

**Open Access** 

# Review on Beef Cattle Production and Marketing System in Ethiopia

## Gebreselassie N\*

Department of Animal Sciences, Ambo University, P.O. Box 19, Ambo, Ethiopia

## Abstract

This seminar is conducted to review on beef cattle production and marketing in Ethiopia. cattle is the domesticated herbivorous mammals that constituent the genus Boss of the family Bovina and that have a great importance to humans because of the meat, milk, leather, glue, gelatin and other items of the yield. Depending up on the purpose of cattle, cattle's are divided into beef cattle, dairy cattle and dual purpose breed. Beef cattle are were bred and selected primarily for the production of meat.

Beef cattle are those breeds that have been developed primarily to produce meat. Dual purpose breed are breeds selected for both beef and dairy production. The beef industry in Ethiopia has got the chance that there is an example that can be used for beef production and there is a large population of cattle and there are local animals like Horroo and Borana breed that have been proved for their best beef performance. The economic contribution of the livestock sub sector in Ethiopia is also about 12% of the total and 33% of agricultural gross domestic product (GDP) and provides livelihood for 65% of the population.

There are three types of cattle fattening systems in Ethiopia; these are traditional, by product fattening system and hararghe fattening. In all of three type, the output of the farmers from beef cattle per head is low, so in general this system must be prove the behavioral and adaptability of the farmers change through teaching and seeing new technology from the neighbor area and foreign countries. Finally our governmental organization must doing on challenge constraint /based on beef cattle production and marketing systems like feed resource, personal challenge, marketing structure, health care and adequate housing system for beef cattle.

**Keywords:** Beef cattle; Production; Management; Marketing; Ploughing

#### Introduction

Agricultural sectors play an important role in the overall development of the country's economy. That means the sectors plan have a major role in the national economy and it is the source of income, food and employment for the rural and urban populations. The livestock sector in Ethiopia has been contributing considerable portion to the economy of the country, and still promising to rally round the economic development of the country. Like most of the sub-Saharan countries agricultural system in Ethiopia is obviously a traditional way that means livestock production system in Ethiopia is an integral or mixed production types. Ethiopia has the leading livestock population in Africa and animal population census with an estimation of 53.99 million Cattle, 25.5 million Sheep, 24.06 Goats, 9.01 million Equine, 0.92 million camels, and 50.38 million Poultry in the country. And the estimated 1.1 growth rate of cattle is against back drop of 2.5 human population growth per annual in many cases livestock are central component of small holder risk management strategies. The economic contribution of the livestock sub sector in Ethiopia is also about 12% of the total and 33% of agricultural gross domestic product (GDP) and provides livelihood for 65% of the population. In Ethiopia, recent studies estimated that annual illegal flow of livestock through boundaries reaches as high as 320,000 cattle. Finally, Ethiopia exports approximately 200,000 livestock annually.

In general farmers are traditionally fattening the oxen after the completion of tillage by feeding grass for one to three months. These fattened animals fetch price ranging from ETB 1,100 to 1,800 at local market (IPMS) (improving productivity and market success of Ethiopian farmers) 2005 fogera woreda. The present study is therefore, undertaken to review beef cattle production marketing and its constraints in Ethiopia.

# **Literature Review**

#### Beef cattle production and marketing system in ethiopia

Beef cattle production system in ethiopia: According to the fourth livestock development project (MOA, 1996) there are three types of cattle fattening system in Ethiopia. These are traditional system, oxen are usually sold after the ploughing season while they in poor body conditions. Meat yields are low, the beef is of poor quality and returns to farmers are after in adequate even to buy a replacement ox cattle in the low lands are rarely fattened and are solid in poor body condition and at low prices. The by-product based fattening system is a type in which agro industrial by products such as molasses, cereal, middling by product and oilseed meals are the main sources of foods.

Other type of fattening system is the hararghe fattening system which farmers by young oxen from the adjacent law low lands pastoral areas use them for ploughing purpose for 2-3 years and then fatten and sell them before they become old and emaciated. The system is largely based on cut and carry feeding of individually tethered animals, grazing is rare. Fattening enterprise in western region of the country typically take in mature feeder animals and being them to market weight for sale to a slaughter, cattle in these enterprise normally enter the fed lot at cell under one year old and are fattened for six month.

