



# The Challenges of Agribusiness Training on Livestock Farmers in Namibia

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**Abstract** Although contributing only less than five percent to GDP, agriculture remains one of the top employers in Namibia, with livestock production being the top earner. The national agriculture policy has highlighted the lack of capacity as one of the constraints in the industry. Both private and public training institutions in Namibia have had numerous training such as rangeland management, farm infrastructure, and animal health, and seldom focus on the postproduction activities such as markets and marketing. This study aimed to assess the challenges of agribusiness training in Namibia as identified by livestock farmers. An in-depth literature review on Namibian agribusiness training looking at national policies that address agricultural training and farm survey using a structured questionnaire was conducted. The 33 respondents were from three regions of Namibia: Erongo, Omaheke and Otjozondjupa regions, and three land tenures: communal, commercial, and resettlement farms. Natural phenomena including drought and lack of water were crucial challenges identified by livestock farmers. Other challenges such as access to markets, few buyers in the market, and lack of coordination were among the critical agribusiness factors highlighted by most farmers. Commercial farmers were the main market of communal livestock which are considered of low quality. Communal livestock farmers lamented the lack of market options available. Thus, Namibia needs to implement a training policy that captures aspects of livestock marketing that integrates various levels of farmers from communal level to the commercial level.

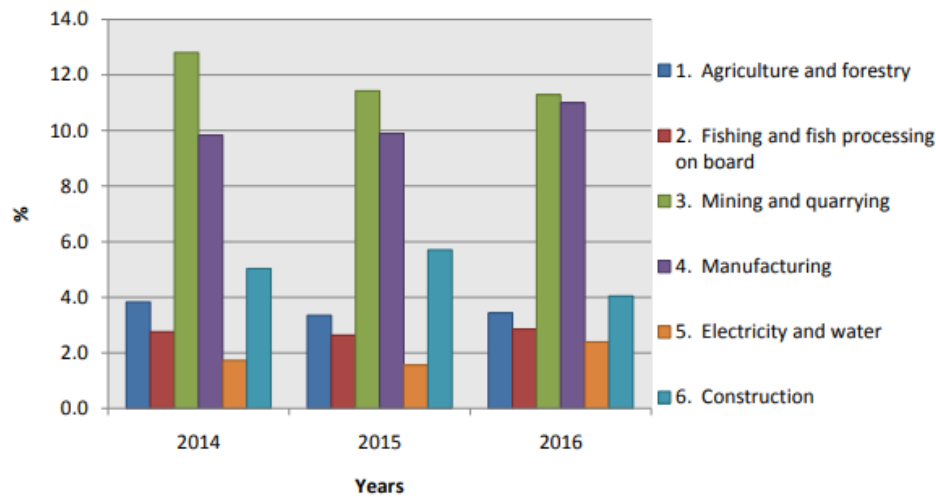
**Keywords** agribusiness training, southern communal area, communal farmer, resettlement farmers

## INTRODUCTION

Namibia is a vast, middle-income developing country in Southern Africa. Located between two deserts, the country is the driest south of the Sahel, characterized by sporadic rainfall and frequent drought. Despite these factors, agriculture is a major industry in Namibia. Agriculture uses more land than any other activity (approx. 78% of the country is farmland), and nearly 1.2 million people (roughly 206,000 households) live on farms and/or in rural areas. Agriculture is the second main source of income for many households in Namibia (Namibia Statistics Agency, 2013) and remains one of the top employers in the country in both the formal and informal sectors (Namibia Statistics Agency, 2015). The following characterize agriculture: small scale mixed farming, cattle ranching, small stock farming, commercial crop production and other intensive agriculture (Mendelsohn, 2006). Cattle ranching is Namibia's main agricultural production sector, with an estimated value of N\$ 900

million (approx. 56 million USD), 44.4% of which accounted for weaner exports (Enkono et al., 2013). Livestock production includes cattle, sheep, goats, and pigs.

Despite all these factors, agricultural contribution to GDP has been less than 5% (MAWF, 2017) (Fig 1). Several factors attributed to this include the country's well-diversified economy and high production by other sectors. The specific challenges of agriculture however are the low agricultural capacity because of aridity and poor soils and the low demand within Namibia and elsewhere for Namibian products due to the lack of market development in most communal areas and the relatively low value-added through local processing (MAWF, 2015).



