FACTORS AFFECTING EXTENSION WORKERS IN THEIR RENDERING OF EFFECTIVE SERVICE TO PRE AND POST-SETTLED FARMERS IN GOVERNMENT INITIATED AND SUPPORTED FARMING SMALL, MICRO AND MEDIUM ENTERPRISES

V.M. Mmbengwa¹, M. Gundidza², J.A. Groenewald³ & H.D. Van Schalkwyk⁴

Corresponding author: V.M. Mmbengwa, School for Natural Resource and Management Nelson Mandela Metropolitan University (NMMU), George Campus, P/Bag X6531, George, 6530, Republic South Africa (RSA). Tel: +27-44-8015027, Fax: +27-44-8056627 or 0866949031, E-mail: vmmmbengwa@gmail.com or victor.mmbengwa@nmmu.ac.za

ABSTRACT

Small, micro and medium entrepreneurs play an important role in economic growth and poverty alleviation across the globe. To this effect, the South African government has instituted a policy to encourage the formation, promotion and support of small, micro and medium enterprises (SMME’s). In particular, the Department of Agriculture and Forestry (DAF) and Rural Development and Land Affairs (DRDLA), through land acquisition, restitution and other agrarian development systems, initiates and supports agriculturally based SMME’s with the objective of achieving sustainable livelihoods for the poor and commonages. However, an intensive investigation using desktop, government reports, research articles and case studies on the pre and post-settlement delivery of services by extension officers, revealed that support is grossly inadequate in terms of funding, training, technical advice, mentoring, monitoring and evaluation. This is also exacerbated by the extension workers’ lack of capacity and specialization in particular fields, such as production, marketing and management to adequately service the land reform programs. It is therefore recommended that extension workers be capacitated on specialisation, production, management, mentoring, monitoring and evaluation in order for them to deliver quality services that will contribute to in making these SMME’s sustainable.

Keywords: Agricultural entrepreneurs; capacity building; extension services; farming; poverty; small, micro, medium, enterprises (SMME’s)

¹ Associate Professor, Department of Animal Production and Management, Nelson Mandela Metropolitan University (NMMU), George Campus, P/Bag X6531, George, 6530, Republic of South Africa (RSA)
² Professor, School of Therapeutic Sciences, Faculty of Health Sciences, University of Witwatersrand, Park Town, Republic of South Africa (RSA).
³ Professor Extraordinaire, Department of Agricultural Economics, University of Free State (UFS), P.O. Box 339, Bloemfontein, 9300, Republic of South Africa (RSA).
⁴ Campus Rector Potchefstroom Campus, North West University, Private Bag X6001, Potchefstroom, 2520
1. INTRODUCTION

In the South African agricultural sector, the categorisation of business enterprises into size and volume is usually done in terms of subsistence, semi-commercial (also called emerging) and commercial enterprises. These categories do not clearly distinguish small, micro and medium enterprises (SMME) as defined by the National Small Business Act 102 of 1996. Therefore, the SMME definition in agricultural enterprises or the agricultural sector in South Africa differs from the common definition of the SMME’s in other sectors. On this basis, farming SMME’s in the South African context is formed through individual, groups and government initiatives such as Land Redistribution for Agricultural Development (LRAD). These initiatives were started in 1994 by the first democratically elected government (Ortmann and King, 2007). The objective of these aforesaid initiatives was to ensure that the previously disadvantaged South Africans are provided with the opportunity to own and utilise productive land for agricultural purposes.

Farming SMME’s arising from Land Redistribution for Agricultural Development (LRAD) and Land Restitution face a lot of challenges during both pre- and post-settlement phases; such challenges relate to lack of access to production inputs, credit, marketing information, value addition and value chains (Ortmann and King, 2007). In addition, these enterprises lack proper business mentorship from their designated extension officers leading to a lack of well-defined shareholding status (in case of the business entities other than sole proprietorship) and contribution to farming activities. Despite these challenges, farming SMME’s are considered a cornerstone to development, job creation and food security (Fete, 2010). However, these entities have to be based on sound foundations in order to contribute meaningfully to these ideals. With the continuous rolling out of Land reform in South Africa, it appears that the agrarian development program may contribute enormously to the formation of small, micro and medium enterprises (farming SMME’s). It is estimated that there are approximately 14 million small-holder farmers who can be categorized as SMME’s (CSD 2007, Verschoor 2003, Bienabe & Vermeulen, 2006, NDA, 2001).

