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LINKING RURAL ECONOMIES WITH MARKETS – AN INSTITUTIONAL APPROACH

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Abstract

For many developing countries, the agricultural sector is still the main employer, especially for women, and particularly in sub-Saharan Africa. The causes of poverty are complex and often superficially understood. As a result, efforts to resolve these problems are frequently fragmented and development interventions become severely limited in focus and reach. The development of the agricultural sector can ensure integration of the region's economies and the resultant upliftment of rural communities. Market access seems to be one of the most limiting factors which have been identified that is hindering growth in rural agriculture. Factors influencing market access are lack of information, training and extension services, tenure systems, transport and credit. Resolving the South African problem requires a concerted, holistic, innovative and integrated approach through partnerships between the civic, public and private sectors. The market access problem should be addressed based on linkages between the small producers and markets by addressing the constraints. The fact is recognise that small farmers do not exist in isolation but is part of a large market system. Interventions are therefore well grounded in understanding the business development service markets within which small producers operate, as well as enhancing win-win linkages between rural-based service providers and small producers.

Keywords: Market access, rural farmers, institutions.

Background

The dualistic agricultural sector creates many challenges for South Africa. The established commercial sector and the areas, in which commercial agriculture preponderates, are served by a sophisticated agricultural marketing system, with good infrastructure. This infrastructure includes roads, railways, telecommunication, postal services, marketing and financial services. Circumstances for small-scale farmers is different, marketing services to these small farmers are often poor (sometimes non-existent), as are roads, telecommunication, physical marketing infrastructure and financial services (Van Schalkwyk, Groenewald and Jooste, 2003).

According to Magingxa, (2006) market access is one of the most critical factors that influence small scale farmer's potential for success. Jooste and Van Rooyen (1996) also concluded that the transition of the small-scale livestock sector towards commercial production will ultimately be determined by its access to markets. Market access can be considered to be the reason why those farmers who produce surpluses

remain trapped in the poverty cycle. Smallholder access to markets is considered central in the commercialisation debate of small-scale agriculture in general because it is implicit in the view that development of smallholder agriculture can influence economic growth.

Market access is an important factor in improving rural livelihoods. In addition, within the South African context, market access is also seen as feeding directly into the government's development objectives that include poverty alleviation and economic growth. In this regard, it becomes important to understand the factors that influence market access in smallholder production. Understanding the factors influencing market access will improve the knowledge of those involved in rural development in general and smallholder management in particular. By understanding the factors one can pay the necessary attention to them when designing successful smallholder projects (Magingxa, 2006).

A substantial number of studies in the recent history have put market access as one of the main ingredients to successful irrigation management. The core argument in recent studies such as Gabre-Madhin and Haggblade (2001), Hau and von Oppen (2002), Foreman and Livezey (2003) and Muhammad, Tegegne, and Ekanem (2004) is that market access needs to receive more attention in studies dealing with smallholder farmers. However, as Kherallah and Kirsten (2002) argue, the frequent occurrence of market failure in developing countries requires an institutional analysis.

