

CONSTRAINTS OF CAMEL (*Camelus dromedarius*) PRODUCTION IN NORTHERN KATSINA STATE, NIGERIA

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ABSTRACT

Camel (*Camelus dromedarius*) production stands as one of the major livestock kept by sedentary farmers in the study area. The study was designed to assess the major constraints of camel production in Northern Katsina state. Four local government areas; Baure, Dutse, Mai'adua and Mashi were purposively selected. Two hundred structured questionnaires were used. From the results, all of them were males. Majority (44.50%) were within the age range of 41 – 50 years. Majority (80.00%) attended Qur'anic schools and only (3.00%) obtained secondary leaving certificates. Free range/extensive system of management are the major practice as indicated by the majority (94.50%) of the respondents. Extension services was very poor as indicated by the majority (94.00%). However, majority (66.00%) uses ethno-veterinary medicine (EVM) as a source of medication while (30.50%) uses veterinary drugs and only (3.5%) uses other alternatives. Physical outlook were the only means of pricing. Majority (38.00%) sold their camels to meet-up the household demands. All of them indicated that camel production is a profitable practice. Despite all the constraints, majority (41.00%) uses camel for farming activities, most (30.50%) engaged camels in transportation and only (18.50%) sold their camels live.

Key words: Camel, Constraints, Production, Marketing, Profitability

INTRODUCTION

One humped camels in Nigeria are concentrated in the semi-arid Northern part of the country. Camel production in arid regions of the tropics is a practice of both sedentary and migratory farmers (FAO, 2009). Camels form a major group of the important livestock species in the tropics. Camels plays an important roles in the livelihood of rural dwellers by providing meat, milk, animal traction, transportation of goods, cash income from sales of their products as well as capital assets to face risks and misunfortunate in harsh time or periods. Ramet, (1996). However, Waziri *et al.* (1999) reported that camels are well adapted to the harsh conditions of the Arid and semi-arid regions and it equally thrives where other livestock does not. Camels are versatile; their ability to thrive in the harsh environment has earned them good reputations amongst pastoralists of tropical Africa and Asia. Camels are reared extensively with low input, free-range systems of management, unavailability of extension services, inadequate marketing and processing services such as slaughtering and abattoir facilities, inadequate access to veterinary services, poor quality feed among others, FAO (2009). According to Bourn *et al.* (1994), apart from poor management which includes inadequate and unbalanced

feeding, high neonatal mortality constitutes a major obstacle to the livestock production. Fertility is reduced, young stocks grow poorly, milk yield are low, carcass quality affected and mortality rates are high. According to Johnson and Alexander (2006), different extension services are being rendered by extension agents to livestock farmers out of which a lot of benefits are derived but there seems to be no exclusive package has been designed for camel producers in the Arid and semi-arid regions. Extension services and availability of well trained extension agents have effect on innovation of livestock management system and production in which sources of information exists in almost every developing countries, but package in camel production is still lacking. Ramet (1996).

MATERIALS AND METHODS

Study area.

The study was conducted in four local government areas of northern Katsina state (Baure, Dutse, Mai'adua and Mashi) between February and April 2014. Katsina State was carved out of the old Kaduna State in 1987. The state covers an estimated land area of 49,895 square kilometers and shares a boundary with the Republic of Niger to the North. The

population of the state is over five million during the 2006 National Head Count. Katsina State has hot and dry climatic conditions for most of the year in the northern parts of the state. The hottest months are March to May with temperatures ranging from 23°C to 42°C. The annual rainfall varies from 700mm to 1000mm and rainy season is usually from June to September (KTARDA, 2001).

Data collection and analysis

Two hundred structured questionnaires were used for the study. Fifty (50) questionnaires were allocated to Baure, Dutsi, Mai'adua and Mashi local government areas respectively. Information on the biodata of the respondents, constraints of the production potentials (management, extension services, medication, and marketing) among others was reported. Data collected were subjected to descriptive statistics using frequency and simple percentages.