These SMME’s were formed in order to address the land use and ownership gaps that existed prior to 1994, where 87% (i.e. 102 million hectares of agricultural land) was under the ownership of about 55000 white farmers (Bienabe & Vermeulen, 2006), compared with 17 million hectares operated by 1,2 million black farmers. These discrepancies are also accentuated by the 3 to 4 % of GDP is contributed of large scale commercial farming enterprises to the national GDP (NDA 2002, Mashotola & Darroch 2003), whilst the contribution by small scale farmers has been regarded as marginal. It is well documented that the large scale commercial agriculture has created approximately 1,6 million jobs (Nomvete et al, 1997) while economic linkages caused another 10.5% additional jobs outside the agricultural sector (Esterhuizen and van Rooyen; 2003, Mashatola and Darroch 2003).
It is worth noting that the commercial value of agricultural production in 2007 amounted R76 billion and this contributed R34 billion to GDP (Agri Companies 2007). Apart from the above-mentioned contribution, the agro-processed products from commercial agricultural sector recorded 8.1% contribution to the total GDP (Bienabe & Vermeulen 2006). These contributions hardly include any measurable contribution by SMME’s. It would be interesting to know if the majority of the SMME’s have started to contribute to the GDP and how the economy would benefit from their contributions. Current trends indicate that many small scale agricultural businesses are formed in order to fulfil livelihood requirements rather than commercial economic objectives (Ortmann and King, 2007).

This might be as a result of the social orientation influenced by ages of communal land tenure which led to a tradition in which families were allotted plots of land to grow crops for household consumption purposes, and where in many communities, chiefs could change allotments annually if they desired to do so (Fenyes & Groenewald, 1977). It is extremely important that small scale farmers should venture to start taking farming beyond purely livelihood motives. Continued subsistence farming will mean continued rural poverty. This paper investigates the factors that may contribute to ineffective delivery of services by the extension officers to this newly established class of the emerging farmers in South Africa. The aim of the study is to recommend a model that may be useful in improving delivery of extension services to emerging farmers in all phases of their development.

2. PROBLEM STATEMENT

The importance of SMME’s is increasingly recognised in many countries (Sithole, 2006). Small businesses are exploding across the globe despite their limited resources and support (Ladzani, 1999). Literature indicates the significant role played by SMME’s in different sectors and countries (Ladzani, 1999). In the USA, 25 million small businesses continue to be a potent force in the economy (ASCCI, 2007:64; Longenecker, Moore & Petty, 2003:9). It is recorded that the small businesses provide more than 52% of the private work force and are the principal source of new jobs (Ladzani & van Vuuren, 2002:153 Scarborough & Zimmerer 1996 Longenecker, Moore & Petty, 2003:9). It is further noted that these businesses generate more than 51% of the private sector contribution to GDP (Longenecker, Moore & Petty, 2003). Ladzani (1999) ascribed much credit for the success of countries like Japan, Korea and Germany to their strong SMME sectors.

Japan’s SMME’s account for the bulk of the country’s business establishment, providing vital support for employment and regional economics (Ministry of International trade & Industry, 1997 Ladzani & Van Vuuren, 2002:153). In Taiwan, SMME’s account for about 98% of the national GDP. In this way, they make significant contributions to economic prosperity, create numerous jobs and promote
Many African countries are also changing their economic policies with regard to small business enterprises. There are moves to promote the development of SMME’s (National Economic Policy Research Unit, 1995).

In South Africa, the White Paper on National Strategy for the Development and Promotion of Small Business (1995) has led to the enactment of the National Small Business Act 102 of 1996, which made a significant impact on decisions by South African Revenue Services (SARS) and the Treasury to set flexible conditions for small business to flourish (Ladzani & Van Vuuren, 2002:153). The association of Southern African Development Community (SADC) Chambers of Commerce and Industry (ASCCI, 2007) mentioned that 95% of the businesses in South Africa are small enterprises. Many entrepreneurs in South Africa are in small, medium or micro-enterprises. They contribute 50% of the total employment figure in the country. Their contribution to the country’s GDP is about 35% (ASCCI, 2007:3).