**Fig. 1 GDP by Primary and Secondary Sectors at Current Prices – Percentage Contribution**

*Source: Ministry of Agriculture Water and Forestry, 2017*

Namibian agriculture is agrarian in nature, with many households depending on their crops and livestock for part of or all their income and/or nutritional needs. A key distinctive factor of the sector is its dualistic in nature with a highly developed, technology-based, and productive commercial sector and a subsistence sector characterized by low productivity dependent on manual labor and use of traditional methods of production often referred to as communal farming (Namibia Training Authority, 2013). The communal land system is a remnant of the duality applied to land tenure by the apartheid pre-independence system. Black communities had to stay in small areas, often away from cities and share resources such as land and water. Traditional livestock rearing in Namibia is characterized by low productivity due to low calving rates, high mortality, and low off-take rates for meat and milk (JICA, 2017). Historically commercial farmers benefitted considerable support from the government through direct assistance – such as subsidies, extension, and veterinary services – and indirectly because of the development of transport, marketing, and other services (Schmokel 1985).

At independence, studies found that farmers in the communal areas often lacked adequate agribusiness skills to make them competitive in modern agriculture (Ministry of Agriculture, Water and Forestry, 2015).

In its 2013 inaugural report, the Namibian Training Authority (NTA), the country's regulator for vocational education and training, developed the agricultural sector skills plan (SSP) to provide skills the needed by sector (Namibia Training Authority, 2013). This SSP set the blueprint for training in agriculture. This SSP focused on the demand for vocationally skilled labor, specifically on the primary agricultural sector, and excluded occupations of a generic and general nature which do not relate specifically to the sector. This SSP found that reliable data on qualification and skill profiles in the agricultural sector remains scarce as most studies and surveys have focused on the commercial sector (Namibia Training Authority, 2013). This is supported by studies stating that training in developing countries often focuses on production without taking cognizance of post-production activities (Mabeya et al., 2010). Hence, capacity-building exercises also often target commercial producers and professionals leading to a skills shortage in rural (communal) areas.

## **OBJECTIVE**

Due to the highlighted factors, the objective of this study is to identify the challenges farmers face given the current agribusiness training offered in the country. Further, this study looks at findings from farmers in all three-land tenures in the country.

## **METHODOLOGY**

### **Study Area**

This study was conducted in three regions within the Southern Communal Area: Erongo, Omaheke, and Otjozondjupa, where a combination of livestock farming takes place. A veterinary cordon fence was erected in 1896 under German colonial rule to contain a Rinderpest outbreak, resulting in the splitting of Namibia into two livestock farming zones: Northern and Southern Communal Areas.

### **Method of the Study**

This study utilized both qualitative and quantitative data. Secondary data was sourced from publications from line ministries involved in agriculture, which are the Ministry of Agriculture, Water and Forestry, the Ministry of Land Reform, and the Ministry of Industrialization and Trade, as well as documents from parastatals (refers to government-owned agencies): Meat-Board of Namibia, MeatCo (Meat Company) Namibia and the Namibia Statistics Agency. Primary data were collected from a structured questionnaire administered to livestock farmers from all land tenures (e.g., communal, commercial, and resettlement farmers) in August 2019. A total of 33 livestock farmers were surveyed through convenient sampling. The questionnaire aimed to collect farmers' views on agribusiness training in the country, including what they believed were the challenges in agriculture, training, and livestock markets. It should be noted that this study is essentially a qualitative literature review, that not only considers findings from the three regions but relies on historical findings and supporting studies on Agricultural training in Namibia.

## **RESULTS AND DISCUSSION**

### **Training Access and Content**

Prior to the inaugural SSP report in 2013, Namibia conducted baseline surveys on the impact of extension services in all regions. These surveys tried to address whether impact can be proven and to whom this impact is felt (Ministry of Agriculture, Water and Rural Development, 2003). These surveys looked at advisory services, information, communication, and farmer training, and can be considered the most significant for looking at communal areas as extension services address all farmers. These surveys are also critical for assessing training access in terms of government extension services which are offered at no cost but vary in frequency and location (distance from training area), and these can be seen as challenges.

The most significant research on training access and content for Namibia in recent years is the SSP, which aimed at addressing all Technical, Vocational Education and Training (TVET) in the country by looking at factors affecting training and all the key role players. This SSP was a consultative process, to match demand and supply of Agricultural Technical and Vocational Education and Training (ATVET), the skills needed mainly include production side (e.g., anatomy and physiology, farm production). Farm management, another sub-category of the trainings, includes business planning and entrepreneurial skills, marketing skills, record keeping and administration, financial management skills, people management and management as well as transport and stores management (Namibia Training Authority, 2013). These are the skills considered to scale up farmers entrepreneurship (Schulleri, 2013). According to the TVET studies, the demand for training is high and diverse but providers are few thus there is a need to prioritize on the training

needs. It is important to note that “agribusiness” is rarely explicitly mentioned in most documents, and often “agricultural training” and “marketing” and most other “finance” related terminology are the terms used to capture these critical skills.

