LIVESTOCK-BASED LIVELIHOODS: COMMERCIALISING LIVESTOCK PRODUCTION UNDER COMMUNAL LAND USE SYSTEMS

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Abstract

South African agriculture has a dualistic economy: the first economy comprising of large commercial farmers, and the second economy composed of small subsistence and developing farmers. Supporting the second economy is a major need and priority in South Africa. In Limpopo Province, Blouberg Local Municipality has been identified as a nodal area where livestock farmers need to be supported for the production of livestock. The focus is on the development of the livestock production sector, concentrating on communal lands. In this paper, strategies that can be used to transform farmers in communal land use systems from subsistence livestock production into viable systems of production and marketing livestock through formal markets are evaluated using Agricultural Research for Development (ARD), a holistic approach to collective rural innovation and development. The findings of this study indicate that involvement of all stakeholders in formulating development interventions can lead to sustainable development and strengthening of inter-organisational linkages.

Key words: Livelihoods, Communal land-use systems, Livestock, South Africa.

Background

In order to address the injustices of the past in land ownership, the South African government instituted a number of land reform measures, among which is the land tenure reform. Current land policy, administration and legislation are being reviewed to improve tenure security of all South Africans and to accommodate diverse forms of land tenure, including communal tenure. Cousins (2006) and (Sibanda, 2001) critique the land tenure reform for its snail pace in producing real change in the lives of rural people.

Even though communal lands play such an important part in the lives of the rural poor, the communal tenure system contribute to low productivity because of insecurity to tenure and the inability to use land as collateral for bank loans. Management of communal lands is also a mammoth task. In addressing the needs of the rural dwellers, who produce mainly under communal land use, is land reform an appropriate measure or can the agrarian reform better make the much needed change? Cousins (2006) contents that although land reform and agrarian reform are inseparable, agrarian reform is paramount. The agrarian reform is much broader in scope and aims to restructure rural economic areas and socio-political relations, creating 'accumulation from below'. This implies that the rural dwellers do not only have access to land, but inputs, implements, marketing outlets, infrastructure such as transport and communication, support services such as extension, trading and marketing advice (Cousins, 2006).
Conducive agrarian reform conditions can be facilitated amongst others by the area-based land reform, the strategy which the Limpopo department of agriculture (LDA) has adopted. With this approach, infrastructure and support services can be provided to land reform projects more cost-effectively. The approach calls for the contribution of other agencies in the private sector as well as civil society in collective service delivery to compliment government functions.

Like all the provinces of South Africa, Limpopo has two distinct types of agricultural production systems; the large scale commercial system that forms part of the first economy, and the smallholder farming system of the second economy. The smallholder farms are located mainly in the former homeland areas and cover approximately 30% of the provincial surface area. The other 70%, which happens to be prime land is white owned. About 89% of the Limpopo population is classified as rural (STASSA, 2002) and agriculture plays an important role in the livelihoods of the people and in the economic development of the rural areas of the province.

The South African government has put forward as one of its priorities strategic imperatives the support towards the second economy. In Limpopo province, which is dominated by the rural poor, various intervention strategies have been institutionalised to aid smallholder farmers become sustainable and join the mainstream economy. The LDA has adopted a municipal-level service delivery model. This approach entails provision of extension support and infrastructural development to commodity organisations. The department recognised that amongst others, the success of this approach depends on organisation of farmers into commodity organisations for better targeting of government interventions; development of human and physical resources and promotion of sustainable production.
This new mode of operation was piloted in the livestock production sector of Blouberg Local Municipality (BLM) before broad-based application throughout the province.

The Study Area

Blouberg Local Municipality (BLM) falls within the Capricorn District Municipality (CDM) in the Limpopo Province, South Africa. The CDM is classified as semi-arid area, making the area prone to drought. Blouberg receives an annual rainfall ranging between 380 and 550 mm: the rainfall is concentrated mainly during summer (November-January). The CDM is a commercial farming area, but extensive areas are populated by the Pedi tribe that makes use of communal land use systems. Blouberg is characterised by a high unemployment rate of 52.6%, and lowest level of education within CDM. On average, 34.7% of the households have no formal income (Integrated Development Plan, 2005/6). The two villages, Gemarke and Early Dawn were selected for the study.