However, the contribution by the farming SMME sector, unlike SMME’s in other sectors in South Africa and abroad, has not been recorded. This may partially be because these enterprises are not always easily identified or are operated in an informal manner where records of production and transactions are not kept. Another reason may be that South African agricultural services may not have a national database of the existence of these SMME’s and their economic activities, which may lead to challenges regarding monitoring and evaluation of their economic status and contribution. Therefore, these may present critical challenges to different stakeholders to develop models that may assist their growth and development. The questions that need to be answered are: Are our extension services well equipped to deal with this emerging phenomenon? How capacitated are the extension services’ officials to deal with this challenge? If the extension services have no scientific approach to deal with these challenges, would these gaps not adversely affect the emergence of innovation from the knowledge institutions to come up with intervention?

3. PURPOSE AND OBJECTIVES

Various researchers, including Pender (2001:1) and Place (2000) have highlighted problems of low agricultural productivity in agricultural SMME’s. These problems result from various factors that need serious attention in order to enable these SMME’s to succeed and grow. These factors include access to sustainable markets, adequate and relevant capacity for extension workers, adequate input supply, mentoring, monitoring and evaluation, well established structures within SMME’s, adequate infrastructure and access to financial resources. These factors must be present simultaneously for SMME’s to become viable. Neither will be sufficient in the absence of others.
This paper reports on an analysis which is part of a larger research project. The main objective with this analysis was to investigate the challenges faced by extension workers in executing their duties efficiently and specifically to: 1) Investigate pre- and post-settlement support for farming SMME’s and 2) assess capacities of extension workers and beneficiaries.

4. RESEARCH METHOD

This was a longitudinal quantitative study spanning a period of three years (starting in 2007 and ending in 2009). Both descriptive and exploratory research designs were utilised (Neuman, 2003). The study was undertaken in six provinces of South Africa (i.e. Limpopo, Gauteng, Mpumalanga, Free State, North West and Eastern Cape). The data was collected through face to face interviews with beneficiaries and extension officers. The survey instrument in the form of self-completion questionnaires comprising of 32 closed-ended items and 18 open-ended items was used. Prior to the commencement of the data collection, the local, national, regional and international literature dealing with farming SMME’s were reviewed in order to draw lessons from past experiences of experts in the field. Government reports at national, provincial, district and municipal level were also studied in order to assess government policy and pre-and post-settlement support programs.

A participatory rapid appraisal (PRA) methodology was thereafter used to collect fresh data from stakeholders. This methodology was preferred because it uses participatory processes, where participants are directly involved in data gathering analysis. In the study, farming SMME’s were defined in terms of their annual turnover, as per the National Small Business Act of 1996. A non probability sampling strategy was used to identify and select the respondents. A combination of purposive and multiplicity sampling methods were used. The following sampling procedure was used to select the farmers:

- All extension workers throughout the identified provinces were encouraged to participate.
- The beneficiaries with operational farming units were considered and those who are not functional were excluded.
- Personal interviews were used during the data collection process.

Groups of key informants (30) from different backgrounds were identified and consulted. Focus group sessions (FGS) were held (50 sessions were successfully arranged), preceded by presentations by main researchers. This was followed by extensive discussion and analysis. A random sample of 200 extension workers (both male and female) was used in this study.
5. RESULTS AND DISCUSSION

The following factors were found to influence extension service delivery in the pre- and post settlement phases:

a) Human capital status of extension workers in South Africa

According to human capital theory (World Bank, 2007), education and, by implication, Agricultural Education and Training (AET) influence agricultural productivity through enhancing farmers’ ability to choose optimum combinations of farm inputs and farm outputs (allocation effect), by uplifting the farmers’ ability to acquire and adapt new technologies, thereby reducing innovation time lags (innovation effect), fostering the capacity to exploit new market opportunities (Idachaba, 1997; Atchoerena and Gasperini, 2003) (market efficiency effect), affecting performance and success through enhanced worker productivity.

The strengthening of human capital and the production of knowledge are the most important elements in agricultural development strategies (Hang, 1999). It has been noted that agriculture leads growth in many parts of rural Africa, but investment in human capital and infrastructure leads agriculture (World Bank, 2002). Investment in human capital education and vocational training, extension services with the emphasis on low external input technologies and so on may have the greatest social returns (Pender, 2000).

The educational levels of the male and female extension officers in the sample are illustrated in Figure 1.

