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APPLICATION OF DISEASE CONTROL MEASURES BY SMALL SCALE CATTLE FARMERS IN TWO DISTRICTS OF THE FREE STATE PROVINCE OF SOUTH AFRICA

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SUMMARY

This survey was conducted in Thaba Nchu and Botshabelo districts of the Free State Province. A questionnaire covering important issues related to animal health management was used during the individual interviews. The findings show considerate differences in the overall management of animal diseases in the two areas. The majority of the farmers (95%) in the Thaba Nchu area adopt basic disease preventative measures such as dipping, vaccination and dosing of their animals. However in Botshabelo area very few farmers (5%) adopt these measures. The reasons behind these differences were mainly due to the historical background of these farming communities.

Among other findings, the poor management practices and inefficient extension support services have been the major causes of poor adoption of basic disease control measures.

Keywords: Disease control measures, animal health, small scale cattle farmers, management

INTRODUCTION

Animal health plays an important role in the maintenance of adequate level of livestock production throughout the entire sector. This is reflected by decreased normal production in a herd that is affected by diseases in general. In small scale farming sector, despite other various factors that influence animal production, animal health management frequently affect heavily the production and sustainability of these farming systems. Horn and Williams (1997) emphasised that improvement in the health of livestock animals in small scale farming could contribute in improving the quality of human existence and food security in rural communities.

The impact of animal diseases at household level is mostly seen when major production losses of livestock products such as meat, milk and other animal products are experienced. This results in a threat to household food security and the economics of the rural population sector in general. Lack of knowledge of zoonotic diseases is also a challenge in animal agriculture and to the well being of a mankind, national economies and international trade. It is therefore of outmost importance to emphasise the serious consequences that usually results from lack of control of animal diseases.

The interdependency of animal disease control and increased livestock production should be seen as a contributing factor to food security, economic and social empowerment of rural communities of African continent.

The objective of this paper is therefore, to emphasise the importance of maintaining animal disease control measures and determine the factors that influence the application of these measures and come with possible solutions for implementation by policy makers.

MATERIALS AND METHODS

A questionnaire was designed to determine the level of application of basic preventive animal health measures and the factors influencing this process. During the study *255* and *265* cattle owners were individually visited and interviewed in Thaba Nchu and Botshabelo areas respectively.

Thaba Nchu area is divided into 40 agricultural villag
owned by these cattle farmers was 2694. The other area, Botshabelo is situated 10 km from Thaba Nchu, and is divided into general sections or blocks. The farmers interviewed in this area own a total of 1907 herd of cattle. Fig. 1 and 2 show the areas visited in the two districts.

RESULTS AND DISCUSSION

Table 1. Application of disease control measures

AREAS	Number and percentage of farmers adopting		
	Vaccination	Di in	Dosin
Thaba Nchu	243 (95.3%)	246 (96.5%)	10 (4%)
Botshabelo	14 (5.3%)	11(4.2%)	2 (0.8%)

The poor adoption of basic control measures such as vaccination against anthrax and black quarter, dipping and dosing against external and internal parasites respectively, are clearly indicated by low figures in table 1.

Table 2. Percentage of farmers with frequent cases of disease occurrence in the herds

AREAS	YES	NO	REPORTE	DDID NOT REPORT
ThabaNchu	51 20%	204 80%	45 88%	6 12%
Botshabelo	150 (56.7%)	115 (43.3%)	6 (4%)	144 (96%)

Relatively high percentage of farmers (20%) in Thaba Nchu and *(56.7%)* in Botshabelo reported having had sick animals in their herds. The high number of farmers who do not apply basic control measures of animal diseases (Table 1) correlates with the number of farmers having had sick animals (Table 2) in their herds. These results clearly demonstrate that adoption of preventive measures will always maintain herds free of diseases.

Poor adoption of disease control measures were also reported by many other researcher in Southem Africa (Mazengera, 1993; Schillhorn Van Veen, 1993). The main reasons for such low implementation levels are the general lack of flinds, control measures awareness by the farmers and the withdrawal of subsidies by most African govemments which resulted in the inability to support and maintain an efficient operational animal health extension services (Tambi *et al.*, 1999 and Nthakheni, 1993).

The low level of reporting or seeking for help by farmers in Botshabelo (4%) was due to several factors such as lack of money for transport, some farmers did not know where to go, while most of the farmers treated their animals with home and traditional remedies such as aloe, home made beer and others. This prevailing situation in Botshabelo may be explained by the lack of appropriate extension services, no basic farming infrastructure such as communal crush pens or dipping tanks.

However in Thaba Nchu, farmers have access to basic farming infrastructure mentioned above and are generally more experienced as they have been offered technical assistance through Agricor for long time. These farmers are still implementing basic animal disease control measures even after the government have stopped subsidised services offered to them in the past. Although most of the farmers (88%) reported sick animals to the animal health officers, they were unhappy due to the fact that, health officers do not have remedies needed for the sick animals. Farmers still travel long distances for technical assistance, and there is no communication network in the area.

In both areas there is no private veterinary service, therefore drug remedies and animal feeds are not easily accessible. The majority of these farmers still believe that the government should subsidise veterinary services as transport and distances to access these services are not affordable.

CONCLUSION AND RECOMMENDATIONS

The importance of preventive animal health practices in small scale livestock farming can not be overemphasised. While a considerable number of farmers believe in the advantages of disease control measures and are still implementing them in Thaba Nchu, the low percentage of farmers applying these measures in Botshabelo should not be ignored. The high risk of an outbreak of diseases can result with the loss of all animals in these areas, aggravating the food insecurity status, as well as great financial losses on the part of the government.

The existing low level of animal health management, require proper attention by properly trained and equipped extension personnel. These can be achieved through government subsidies and non-government organisations and farmers cooperatives, these bodies can enable offering of affordable services to the local farmers.

The training of village animal health workers consisting of farmers must be considered. However this require an assessment of the age and level of education of a farmer. Lastly, Intensive research studies in animal health services in rural areas of the Free State Province should be encouraged.

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