Problem Identification

BLM has been identified by the LDA as a nodal area where livestock farmers need to be supported for the production of livestock. Livestock numbers in this municipality are considerable, and are complimented by the availability of extensive range land. However, there is difficulty in optimal management of this range land and other natural resources. Furthermore, livestock keepers find it difficult to profitably market their livestock produce. In addition, some of the residents are poor and in need of any opportunity that can build their capacity and enhance their economic development.
This paper looks at the contribution of livestock in the livelihoods of the rural areas of BLM, together with the opportunities for commercializing livestock production in the communal land use system through better management and sustainable use of the agro-ecological and socio-economic resources. The efficiency of the new mode of operation of LDA is also reviewed.

Methodology

A holistic approach to collective rural innovation and development, termed Agricultural Research for Development (ARD), was used in carrying out this research. As ARD is multi-faceted, it provides synergy of various other approaches, making it an ideal approach to create the much needed paradigm shift in South African research and development. Participatory Rural Appraisal (PRA) tools such as

meetings, semi-structured interviews, focus groups discussions and workshops provided a platform for a team of researchers to explore possibilities for increasing production and commercializing livestock under the communal land use system, and to gather different perspectives of the key stakeholders.
Data was collected by interacting with different stakeholders such as farmers, traditional leaders, auctioneers, LDA (extension officers, agricultural economists, animal scientists, and managers), the municipality (CDM and BLM), and representatives of tertiary institutions (Universities of Venda and Limpopo, Tompie Seleka and Madzivhandila colleges of agriculture).
Potential opportunities and associated strategies to enhance the livestock farming-based livelihoods and ultimately commercialization were jointly analysed and prioritised by all key stakeholders.

Discussion

In investigating the possibilities of commercialising livestock under communal lands system and devise strategies that match the livelihoods, it was imperative to examine the need for typology development; the rationale behind livestock keeping; the constraints in livestock keeping; the marketing channels followed and the general challenges faced by these small-holder farmers. In development context, it is imperative to assess if the proposed development strategies are compatible with the livelihood strategies.

Typology

Rural communities are often perceived as harmonious and homogenous, a wrong perception. These communities are composed of different economic groups that have different access to resources. Their preferences, objectives and expectations also vary, leading to different livelihood strategies. This implies that perception and reaction to the problem situation and developmental interventions will differ.
Since it is not possible for the government to address the needs of households individually, and it was viewed important to determine whether the farmers can be grouped into fairly homogenous groups with similar needs. As a result, the livestock owners were classified into suitable target groups that can facilitate future targeting of interventions. A univariate analysis through livestock numbers (ICRA, 2006) was used in constructing a typology for the two study villages to describe clustered types of farmers. A summary of the five tentative clusters is presented in Table 1.

Table 1: A tentative livestock farmer's typology

Farmer target group: Livestock numbers
• Cluster 1: 1-5 LSU • Cluster 2: 6-10 LSU • Cluster 3: 11-15 LSU • Cluster 4: 16-20 LSU • Cluster 5: > 20 LSU LSU: Large Stock Units

The livestock kept in households varies in types and numbers. The number owned can stimulate interest in livestock developmental projects. Table 2 displays the type and the numbers of livestock owned with respect to Gemarke clusters. Only three clusters apply in Gemarke since no farmer owned more than 15 LSU's.

Table 2. Livestock type and numbers amongst clustered farmers in Gemarke

Cluster	Livestock type	Total	Average	Livestock type	Total	Average
1	Cattle	34	1.7	Goats	145	7.3
2	Cattle	47	4.7	Goats	85	8.5
3	Cattle	57	11.4	Goats	42	8.4

The average numbers of livestock in the clusters exactly match the intended range for each cluster. In clusters 1 and 2, the average number of cattle is lesser, compared to the average number of goats; while in cluster 3 the average number of cattle surpasses the goats' average. From these clusters it is clear that the lesser the number of cattle the more the number of goats, indicating a probable negative correlation between the two types of animals. One could also argue that as soon as the number of goats surpasses a certain number, the surplus is converted into the purchase of cattle. As small stock dominates in clusters 1 and 2, it can be concluded that the farmers in these clusters are predominantly small stock keepers while farmers in cluster 3 may be regarded as large stock farmers.