![Figure 1: Education levels of male and female extension workers](image)

A higher proportion of female extension workers have four year degree qualifications than their male counterparts. Almost the same percentage of the female and male extension workers have had post graduate training in agriculture. More female extension workers (25%) have three year degree qualifications than their male counterparts (16%). Some male extension workers’ highest qualifications were...
diplomas; this was not the case with any female extension workers in the randomly selected sample.

The extension workers were also asked whether in their opinion, their training had been adequate for their task. These results also revealed that on average female and male extension officers’ satisfaction with their educational levels ranged from 12.5% to 12.0%, with the female extension officers having a slightly higher degree of satisfaction with their educational status. Thus the extension officers regard their educational levels as dismally poor. This may be one of the major barriers in providing effective extension services. Given these educational levels, it may not be reasonable to expect the extension officers to meet the expert demand of facilitating the pre-planning phase of the settlement processes for the emerging farmers; feasibility studies and business planning required absolute diligence and a high degree of accuracy. The post-settlement phases will also provide a serious challenge for the extension officers; a high level knowledge regarding aftercare support, linking the farmers with sustainable markets and technology transfer is required.

b) Exposure of extension officers to management, marketing, training and infrastructure development.

Management, marketing, training and infrastructure capacity are amongst the factors that play an important role in achieving the competitive advantage of any individual or any business entity, including a farming enterprise, irrespective of its size or the number of people involved (Ortmann and King, 2007, Nell and Napier, 2006). These skills categories are needed also by emerging farmers, and should ideally be imparted to them by extension services. In order to impart such skills, extension workers should themselves be well versed in these fields. The management, marketing, training and infrastructure capacity of the extension officers are illustrated in figure 2.

Figure 2: Male and female extension workers’ insights on management, marketing, training and infrastructure as key requirements for effective extension services

Figure 2 indicates that in the opinion of extension workers, marketing and management skills, infrastructure and other training aspects in agriculture are paramount to execute their duties, thereby contributing to the sustainability of beneficiaries’ enterprises. The results revealed that males have lower (16%) exposure in management compared to the female (26%) counterpart.
In this study management qualifications of only 16% of the male and 26% of the female respondents is regarded as adequate. In total, it is inadequate. This might imply that these officers may have a low impact in transferring management skills during the aftercare support phase of the farming SMME’s development stage, as themselves have inadequate knowledge of the management subject.

Neither has marketing insight or knowledge which is key to the sustainability of beneficiaries, been adequately provided for male (24%) and female (0%) extension workers. This might imply that the females need more exposure in the marketing. Only 32% of males and 26% of females regard their training as adequate. Therefore the great majority regard it as inadequate. It is therefore important that female extension officers are given priority regarding agricultural training. Overall, the training levels of the extension officers are quite low and on that basis, it can be deduced that inadequate or ill-directed training constitutes a major barrier in extension service delivery. In the the view of male (28%) and female (48%) extension workers, the available infrastructure is still below adequate levels for the beneficiaries. In the nutshell, it appears that on average, only 25% of the extension officers have the capacity in all aspects under consideration. In general the results reflect a poor capacity. Thus, if these workers are to render effective services during this stage of the development of these farmers, a clear capacity building model will be useful.

c) Membership of associations

Membership of professional associations is of vital importance for practitioners, scientists, policy makers and managers (Bennett and Ramsden, 2007). The South African Society of Agricultural Extension (SASAE) can serve as an example. The main motive for its formation in 1966 was to promote science and the vocation of Agricultural Extension through disseminating new information and technology to its members. It is very important for extension workers – as for people in any profession – to keep abreast with developments, and one of the most effective ways in this regard is to be members of registered associations in their field. Professional and commodity associations provide updates in technology, markets, weather patterns, government policies and regulations to their members. More male (72%) than female (28%) extension officers belong to associations (Table 1). In addition, female have shown a superior involvement in commodity association than the male counterpart. They participation in other association also showed similar trend. According to these results, more exposure of association activities to female extension officers would be very helpful. This can enhance their knowledge, skills and interest.
Table 1: Membership of association for both male and female extension workers