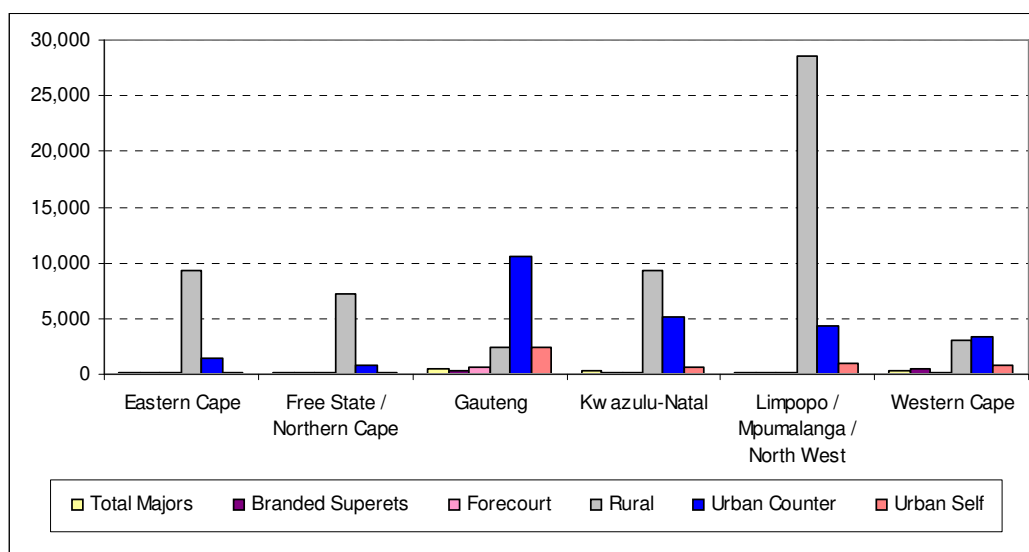
Markets

Types of Markets

There are two distinctive market types in South Africa, i.e informal and formal markets. These two differ dramatically. The informal market forms an essential part of South Africa's marketing power and is very important to small-scale farmers.

There are over 90 000 stores in the formal sector, whereas the informal sector is impossible to quantify. The informal market tends to escape the attention of policy makers and planners. This is not only due to the difficulty associated with an informal market and the complexity of gathering data, but also because the socio-economic groups involved in the market are frequently the weakest ones in the society (Martin, 2001). Its size, volumes and revenues cannot be easily determined, as the outlets are not registered as retailers, nor do they pay rent or taxes. According to RocSearch (2004) and Wilson (2004) as quoted by Botha (2006) the informal retail market had an estimated turnover of R34 billion during 2004 and estimated that there could be over 6 000 spaza shops in South Africa.

According to Botha (2006) the most common store types throughout South Africa are the smaller types, such as rural shops, urban counter shops and urban self-services shops. Figure 1 below indicates the dispersal of various outlets throughout South Africa.

Figure 1: Numbers of different food retail store types per region in South Africa in 2004.

Source: Botha (2006)

Circumstances that Influence Markets

There is growing evidence that many smallholder farmers can benefit from market-oriented agriculture. However there are fundamental barriers small-scale farmers' needs to bridge before they can access markets. No development can be expected in large areas of South Africa, and no upliftment of the rural poor can occur in the absence of significant improvements in the marketing set-up serving poor areas and people (van Schalkwyk, Groenewald and Jooste, 2003).

A study done by Cichello, Fields and Leibbrandt (2005) found that crime can be identified as the single most dominant hindrance for small-scale farmers in the informal market while other severe hindrances are the continual risk of business failure, a lack of access to start up capital, transport costs, uncertainty over profits before one starts the business and jealousy faced in the community if an individual is successful. These are all essential factors which need to be considered before market entrance can be finalised by small scale farmers in an informal market. A study by Chandra, Nganou and Noel (2002) found that lack of credit, low demand and variability of income streams, high cost of infrastructure (public transport) and services (water, electricity, and telephone) and poor access to business support centers, poor access to training, lack of storage spaces/permanent stalls, lack of transport facilities, and inadequate business space are all constraints for small scale farmers to link to markets.

Factors considered as restraining small-scale farmers ability to market their cattle include lack of market information (Nkosi and Kirsten; 1993), large distances to the market place (Mahanjana, Esterhuizen and Van Rooyen; 2001), marketing infrastructure (Fraser, 1991), lack of diversity of the market outlets (Lyster; 1990), cultural and subsistence type of farming (Ainslie, Kepe, Ntsebeza, Ntshona and Turner, 2002), and Makhura (2001) mentions that small-scale farmers contribute inadequately to the mainstream market because of low production and poor access to other options for obtaining a livelihood. Other factors include, farmer training, herd size, household characteristics and support services, (Lapar, Holloway and Ehui, 2003; Coetzee, Montshwe and Jooste, 2004; Bellemare and Barrett, 2004; Nkhori, 2004).