Livestock composition also varies between the different clusters in Early Dawn as shown in Table 3.

Table 3: Livestock type and numbers amongst clustered farmers in Early Dawn

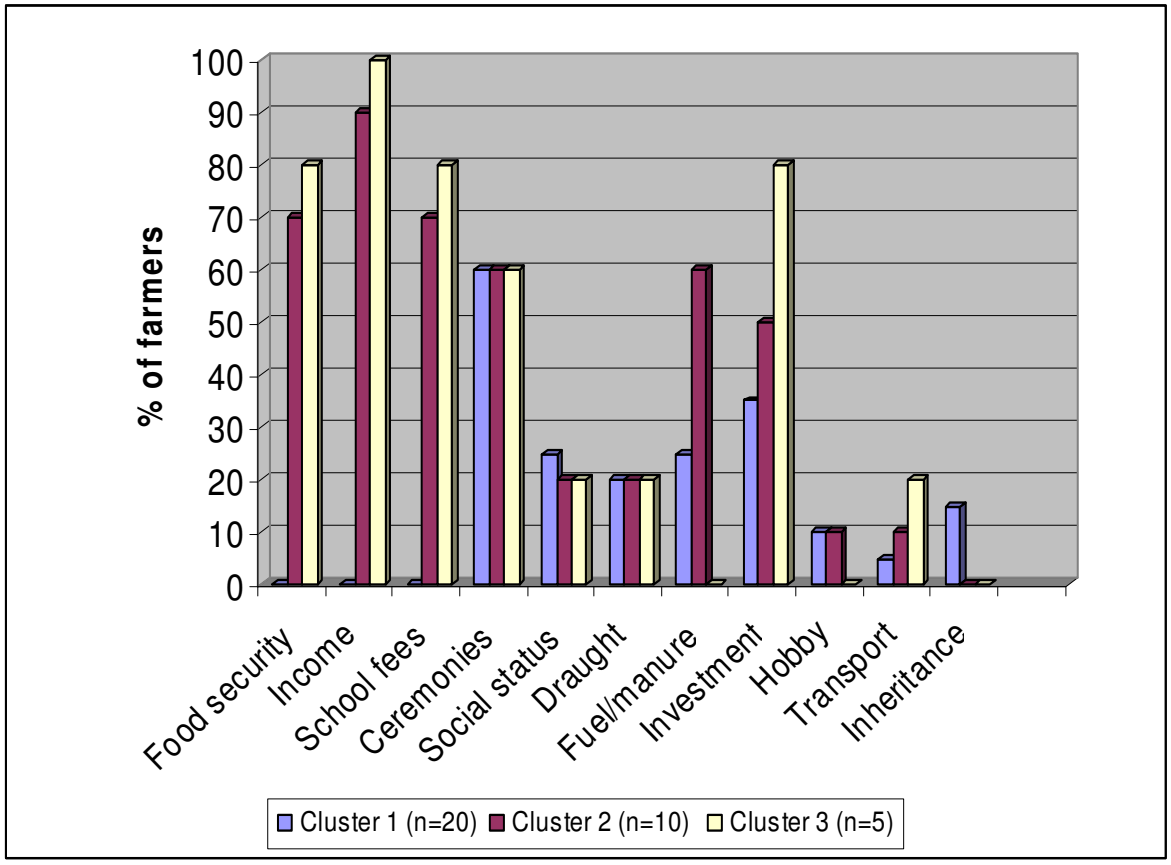
Cluster	Livestock type	Total	Average	Livestock type	Total	Average
1	Cattle	15	1.3	Goats	87	7.3
2	Cattle	59	5.4	Goats	126	11.5
3	Cattle	47	11.5	Goats	17	4.3
4	Cattle	52	17.3	Goats	20	6.7
5	Cattle	171	28.5	Goats	52	8.7

The negative relationship between cattle and goats is also evident in Early Dawn. As in Gemarke, farmers in clusters 1 and 2 can be viewed as small stock keepers due to their higher numbers of goats whereas clusters 3, 4 and 5 are predominantly large stock keepers considering their number of cattle. However, there is potential for small stock farmers to graduate into large stock keeping as the number of small stock increases. It can therefore be concluded that grouping farmers into different target groups may not be beneficial for short-term interventions, but rather all can be regarded as purely livestock keepers.