\*Corresponding author: Gebreselassie N, Department of Animal Sciences, Ambo University, P.O. Box 19, Ambo, Ethiopia, Tel: +251 11 236 2006; E-mail: neamin2014@gmail.com

Received June 05, 2018; Accepted July 31, 2018; Published August 06, 2018

Citation: Gebreselassie N (2018) Review on Beef Cattle Production and Marketing System in Ethiopia. J Fisheries Livest Prod 6: 277. doi: 10.4172/2332-2608.1000277

**Copyright:** © 2018 Gebreselassie N. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Small holder cattle fattening is also a traditional occupation in some regions in Ethiopia e.g. in hararghe zone of the oromia region where locally named harar beef is produced. Fattened cattle for Harar fetch a premium price of up to 50% over other condition cattle in the Addis Ababa maket. Fattening activity in the Amhara Region however differs for the above mentioned enterprise. Small holder farmer commonly fatten mature and therefore much older animals (5 to 7) years old. For short duration (usually for three months) ordinary farmers fatten their drought oxen. So that they can fetch better price when brought to market (IPMS improving productivity and market success of Ethiopian farmers) 2005, Fogera pilot. On the other hand, some farmers purchase oxen specifically to fatten and sell them so as to get higher price per weight margins on each fattened animal. In such cases animal are purchase based on their large skeletal farmers and body conformation, in any case weather purchased or own animals are used for fattening purposes, they have already reached their full skeletal size.

In general Ethiopia is one of the tropical countries which beef cattle production is verifying from extremely productivity obviously advance. The management of beef cattle is greatly influenced to a large extent by the people who own them and geographical location considering that there exist within the tropics an extreme of climate and diverse environmental condition. It is not suppressing that there is a quite considerable variation in management systems. However, they can be divided into two major types. Traditional and modern beef cattle production many suggestions have been made for the classification of livestock production system, now of these classification provide a suitable frame work for the evaluation of tropical (Figure 1).

#### Beef cattle management

a) Feeding and nutrition: the main objectives of any livestock industry in the conversion of feeds which are either in edible by man or surplus to is immediate requirement into animal products. Major constituents of beet for farm animals originated from plants. plant by products and animal sources such as fish meal and milk of recent another source added into the list is a non-biological source such as urea from nitrogen. However, most feed for livestock may be classified into two major types roughage and concentrates. Roughages are characterized by relatively large amount of crude fiber and relatively large but varying quantities of carbohydrates, crude protein, fat and little quantities of water [1]. The nutrient requirement of the beef cattle will depend on the age rate of gains expected and in the case of cows





whether or not they are suckling a calf. The nutritional requirement bulls depend up on both the age and the extent to which they are being used for breeding purposes. Generally the value of any feed in a ration is determined largely by how well the ration is balance of feeding more of any nutrient than the animal requires is wasteful. Beef cattle require nutrients mainly for three purposes that is for maintenance, growth, production and reproduction (Figure 2).

Page 2 of 3

b) Health care of beef cattle: The incidence of disease in beef cattle is low when compared with the disease rate of the other important species of livestock. Nevertheless losses do occur and may be of considerable importance in individual herds. A substantial number of microorganisms cause disease in livestock and are classified as viruses, bacteria, mycoplasma, rickets, fungus and parasities. The common notifiable disease in beef cattle production are a natural, brucellosis, footand mouth disease bovine tuberculosis and rabies. The most important future about a notifiable disease is that owner or the person in charge of an animal suspected as affected by notifiable disease must immediate report his suspension to the responsible bodies [2].

#### Breeding of beef cattle

Beef breeds are generally noted for early maturity, high quality. Meat that is seen as a marbled appearance due to the deposition of fat between the muscle fibers, high percentage of carcass minimum offal. There are two types of breeds. These are Tropical and Temperate breeds. Tropical breeds of cattle are divided into humpless cattle and humped cattle. Zebu, Borena and sanga cattle are the representative breeds of tropical cattle. Most of the temperate breeds of cattle include specialized breeds for beef purpose. These includes a Borden Angus, Birhama, Gallonay, polled Herford, polled Herford, Simmental etc. each of the beef breeds do have their own adaptation and characteristics different environment.



Volume 6 • Issue 3 • 1000277

a) Beef cattle housing and facilitates: Well-planned buildings, lots feed bunks and handling facilitates are essential to the successful beef cattle enterprise. The producer needs to know how to recognize the needs of his operation and how to know the best use of space [3]. In general building essential for stock production in the tropics are fewer and less expensive than are required in the temperature zones. Beef cattle are not especially sensitive to changes in weather conditions. When designing beef cattle facilitates you must provide the required space, shelter, feed, water, was the management and livestock handling features adapt them to the natural features of the site and organized them for efficient and easy operation cow, calf had may graze on large or pasture during dry months. But need some protection in the rainy season. feeder cattle are usually penned in relatively confined areas, wind breaks and open front sheds when properly laid out can give adequate protection for calves during the cool season draft free area is desirable [3].