By comparing the factors influencing market access of Magingxa (2006) study on irrigation farmers and Montshwe (2006) study on the cattle industry a comparison is found in factors influencing market access in a broad spectrum of agricultural production. These factors include information, training and extension

services, transport and credit, all of which have a significant impact on market access for small-scale farmers.

The unstandardised and standardised regression coefficients results between cattle and irrigation small scale farmers are presented in table 1. Only the variables which occurred in the cattle as well as in the irrigation framework are discussed. The interpretation of results focus on the standardised coefficients.

Table 1: Standardised and unstandardised logistic regression analysis for cattle and irrigation farming

Variables	Cattle		Irrigation	
	Unstandardised	Standardised	Unstandardised	Standardised
Tenure system	-0.4517	-0.1429	2.57217	-1.04574
Information	0.8908**	0.3483	3.318946	1.617806
Training	2.2789***	0.93	3.349972	1.108553
Transport	0.0274***	1.3009	3.089256	1.077983
Extension services	-0.1758	-0.0829	0.032404	0.835903
Credit	0.9862***	0.3453	-0.35272	-0.84365

*The * represents the significance level:*

*1%=***; 5% = ** and 10% = **

Information

According to the standardized coefficients in table 1, information has the biggest impact on irrigation small scale farmers. Significant and sensible information is very important to improve success potential. Smallholder farmers are seldom in a position to understand what to produce, when and in what quantities or quality requirements. Small-scale farmers usually lag behind in terms of technology as a result of this and make it difficult to enter the more profitable markets.

Information is crucial for any enterprise not just cattle or irrigation smallholders, access to market information, and the use thereof, results in increased participation of small-scale farmers in the mainstream markets.

Since the deregulation of marketing boards in South Africa acquiring information which is accurate and timely has proved to be an expensive and difficult task. Furthermore, the publicly available information is more often than not historical, and its validity is sometimes questionable. Availability of prompt and reliable market information regarding the movements in markets and what prices are quoted for different commodities considerably improves the decision making capability of the farmers and strengthens their bargaining power.

Different institutions currently involved in the supply of information to the agricultural sector should be invited or be nominated to exercise certain information gathering, processing and dissemination duties on behalf of the agricultural sector. Institutions, which can play a major role in this regard and who may become member institutions of the Institute, are for example:

- National Department of Agriculture (Market and production data)
- Agricultural Research Council (Technical data and information)
- The South African Weather Bureau (Climate data)

- Agri SA (General information on policies etc.)
- SAGIS (Field crop data)
- Agrimark Trends / University of the Free State (Market and production information - value added)

All of the above institutions should have good linkages with the future users of their information, but this is especially true with small-scale farmers. In order for this to happen an Advisory Board consisting of e.g. 5 officials from producer organisations (representing field crops, livestock, vegetables, fruits and secondary products), 5 from agribusinesses (representing the agribusiness chamber, banking sector, input suppliers, traders and processors) and 3 from the consumer sector (representing wholesalers, retailers and the consumer union) should be appointed. The objective of this Advisory Board should be to identify priorities for the Institute and to find the necessary funds to finance the identified priorities (Van Schalkwyk and Frick, 2002). As small-scale farming has been identified as a priority by the government as a vehicle for growth in the rural areas, it is necessary to incorporate these farmers with the most updated information for them to make informed decisions. Information should reach small-scale farmers by means of extension officers.

Training and Extension Services

Comprehensive Agricultural Support Programme (CASP) represents an important step in the Department of Agriculture's strategy to promote agricultural production among previously disadvantaged individuals and communities (NDA, 2005). In the past, the focus was mainly on providing access to agricultural land but since 2004 CASP has a new dimension in the form of post-settlement support. This includes improved access to financing and credit for small-scale farmers and co-operatives, as well as six pillars of non-financial support services. The pillars are information and knowledge management, technical and advisory assistance, training and capacity building, market and business development, on and off-farm infrastructure services and regulatory services.