<table>
<thead>
<tr>
<th>Membership of association</th>
<th>Gender</th>
<th>Membership Status</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>Male</td>
<td>GS</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PS</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>GS</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PS</td>
<td>11</td>
</tr>
<tr>
<td>CA</td>
<td>Male</td>
<td>GS</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PS</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>GS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PS</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>Male</td>
<td>GS</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PS</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>GS</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PS</td>
<td>0</td>
</tr>
</tbody>
</table>

**Keys**: PA= Professional Association, CA=Commodity Association, GS= Good Standing, PS= Poor Standing

d) **Attendance of capacity building initiatives**

IFPRI (2005: 3) referred to capacity building as an effort to generate knowledge, skills and expertise in order to enhance analytical capacity that may assist in increasing agricultural productivity and sustenance. In this sense, attendance of both local, regional and international workshops or conferences or symposia is essential for extension workers. These are the fora for the exchange of ideas, experience and for technology acquisition. It is therefore, crucial that extension workers attend these fora and also be able to organise them. The attendance of capacity building fora are illustrated in figure 3 below.

**Figure 3**: Frequency of male and female extension workers’ attendance of local, international workshops/symposia/conferences and experience in organising workshops/conferences/symposia
In this study both males and female extension workers have reasonable experience in organising workshops (Males: 43%; females: 33%). However, more females (50%) attend conferences once a year than their male counterparts (10%). Attendance of international workshops is generally poor (Males: 9%; females: 17%).

6. CONCLUSION

Extension workers face enormous challenges in the execution of their duties in assisting beneficiaries to access sustainable markets with their produce. The results obtained indicate that a large number of these extension workers have not been adequately trained in the management marketing skills and strategies needed. This deficiency will impact negatively on their beneficiaries since access to sustainable markets is the key to the sustainability of an agriculturally based-SMME.

In the opinion of the randomly sampled extension workers, marketing, management and training skills in general are grossly inadequate in terms of empowering their beneficiaries to have their farming ventures be or become sustainable, although the infrastructure is reasonably adequate. Lack of these skills may give rise to the unsustainability of some agri-business enterprises, as was argued by Groenewald (2004).

Membership of associations for extension workers is generally adequate as far as males are concerned but only few female extension workers (28%) belong to professional and/or commodity associations as compared to male counterparts (72%). In this respect extension workers should be fully updated on all aspects concerning their profession for onward transfer to their clients. Because of poor attendance of international and regional workshops, many extension workers are likely to be deficient in acquiring new ideas, shared experiences and acquisition of new technologies from these workshops for onward transmission to their clients.

7. RECOMMENDATION

It is quite clear that extension workers need to be more capacitated in marketing skills in order to be well equipped in the execution of their duties in assisting government initiated and supported small, micro and medium farming entrepreneurs as well as those emerging entrepreneurs who have entered farming without such aid. The beneficiaries themselves must be adequately capacitated both before and after they have been settled on the new land. This will contribute towards avoiding collapse of their enterprises. The infrastructure must be put in place before they are settled. This will make the job of extension workers much easier.

Greater emphasis must be put on training on production, management and marketing skills for both extension workers and entrepreneurs (Mankazana, 2008 and Mmbengwa, 2005). Mentoring, monitoring and evaluation are also crucial for the success of the farming SMME’s (Düvel, 2007; Terblanche, 2007). Extension workers must be trained in these fields in order to minimize the collapse of these SMME’s. Organisational structures and management information systems are also crucial for the success of farming SMME’s (Wambura et al., 2007). Extension workers as well as beneficiaries must therefore be encouraged to put these structures in place. A model
shown in Figure 6 below can be adopted to highlight challenges to be overcome in order to make farming SMME’s sustainable.

**Figure 6: Model for ensuring the success of Farming SMME’s**

The model seeks to provide a framework for specialisation of extension workers so that they can be able deliver effective services for the pre-and post settlement support for farming SMME’s. It has identified the importance of pre-support for feasibility
study and business planning. For the post-settlement phase, the model has identified mentoring, market linkages and technology transfer as the critical support that extension workers should provide to farming SMME’s. Lack of internal organisation of farming SMME’s themselves, coupled with inadequate extension workers, inappropriate extension training and a lack of networking forums are the sources of poor, inadequate delivery of extension services.

ACKNOWLEDGEMENT
We wish to acknowledge the University of South Africa (UNISA) and University of Free State (UFS) for their support.

REFERENCES


FETE, S.T., (2010). Personal communication, Randfontein, Johannesburg, RSA.