RESULT AND DISCUSSION

Table 1 presents the biodata of the respondents, where all were males. Majority (44.50%) falls within the age range of 41 – 50 years. Most (23.00%) are within the age range of 61 – 70 years and only (5.00%) were above 70 years. Wilson (1998) reported that camel production practice in the tropics is practical by aged people. Majority (80.00%) attended Qur'anic school, most (11.50%) obtained a mass literacy certificate; while (5.50%) had primary school leaving certificate and only (3.00%) obtained secondary school certificate. Table 2 presents information on the constraints of camel production. Majority (94.50%) of the respondents engages in free range/extensive system of management and only (4.50%) practiced semi-intensive system. FAO (2009) reported that camels are reared extensively with low input, inadequate health care services and poor feeding. However, from this report, majority (94.00%) had no access to extension services. The frequency of the visits by extension agents testifies the poor delivery of extension services. Majority (81.00%) does not enjoy any extension services. However, the frequency of visits by the extension agents indicated annually by (5.50%), quarterly were indicated by (4.50%), monthly by (3.50%), six months by (3.00%) and the remaining (3.50%) indicated weekly respectively. According to Johnson and Alexendar (2006), different

extension services are rendered but, yet, there is no special package for camel production. Ghude *et al.* (2012) reported that despite the hardy nature of camels, endoparasites, ectoparasites and dermatophilosis are some of the diseases of camels in the extreme Northern part of Nigeria. From this study, majority (66.00%) uses ethno-vet medicine, most (30.50%) uses veterinary medicine and only (3.50%) patronize other services. However, (86.00%) uses ambulatory / mobile veterinary services and only (14.00%) uses veterinary clinics. Marketing of animals and their products in the tropical countries still maintained its traditional practices. Farmers are yet to accept the use of scale and other weighing devices to value animals and products based on weight (UN, 2004). From this report, all of the respondents indicated the methods of physical outlook in pricing. Majority (38.00%) of the respondents sold their live camels when the needs for household arise. Most (24.00%) sold their camels after fattening, while (14.00%) when low productivity was observed and (6.00%) indicated old age. Ghude *et al.* (2010) reported that camel production is a profitable venture and is one of the contributing factors in the socio-economic life of sedentary farmers in Northern Nigeria. All of the respondents accepted that camel production is a profitable venture. However, majority (41.00%) engages the camels into agricultural practices, most (30.50%) engages into transportation respectively.

CONCLUSION

Camel production practices in the tropics are still traditional for over the years. Little efforts will be required to change the production pattern since camel production does not need much capital to invest. With little improvement in feeds and feeding, healthcare services and some husbandry practices, camel will greatly continue to contribute to the economy of the rural dwellers.

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Table 1: Biodata of camel owners in Northern Katsina state

Parameter	Percentage
Gender	
Male	100 (200)
Female	-
Total	100
Age	
30 – 40	10.50 (21)
41 – 50	44.50 (89)
51 – 60	17.00 (34)
61 – 70	23.00 (46)
Above 70	5.00 (10)
Total	100 (200)
Educational status	
Qur'anic school	80.00 (160)
Mass literacy	11.50 (23)
Primary school	5.50 (11)
Secondary school	3.50 (6)
Total	

Source: Field survey 2014

Table 2: Constraints of camel production in Northern Katsina state

Parameter	Percentage
Management practice	
Free range/extensive	94.50(189)
Semi-intensive	4.50(9)
Others	1.00(2)
Total	100(200)
EXTENSION SERVICES	

*Access to extension services	
Had access	6.00(12)
No access	94.00(188)
Total	100(200)
*Frequency of extension visit	
None	81.00(162)
2 weeks	2.50(5)
Monthly	3.50(7)
Quarterly	4.50(9)
Six months	3.00(6)
Yearly	5.50(11)
Total	100(200)
MEDICATION	
*Source/availability	
Vet drugs	30.50(61)
Ethno-vet	66.00(132)
Others	3.50(7)
Total	100(200)
*Uses of veterinary medical facilities	
Vet clinics	14.00(28)
Vet hospitals	-
Ambulatory/mobile clinics	86.00(172)
Total	100(200)
MARKETING	
*Methods of pricing	
Weighing	-
Physical outlook	100.00(200)
Others	-
Total	100(200)
*Reasons for selling camels	
Old age	6.00(12)
Fattening	24.00(48)
Low productivity	14.00(28)
Household need	38.00(76)
Others	18.00(36)
Total	100(200)
PROFITABILITY	
*Does camel production	
profitable	
Yes	100(200)
No	-
Total	100(200)
*How is it profitable	
Sales of live camels	18.50(37)
Transportation	30.50(61)
Agricultural practice	41.00(82)
Others	10.00(20)
Total	100(200)

Source: Field survey 2014