There is a positive relationship between market access and training for both cattle and irrigation farming practises, as proved by the studies of Magingxa and Montshwe. This positive relationship is expected since marketing through the mainstream markets requires knowledge in terms of product specification, price determination and timing.

The main problems small-scale farmers are faced with are that; farmers are not trained and therefore often apply low technology systems that do not make full use of their resources. This result in low yields per animal/land unit and high production costs per unit of product. Small-scale farmers also usually buy their inputs individually and in small quantities at the last link of the market chain and, as a result, they pay elevated prices. Farmers are not organized, they sell individually without adding value to their products and they often sell to the first buyer. Their sale prices are low and their profits are shared with intermediaries. All of these limiting and constraining factors can be addressed by the proper training and extension.

Extension officers have a responsibility towards small-scale and emerging farmers in the sense that they need to provide proper support to them regarding management practises and marketing information. The obstacle which faces the extension officers is that they are not always capacitated to the necessary level in which they can help these farmers. It thus becomes necessary to rethink the training of these extension officers for them to be able to face the modern day challenges of the rural farmers and in the end become trainers for the small-scale and emerging farmers.

Extension officers need the most up to date information available to them in order to provide the rural farmers with price increases, market changes, new production practices, and management expertise. A

range of training of trainers and organisational development courses must be offered to the extension officers to address gaps in the fields of all major agricultural commodities in their respective areas.

It is clear that without improved education of extension and farmer training it is very difficult to promote change. Extension should be strengthened to increase its effectiveness and ensure that its training programmes are adapted to the resource needs and capabilities of smallholder rural families. This is where government as well as private organisations can become role players. Government can create the necessary policies or incentives for farmers to receive training. This has already been initiated through different Skills Education Training Authorities (SETA) programmes in South Africa. The AgriSETA cover all the economic sub sectors, like all types of farming, slaughtering houses, fibre processing, exporting and importing, sales and distribution, agricultural research, and marketing.

Transport

The third positive standardised variable for both cattle and irrigation farming is transport. The results suggest that market distances have a positive effect on participation of small-scale farmers in the mainstream markets. Transport availability is critical in accessing both input and output markets. Increased participation will take place when the real distance to markets is reduced by bringing buyers closer to the small-scale farmers, i.e. visits by speculators with the necessary transport to move animals/grain.

Government have the responsibility to economic advancement in the rural areas to create the necessary roads and transportation infrastructure to support the rural farmers. Logistics refer to that part of the supply chain process that deals with the transportation, warehousing, inventory carrying, and administration and management of physical products between the point of production and the point of delivery to the final consumer. According to the Council for Scientific and Industrial Research (CSIR, 2005) it was calculated that transportation costs make up 75% of logistics costs in South Africa, making it the biggest part of the supply chain.

If the specialist rail export lines are excluded, the tonnage transported by rail has declined by nearly 20% over the past decade. In contrast road transport increased by more than 50% over the same period (CSIR, 2005).

As transport is one of the most limiting factors for the small-scale farmers, methods to bring markets to them are an option which needs to be considered. Mobile banking is an option in which credit could be combined with the transport issue to increase the farmers' access to banking facilities. A truck with an Automatic Teller Machine (ATM) on the back where withdrawals and payments can be made should run on a scheduled route through the rural areas. This could reduce transaction cost considerably regarding banking for these rural farmers.

Other ways in which transportation cost to markets could be decreased or eliminated is for auctioning houses to go mobile. This will entail that once a month or less an auction is held in a different central point in the rural farming communities, where the pens are set up for the auction and afterwards broken down to transport it to the next auctioning place. This will decrease the actual distance to the market for most rural livestock farmers, and a spill over effect is that livestock will not lose as much condition before being auctioned as would have happened when they were to be transported over vast distances.

Tenure system

Tenure systems were in both cases influenced negatively, this is because the lack in proper tenure systems decreased the farmers' ability to access markets adequately. Roth and Haase (1998) points out that increases in market access can show dramatic increases in food production in the short to intermediate run, these gains are typically achieved under low capital intensity.