Reasons for Keeping Livestock

The reasons for keeping livestock serve as a measure of the importance and role that livestock plays in the livelihoods of these people, and to determine whether any commercialisation mindset exists. The reasons for keeping livestock are related to the numbers of livestock kept and vary from farmer to farmer. Thus it is important to understand the farmers' objectives.
The motives for keeping livestock included food security, source of income, social status, draught power, cultural reasons, investment and fuel/manure. The reasons for keeping livestock mentioned by farmers in Gemarke village according to the cluster they belong to are presented in Figure 1.

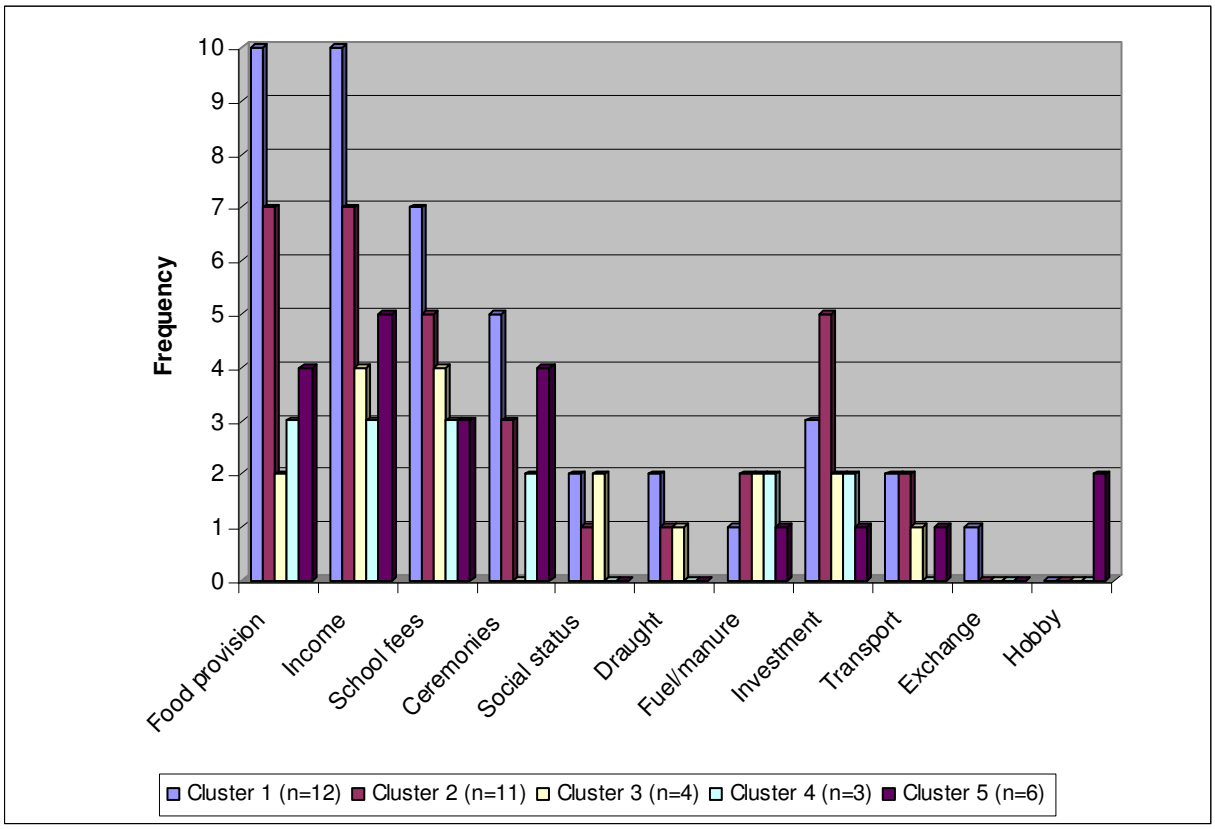
Figure 1: Reasons for keeping livestock as stated by clustered livestock keepers in Gemarke



Cluster 1 encompasses farmers with very few livestock, and this could imply that livestock does not play a very important role in their livelihoods. Ceremonial reasons (religious, funerals and weddings), manure and draught for crop production were most frequently mentioned in cluster 1, even though keeping livestock for investment and social status was mentioned to some limited extent. In the second and third clusters, livestock is kept for income generation, food security, school fees, investment, and manure, in order of frequency of mentioning. This situation may imply that these farmers depend more on livestock for attaining a sustainable livelihood.