Assessment of ATVET provision found numerous challenges including incapacity of trainers, limited training institutions, and inadequacy of practical training facilities and equipment. The government through the NTA has agreed to adopt the Competency Based Education and Training (CBET) approach to vocational training which places a high demand on the ability of the training provider to provide practical training opportunities wherein trainees can develop practice and demonstrate competence very few institutions currently can offer.

### Farmer-Respondents and Training

Respondent profiling was done in terms of age, gender, education level, occupation sector and monthly income. Majority of the 33 farmer-respondents were male (72.7%) and were between the ages of 50-59 (36.4%), closely followed by 60-69 age group (33.3%). The education level for more than 50% of farmer-respondents was undergraduate degree and post-graduate degree levels, with 30.3% and 27.3 % respectively. Most of the farmer-respondents were full time employees in public and private sector with 18.2 and 45.4% respectively. Most of the surveyed farmers had over 21 years of farming experience, many of whom consider themselves communal farmers. Table 1 shows the detailed results of the farmer-respondents’ socio-economic profile.

**Table 1 Socio-economic profile of farmer-respondents (n=33)**

Socio-economic characteristic	Frequency	Percentage	Socio-economic characteristic	Frequency	Percentage
<b>Age</b>			<b>Annual Income</b>		
Less than 40 yr. old	3	9.1	50,000 N\$ and less	3	9.1
41-50 yr. old	6	18.2	50,001-100,000	8	24.2
51-60 yr. old	12	36.4	100,001-300,000	7	21.2
61-70 yr. old	11	33.3	300,001-500,000	6	18.2
Above 70 yr. old	1	3.0	500,001-above	9	27.3
<b>Gender</b>			<b>Household size</b>		
Male	24	72.7	1-5 persons	18	54.5
Female	6	27.3	6-10 persons	14	42.4
			11 persons and more	1	3.0
<b>Marital Status</b>			<b>Farming experience</b>		
Married	25	75.8	1-5 years	1	3.0
Single	8	24.2	6-10 years	8	24.2
			11-15 years	4	12.1
			16-20 years	6	18.2
			21 years and above	14	42.4
<b>Education</b>			<b>Type of Farming</b>		
Postgraduate	9	27.3	Communal	16	48.5
Undergraduate	10	30.3	Commercial	12	36.4
Diploma	4	12.1	Resettled	5	15.2
Other	10	30.3			
<b>Occupation</b>					
Employed	21	63.6			
Self-employed	5	15.2			
Pensioner	7	21.2			

Source Field Survey, August 2019

Out of the 33 farmers surveyed, 25 had attended some form of training as seen in Table 2, yet two were aware of training and opted not to attend any, the remaining six were unaware of any available training and therefore had not attended any. Of the trained farmers, 12 farmer-respondents attended training identified by the farmers’ organization or ministry involved. The training institution mostly identified was government extension services provided by the ministry. Government extension training is offered on an ongoing basis through advice and farmer support services. This type of training is mostly done in the field by the extension staff and is usually not of a structured nature and is not standardized (Ministry of Agriculture Water and Rural Development, 2003 and

Namibia Training Authority, 2013). Some attended training with MeatCo which provides training mainly to livestock farmers. Agribank of Namibia also offers training through its Agri Advisory Services, which offers various content packages, from financial to rangeland management, however these are often for those in urban areas or those that can attend farm excursions which is not necessarily available to all farmers. Farmers also attended training with Agrifutura, although they could not provide the training content, the institution offers training and farm visit (site-led) training on livestock management; livestock marketing; farm finances; animal health; rangeland and pasture management. Few farmers mentioned attending training provided by Agra ProVision. This is perhaps the costliest of the ATVET institutions in Namibia, its courses are tailor-made and includes mentoring. Their course content ranges across the entire plethora of farming and management. The SSP has stated that Agra ProVision is one of the few institutions with the capacity to offer adequate training, its biggest constraint is resources to pay for such services.