Roth and Haase (1998) further states that for output to increase, tenure security become a binding constraint. At some point of production, farmers will demand high tenure security before undertaking fixed land improvements or investing in capital intensive technology. Credit supply by informal lenders becomes limiting, while formal lenders will require clear and transferable title before lending. It is doubtful whether the transition to high value crops and a high capital/labour ratio can be achieved without land tenure that confers right of sale, mortgage, and low cost transaction in the eyes of creditors. The conclusion thus is that accelerated commercialisation of smallholder agriculture will require careful attention to both issues of land tenure institutions and market access.

According to Tietenberg (2003) the structure of property rights that could produce efficient allocations in a well-functioning market economy structure has three main characteristics:

- Exclusivity – All benefits and costs accrued as a result of owning and using the resources should accrue to the owner, and only the owner, either directly or indirectly by sale to others.
- Transferability – All property rights should be transferable from one owner to another in a voluntary exchange.
- Enforceability – Property rights should be secure from involuntary seizure or encroachment by others.

According to Keyfitz and Dorfman (1991) there are 14 institutional and cultural requirements necessary for the operation of an effective private market, and one of these are security of persons and property. They further state that as a requisite for a properly functioning marketing system, property rights should be clearly established and demarcated as well as the procedures for establishing property rights and transferring them. It is imperative that clearly defined property rights system and land ownership be established in the rural areas. Well defined property rights are needed in order for these farmers to not only efficiently use their resources, but also to gain access to credit and become market players.

Credit

A study done by Batha (2003) indicated that about 90% of the people living in developing countries lack access to financial services from institutions, either for credit or saving. This includes nearly all the poor of the developing world. While not all the poor can use microfinance, there remain a massive gap between the low level of commercial microfinance available from financial institutions and the extensive worldwide demand from such financial services among low-income people. Moreover, large scale sustainable microfinance helps to create an enabling environment for the growth of political participation and of democracy.

Such services are rarely accessible through the formal financial sector: credit is however widely available from informal commercial money lenders at very high cost to the borrower-especially poor borrowers. Banks generally assume that providing small loans and deposit services would be unprofitable.

According to Bahta (2003) rural financial systems help to promote economic growth through the mobilization of resources and by providing financially and economically viable investments and economic activities; to further efficient resource allocation; to contribute to better income distribution and

poverty reduction by enabling access to financial markets also for poor; to support the building of sustainable self support rural financial institutions.

As mentioned, mobile banking can increase the access that rural farmers will have to credit and other banking facilities. By using the post offices in the rural areas as banking facilities one immediately increase the reach of credit availability to the rural areas.

Conclusion

Present trade, marketing and institutional policies in this county make limited provision for the unique interest of emerging small-scale farmers. Furthermore, the current institutions involved in promoting market access are not co-ordinated. The various constraints to market access can be addressed through a combination of public interventions and private sector involvement. Potential solutions include overcoming infrastructure backlogs especially in the transporting sector. Small-scale farmers have limited access to transport and mobile auctioning houses should be considered, decreasing transportation cost. Other potential solutions are the improvement of market information, institutional reform (with specific reference to land tenure), supporting small-scale food processing and value-adding, and encouraging closer links between small-scale and established commercial farmers. Makhura and Makoena (2006) came to the same conclusions and indicated that Farmer-Public-Private-Sector Partnership is crucial in addressing the problem of market access of small-scale farmers in South Africa.

It is important that Government recognises the diverse roles the state can play: as provider, facilitator, or partner. The state needs to use resources wisely to maximise their impact. One of the critical decisions which government needs to take is who can provide the services most cost-effectively. Currently government is providing many services that it cannot provide cost effectively. It is important to work out which are the core processes of the organisation, where the organisation can really make an impact. For other areas the state should seek either to leave a space for the private sector or Non Governmental Organisations to take up those services, or if it will not happen without subsidy, then to outsource those activities.

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