The rationale for keeping livestock in Gemarke did not deviate much from Early Dawn as Figure 2 indicates. Livestock keepers in clusters 1, 2 and 4 referred to food security and income as reasons for keeping livestock. Income was the most frequently mentioned reason for keeping livestock in cluster 3. Income was also the most frequently mentioned reason for keeping livestock in cluster 5, followed by food security and ceremonies. Use of livestock for provision of manure (fuel and fertilizer), draught (transport) and social status play a less important role.

Figure 2: Reasons for keeping livestock as stated by clustered livestock keepers in Early Dawn



Keeping livestock for income purposes was mentioned by some clusters, but mainly to meet some social responsibilities such as paying school fees, health care, food requirements, etc. The role of livestock is important but is still mainly related to reaching more subsistence and secured livelihood objectives. Subsistence oriented reasons (food security, school fees, ceremonies, investment) dominate the household decision making process regarding livestock management. This is the same for all tentative clustered target groups. Commercialization considerations do not play a role yet. As livestock keepers in the two villages are still focusing on subsistence objectives, it is important for development intervention by the LDA and other stakeholders to focus on this and build on it as a step towards commercialisation.

Constraints

It is important to recognize the role of smallholder farmers in livestock production and agriculture in general, but even more so to identify those factors that prevent them from being efficient and productive farmers. It is often the lack of crucial productive resources such as land and credit that render the image of smallholder farmers as being marginal and inefficient producers.

In both villages, theft, diseases and drought (resulting in lack of fodder and water) were cited as the major constraints faced by farmers in livestock production. Stock theft causes high economic losses to farmers. Farmers are very much concerned that stock theft causes not only an economic loss to them as farmers, but also a social loss as stock theft can also lead to a lower level of trust among community members.

Livestock farmers consider animal diseases as one of their major constraints. According to the farmers, high mortality caused by tick-borne diseases such as heart water cause significant losses in livestock production. The farmers need access to a number of animal health services in order to keep their herds or flocks healthy. Some critical requirements are access to preventive disease control measures such as

vaccinations and internal and external parasites control; a reliable supply of key veterinary pharmaceuticals; training in the administration of key pharmaceuticals and the follow-up treatments. Drought was also frequently mentioned by farmers as a major threat. Its effects are mainly felt by the livestock keepers through constraints in supply of fodder and water.

Providing various services to the farmers at municipal level by the LDA, targeting farmers as commodity organisations can go along way towards addressing these constraints. It is evident that opportunities to minimize the effect of the main constraints identified require action by the community. Unfortunately, appropriate community structures are weak or non existent. Perhaps the most important constraint to livestock development is the lack of a common vision and implementation strategies among the villagers. To change this situation, a change of mindsets among villagers is required.

Marketing

Communal livestock farmers are numerous and operate at a small scale. Subsistence objectives still dominate their farming systems e.g. food security, ceremonies, investment, income generation or selling during emergencies. This means that the time for selling animals vary from farmer to farmer and is not yet determined by economic related objectives (production and price). As a result, farmers sell their animals when they are in need of immediate cash to speculators, local traders, neighbouring commercial farmers, individuals, depending on the market available at the time of sale. Some marketing channels such as abattoirs require large volumes and higher quality animals. It is obvious that the current situation of smallholder livestock farmers (numerous and small) hinders their ability to effectively market their produce in these channels.

The current status of the smallholder farmers prohibits them to access formal commercial markets. This is mainly due to low quality livestock offered to the markets and inadequate institutional arrangements. As a result, capacity building on market requirements is a necessity. A collective effort amongst the farmers can help them overcome some of the marketing obstacles, and facilitate government intervention. In order to market together, farmers would need to have a common vision and work towards a common goal. Careful selection of a niche market can contribute to an effective marketing strategy and an opportunity for smallholder farmers to commercialise.