#### Beef cattle marketing system

In Ethiopia, there are about 120 livestock market centers are recognized by the ministry of agriculture (MOA) and Rural development (RD). Most of these places do not have well- organized livestock marketing infrastructure to offer basic watering, feeding, resting, and guaranties facilities. The situation is worse in pastoral areas, where only some have perimeter fencing to facilitate tax collection.

In Ethiopia, livestock and their products marketing system is generally under developed. The low level of infrastructure and facilitating are not conducive for efficient marketing. Transportation is often on hoof which leads to considerable weight loss of animal as well as physical injuries and illness. Trucking is very limited and used only during holidays and festivals to move finished cattle and small stock to urban centers. Poor infrastructures development also hampers the flow of stock from pastoral area to consumption sites. Lack of marketing information reduces the efficiency of the marketing system. They also do not respond to the price changes resulting from supply and demand variations. Lacks of market transparency also restrict the development of the livestock economy. Availability of market information will help produces, traders and exporters to plan production operations and marketing decisions. It would also a valuable contribution towards improving government planning and policy marketing for the livestock sector [4-9].

#### a) Sources and participants of beef cattle marketing

Participants in beef cattle marketing in Ethiopia are producers and fattening cooperative, Brokers, trade agents, small agents, large and medium scale exporters, importers.

# Conclusion

Agricultural sectors play an important role in the overall development of the country's economy. That means the sectors plan have a major role in the national economy and it is the source of income, food and employment for the rural and urban populations. Most of sub-Saharan Africa countries heavily dependent on agriculture and in general Ethiopia us a obviously it is a traditional way of agricultural systems that means integral or mixed production type. The essential management requires for beef cattle production. Like feeding, watering, housing, health care and breeding are not well developed near to owners. There was no strategic production of livestock for marketing except some sales target to traditional Ethiopian festivals. Markets are dispersed to remote areas lacking price information. The slaughter facilities in Ethiopia includes abattoirs, slaughter house and slaughter slabs. However, the production of beef cattle in Ethiopia will remain low, unless supported by intensive production system in general.

#### Recommendation

Capacity building of the small holder farmer in different beef cattle operation such as rising breeds, reproduction and slaughter operation. Empowering small holder producers so that they can provide high quality sustainable beef cattle production with an identified market destination and they will have access to basic production in put, credit, market related information. Creating strong relationship among various actors (act on investment). The ministry of agriculture should established necessarily quarantine at appropriate location and introduce necessary products. The government fed also allocates necessary budget assign relevant staff.

#### Acknowledgement

I wish to express my deepest gratitude and appreciation to my almighty god for unreserved, Support during this review work. Without the support of him nothing is possible.

#### References

- Daniel T (2008) Beef cattle production system and opportunities for marketing orientation in Borena zone, Southern Ethiopia.
- Livestock marketing Authority (2004) Meat exports market study MOARD (ministry of Agriculture and rural development). Addis Ababa, Ethiopia.
- Improving productivity and market success of Ethiopian farmers (2005) Fogera Woreda Pilot Learning Site diagnosis, program design and atlas IMPS, AddisAbaba, Ethiopia.
- Hurrisa B (2003) Livestock marketing and pastoralism in proceedings of the 3<sup>rd</sup> national conference on pastoral development in Ethiopia, pastoralism and sustainable development, held 23-24 December 2003, Addis Ababa, Ethiopia.
- Mengistu A (2002) Forage production in Ethiopia: Case study with implications for livestock production.
- Alemu G (1999) Role of draft oxen power in Ethiopian agriculture. Ethiopian Agricultural Research Organization, AddisAbaba, Ethiopia.
- 7. Ethiopian Agricultural Research Organization (1999) Livestock research strategy EARO, Addis Ababa, Ethiopia (unpublished).
- Ehuis S, Pun HL, Mares V, Shapiro BI (1998) The role of livestock in food security and environmental protection outlook in Agriculture. 27: 81-87.
- Ministry of Agriculture (1996) Fattening Extension manual. MOA, Animal and fishery resource main department. FLDP (fourth livestock development project), Addis Ababa, Ethiopia: 83-99.