.

The respondents who were in the 35 to 50 HCI value range constitute 32.5 percent. They are categorised as "semi-commercial" farmers. The farmers are interested in producing surplus crop to meet market demand under intensive farming system. Improved farm input usage is common and mostly they resort to locally procured seeds. The farmers produce products which are moderately specialised for the market. They are cautious and diversify in order to spread market related risks because they have market information about changing demand and supply of produce.

The last group indicated that 38.3 per cent of households were in the category below HCI 35. The group is categorised as "Subsistence" farmers. The primary aim of production is to meet household demand using locally procured seeds, family labour and traditional practices. Their production is characterised with low yields that may risk distress sales while attempting to meet household cash contingencies. They require concerted extension support to improve their production activities.

Multinomial logistic regression: Eight variables were found to be significant at 10 per cent level. This reflected how each influenced or affected the commercialisation among small holder farmer enterprises.

Table 2 revealed that four internal factors namely; education status, business orientation, innovativeness and monthly income affected informal sector interventions and three external factors *viz.*; credit facilities,

Table 2. Multinomial logistic regression statistics

Effect	Likelihood ratio tTests			
	Model fitting criteria[+]	Likelihood ratio tests (χ^2)	df	Sig.
Intercept	234.312	0	0	-
Age	234.616	0.304	2	0.859
Education	237.604	3.293	2	0.08**
Occupation	236.146	1.835	2	0.400
Credit facilities	238.274	3.962	2	0.086**
Business orientation	237.297	2.986	2	0.097**
Innovativeness	239.081	4.769	2	0.056**
Commodity transportation	156.422	2.754	2	0.10**
Monthly Income	157.165	3.496	2	0.070**
Extension sources	242.292	7.981	2	0.018**
Information source use	238.121	3.809	2	0.061**
Gender	237.074	2.762	2	0.251

Note: ** Significance level at 10%
[+] -2 Log Likelihood of Reduced Model

commodity transportation and extension services significantly influenced household commercialisation among small holder farmers. One variable, specifically information source utilization was partly external and internal. The choice of the information source is an internal aspect, as it is solely the individual farmer's choice. On the other hand, information source availability in a particular area is mostly an external aspect.

Policy makers, administrators and development mechanisms of the country might concentrate more on the external factors like transport facilities, credit facilities, extension services and information source availability to enhance the informal sector activities. In so doing, the commercialisation of smallholder farmers would be enhanced.

Crop commercialisation index (CCI): A value of zero for the CCI indicates total subsistence. An increasing value of CCI towards 100 percent indicates higher degrees of commercialisation i.e. a greater percentage of produce marketed. From the computed data, vegetables accounted for high value of CCI with average of 73 for the 3 years growing seasons as highlighted in bold. Therefore, growing of vegetables clearly demonstrated that high portion of production is devoted for household income source through sales and this was common in the two districts.

Table 3. Cop commercialisation index (CCI) for each crop per year

Crops	CCI values			Mean Value	Rank
	2008-09	2009-10	2010-11		
Food grains	37.00	34.30	33.95	35	IV
Tubers	56.20	70.67	59.08	62	II
Vegetables	79.25	68.97	69.40	73	I
Fruits	44.54	60.13	33.20	46	III

In addition, ranked second, third and forth are tubers, fruit and food grains respectively. Tuber crops had higher potential of commercialisation with average CCI of 62. This can be enhanced through creating favourable environment to scale up their production as well as providing better access to other services such as credit facilities, market linkages and capacity building just to mention a few (Table 3).

Fruit production was another enterprise which requires more emphasis in terms of increasing their production and marketability. Individual farmers were making more money through sale of fruits because fruit production involved low recurring expenditure as most of them were perennials. The yearly capital investments were insignificant and common fruits included mangoes, avocado peas, bananas, oranges and guavas.

Food grains on the other hand indicated the lowest CCI of 35. This is not surprising since most households rely on food grains for consumption and in particular maize (staple food). The crop is usually subjected to meeting household food requirements and its intake largely depended on household sizes. Its sales showed an inverse relationship and only when household needs are satisfied the surplus was marketed.

CONCLUSION

The study established that informal sector farmers in Malawi are fairly on the path to commercialisation. MSEs(Micro and Small Enterprises) are already pointed out as the instrument in addressing poverty problems where women are increasingly becoming the owners (*GOM,2002; Chirwa, 2004*). Results of this study indicated that more farmers were at subsistence farming who require support to move towards semi-commercialised farming through to commercialised farming. Specific interventions have been suggested that would enhance the farmer transformation. Smallholder commercialisation demonstrates the potential for achieving increased agricultural production and income levels. Provision of support mechanisms in the form of credit facilities, instilling innovativeness, improving commodity transportation and timely information are instrumental towards accelerating the process. Additionally, farmers should be consistently empowered with adequate skills for market identification and business management in order to have sustainable livelihoods for the rural farmers in Malawi.

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