Challenges And The Way Forward

Overall, the main challenge facing the commercialization of the smallholder sector is the level of preparedness towards this endeavour. Farmers need to first fulfil their subsistence objectives before putting commercialization as a priority. On the other hand, LDA views the main challenge facing the commercialisation of livestock in communal grazing areas as organisation of farmers. This is true as a paradigm shift is required to change farmers from operating as individuals to functioning as groups. This is because social organizations for the smallholder livestock sector are necessary for effective establishment of markets.

In rural areas, collective marketing of livestock in communal land use system can be achieved through formation of farmer groups, cooperatives or organizations, which can assist farmers to negotiate price for their produce. As an association, farmers can make collective decisions on how many animals could be sold per month/year and develop strategies to deal with specific targeted markets. There are a number of benefits associated with collective marketing. Transport costs can be reduced as costs will be shared among all farmers. Farmers can secure specific markets through contracts, and with joint selling, constant supply can be ensured. Other farmers from neighboring villages can be contracted to sell together to meet market demands. Collective marketing also increases the bargaining power as compared to selling individually; it can also encourage farmers to take better care of their natural resources, which may

improve the condition of the grazing areas. With active organisations, the government will be better able to help farmers in collective marketing of their produce and in providing other extension services.
Breaking the 'dependency syndrome' is another challenge to be faced by the smallholder sector, and it is essential that mind-sets of these farmers are changed in order to be able to be independent from government and take initiatives on their own. However, the change of mind-sets takes time as it is related to values, norms and practices in relation to livestock production. If these are not adequately addressed, they can inflict negatively on the livestock commercialization efforts. Any livestock development effort should therefore start with raising community awareness and essential development issues, and it should be realized that this is not a short term process.

The government through its extension services can further play a leading role in addressing some other challenges such as training farmers on livestock marketing; exposing smallholder farmers to already established farmers; capacitating farmers with livestock farming skills; helping farmers recognize potential markets and institutions that provide capital; providing necessary information needed for agricultural production and encouraging smallholder farmers to target local markets. These can be effectively done through commodity organizations.

Currently the older generation is dominating the smallholder livestock sector. Working with this section of the population poses its own challenges. It may be necessary to capacitate the younger generation on issues related to commercialization. If the necessary skills are only in possession of the older generation, this may jeopardize the progress of the livestock commercialization process. There is need to encourage the youth to be more interested in livestock farming activities.

Limited extension services and lack of infrastructure such as sales pens and accessible roads were also identified as challenges to the commercialization of small-holder livestock production. The government can also consider establishment of infrastructure such as sales pens, better roads and subsidize farmers with transport. However, farmers should take the leading role in the planning, implementation and monitoring of such development plans and set rules and regulations for the management of the structures. This will ensure ownership and accountability.

The farmers need to put relevant committees in place to monitor and guard the structures against vandalism. These committees should also take responsibility to fix broken fences and other related infrastructure. This is in line with the requirements of farmers as the grazing area management sub-committee for management of feed resources, water, veld fires was prioritized as the most important sub-committee. Other prioritised sub-committees include the livestock management sub-committee concentrating on animal health and control of livestock theft, and the marketing sub-committee. However, for these committees to function properly, the farmers need to be capacitated on the operation of social organizations and the dynamics associated with them.

Conclusion

It therefore suffices to say efforts of the LDA should put emphasis on community development organizational issues first before infrastructural development and transfer of technologies are considered. However, this may also require a change in the mindsets of the managers and staff of the LDA and local municipalities, who are often under the political pressure to show immediate visual impact.

The promotion of local organizations can contribute to making marginalized groups active participants in their own development. The organizations identified during the priority setting workshop can contribute to management of the grazing area, the infrastructure therein, the livestock and marketing, ensuring that the objective of commercialisation is ultimately realised.

With this process that includes all the relevant stakeholders in identifying problems and devising strategies to solve them, development and sustainability can result. As the saying of the Pedi tribe goes "Greater things can be achieved by a collective effort".

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