**Table 2 Awareness and participation to training**

Characteristic	Frequency (n=33)
Aware of training, attended training	25
Aware of training, did not attend training	2
Unaware of training, did not attend	6

Source: Field Survey, August 2019

**Table 3 Agricultural challenges identified by number and tenurial type of farmers**

Challenges identified	Commercial (n=12)	Communal (n=16)	Resettlement (n=5)
<b>Environment-related</b>			
Bush Encroachment	0	0	1
Drought	1	1	1
Increase in number of wildlife	0	1	1
Lack of grazing	0	1	1
Water shortages	0	1	1
<b>Livestock technology</b>			
Animal health	1	1	1
Quality of livestock	1	0	0
<b>Market-related</b>			
Few auctions/uncoordinated auctions	1	1	0
Few buyers/monopolies buyers	1	1	0
High cost of transport	1	1	0
Low market access	0	1	0
No direct marketing channels	1	1	0
Poor prices	1	1	1
<b>Policy environment</b>			
Few regional farmers' organizations	0	1	0
High interest loans	1	0	0
High land prices	1	0	0
Lack of capacity	1	1	1
Lack of information	1	1	1
Low government support	1	0	0
Permit bureaucracy	0	0	1

Source: field survey August 2019

Note: 1 implies that farmers agree this is a challenge and 0 implies farmers did not agree that this is a challenge. For each challenge all farmers from that tenure agreed the factor is a challenge.

Although the available trainings ranged from basic livestock management to range management (Mabeya et al., 2010), it is evident that training is often production-oriented leaving a capacity gap in post-production activity. Moreover, this study found that livestock farmers, even those receiving some form of training experienced various challenges (Table 3).

### Environment related Challenges

All farmers identified drought as being a major threat to livestock agriculture in Namibia, the Ministry of Agriculture, Water and Forestry (2015) highlighted this as one of Namibia's major agricultural constraints as the country has had a severe drought over consecutive periods since 2013. This has worsened water shortages, especially in communal areas where farmers share resources including land and water with each other and the growing amount of wildlife. Farmers in communal areas are increasingly facing challenges of reducing grazing pastures as more areas are being fenced off by well to do families, leaving less land available for open grazing (Togarepi et al., 2016). Livestock grazes on open access commonage pastures and woodlands. The practice of transhumance has declined in recent years. Farmers also alluded the high cost of land in Namibia.

### **Livestock Technology**

Animal health was identified by all farmers as a common problem which explains why one of the main trainings is on livestock health. Musaba (2011) found that increased technology adoption is only possible through capacity development, his findings show higher adoption rates for farmers located closer to extension officials. This clearly shows the importance of extension services and the need for frequency of training for livestock farmers. The SSP also identified 40 areas of skills demanded in agriculture through consultation with farmers and other key stakeholders (Namibia Training Authority, 2013), these skills were ranked from 5 to 1 on importance. Those skills pertaining to livestock technology ranked between 3 to 5 which is high ranking.

### **Market Challenges**

The low prices, small number of buyers, and few uncoordinated auctions point to livestock market challenges. The Namibian market is small due to the country's low population with the only lucrative markets being in urban areas. Many farmers stressed how difficult it was to make a profit in livestock farming due to numerous cost constraints including the price of stock feed, high cost of transportation to markets and few auctions and buyers available in the country. Most farms are located far from markets thus prices of farm products are often also high to cover variable costs, including transport. Similarly, perishables, like meat and meat products require costly cooling or other special storage facilities, which are not readily available in rural areas. Farmers predominantly sell to a single buyer or speculator, a situation which has created monopolies within the sector, as one commercial farmer stated, "Farmers have few options but to sell to a middleman," conveying that they are often price takers.

### **Policy Environment**

One of the key factors that play a major role in livestock market participation by farmers has been found to be "business orientation by the smallholder livestock farmers" (Zuwarimwe and Mbaai 2015) which highlights a need for capacity in the industry as identified by all the farmer-respondents. Another common policy problem was the lack of information among or within the agricultural sector. Agricultural policy decisions are made, without involvement of the primary recipients – the farmers (Kumba, 2003).

## **CONCLUSION AND RECOMMENDATIONS**

Farmer-respondents clearly identified agricultural sector challenges in the country, including their personal farming challenges. Literature review of the SSP also highlighted challenges of the training. Together these sketch a foundational analysis where the two can be used to further study training needs and agricultural challenges' convergence to improve the sector. It was found that the livestock production, although dominating the Namibian agriculture sector, is faced with a myriad of challenges, some, such as drought and climate variability are beyond anyone's control. However,

most of the training offered to farmers by institutions, including government extension, is production centered, yet the measures to integrate farmers into greater markets are very few. Farmers need to be given adequate training on how to market their livestock independently. Farmer capacity development cannot be the sole responsibility of the government; the private sector also needs to be involved. Farmers need to be equipped with the necessary skills to cope with ever-changing environments and operate their farms more efficiently. To enhance livestock productivity in rural communities, better farm management practices should be adopted.

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