

Poultry Production and Marketing in Borana Zone, Southern Ethiopia

Dirriba Mengistu*, Belay Biru

Department of Agricultural and Social Sciences, Yabello Pastoral and Dryland Agriculture Research Center, Yabello, Ethiopia

Abstract

Poultry production has become the most popular particularly as a business sector, which can be kept and managed by family as an immediate source of income. Owned to these facts, this study was conducted in Borana zone with the objectives of assessing the prevailing poultry production system and its marketing system in Borana zone. For addressing this target, 125 sample households were drawn following two-stage-sampling procedure followed by simple random sampling techniques to withdraw sample. In data collection, checklists and questionnaires were used to collect information from market actors, producers, and intermediaries enriched with secondary data information. Generally, the study assure that poultry production and introduction of exotic breeds become increasing without the characterization of the local breed. In fact, as the other agricultural activities, shortage of improved breeds and market problem were messing the existing production system. Thus, this study briefly argues the characterization of local breed for further breed improvement and popularization.

Keywords: Borana • Exotic bread • Marketing • Poultry • Production

Introduction

Livestock production is the main stay of pastoral and agro-pastoral communities of Borana acknowledged to good ecological potential for livestock production. Moreover, poultry production has become the most popular particularly for immediate cash generation. In the national economy, poultry production represents a significant part where rural economy contributes about 98.5 and 99.2% of the national egg and poultry meat production, respectively [1]. The impact of village chicken in national economy of developing countries and its role in improving the nutritional status, income, food security and livelihood of many smallholders is significant owing to its low cost of production [2]

Borana zone is known for its livestock production, though drought has been resulted in the indispensable livestock death [3]. This livestock death has ground effect on livelihood of the community that enforces to look for other options for income diversification, income generation and livelihood improvement beside common livestock production.

In fact, poultry is a business sector, which can be kept and managed by a given family that has been acts as an immediate source of income. Particularly, in the area where climate change is a serious impact, poultry production could be a relief. However, poultry production was hardly addressed in pastoral area where this study

was undertaken to assess the prevailing poultry production and its marketing system in Borana zone.

Methodology

Borana zone is located at the southern tips of Ethiopia which share a single borderline with Northern Kenya with 10% highland, 20% temperate and 70% lowland with the average temperature that ranges between 18-28°C [3]. In fact, to draw the final sample for the study the study follows two-stage-sampling methods followed by a simple random sampling procedure.

At the beginning, the districts in the zone and PAs in the districts were stratified based on the potential of the livestock production. Then, the sample household were selected randomly from the selected PAs with a proportionally distributions based on the number of population and area coverage.

Finally, three districts were selected from Borana zone where two PAs were selected from each selected district to draw 125 households for final interview.

In data collection, checklists and questionnaires were used to collect information from different market actors, producers, and intermediaries. Relevant secondary data were also obtained from the districts, zonal pastoral development offices and FAOStat.

*Address to correspondence: Dr Dirriba Mengistu, Department of Agricultural and Social Sciences, Yabello Pastoral and Dryland Agriculture Research Center, Yabello, Ethiopia; E-mail: dmangistu@gmail.com

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Moreover, both informal and formal survey was conducted to collect the primary information from producers and traders. The datum was analyzed qualitatively and quantitatively to generate descriptive statistics to examine and explain basic characteristics of the production and market.

Result and Discussion

Most of the sample households were female-headed households, with the average age of 38 years that ranges from 18-56 years old which indicates that larger proportion of the respondents are within the working age with ample experience and knowledge about the matter.

The study shows that about 78% of the respondents have poultry with their livestock where most of the respondents are aware of the poultry production in their area [4].

Poultry is among the major household asset in Borana zone which constitute some portion of their income. From the survey result, 75% of the respondents owned chicken that hints poultry constitute among the livestock composition of the society.

Among all livestock, on average the households have about nine chickens with the maximum of 100 chickens per households (Table 1).

Livestock	N	Min	Max	Mean
Cattle	113	1	30	5.43±0.5
Goat	112	1	100	10.26±1.2
Camel	103	1	60	2.55±0.78
Sheep	107	1	25	4.71±0.53
Poultry	97	1	100	12.39±1.39
Donkey	98	1	6	0.84±0.12
Poultry Experiences	80	0	60	8.49±1.04

Table 1. Number of livestock owned.

Even though Borana zone is hardly recognized for poultry production due to the perception of pastoral mobility, today chicken production become expanding in area to the level of business-based poultry production. Borana zone constitute 1.23% of national and 3.36% of the Oromia region poultry population with the average growth rate of 2.68% annually [5].

Poultry production system

Poultry production has a long history in Borana zone though it is not socially valuable as much as other livestock. Regardless of this, parcel of the households has been staying with their chicken during night either in the kitchen or in the dwelling house (Table 2).

Description		N	%
Separate poultry house	Yes	58	51.3
	No	43	38.1
	Total	101	89.4

Birds stay at night In the kitchen	Family dwellings	25	22.1
	Perch on trees-	26	23
	Under basket	24	21.2
	In cages	4	3.5
		4	3.5
	Total	83	73.3

Table 2. Poultry house and night relaxation.

Even though the production system was underdeveloped, about 70% of the respondents were culling their chicken by selling poor breed as production improvement strategy (Table 3) (Figure 1).

Description		N	%
Culling	Yes	79	69.9
	No	32	28.3
	Total	113	100
Purposes culling of	For sale	69	61.1
	Breeding	3	2.7
	Sale or consumption	6	5.3
	Total	113	100

Table 3. Culling practices.

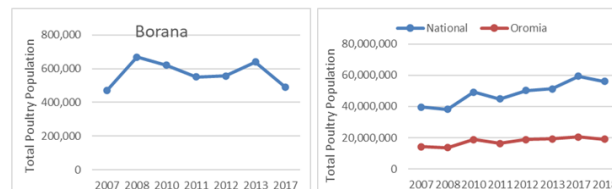


Figure 1. Trends of poultry production in Ethiopia from 2007-2018.

However, though the consumption of poultry and poultry product is habitually not common, now days the practice of chicken meat consumption become emerged due to shortage of mutton and beef as compared to past era.

In the study area, 95% of the respondents reports that their chicken are dominantly scavengers, which collect their feed by themselves. However, due to feed is an important ingredient to increase the daily egg production capacity, 75% of the respondents were providing supplementary feeding dominantly maize and wheat on the bare ground (Table 4) [6].

Description		N	%
Scavenging behavior	Yes	110	97.3
	No	2	1.8
Give supplementary feeding	Yes	85	75.2
	No	23	20.4
	Total	108	95.6

Table 4. Feeding system.

Marketing system chicken and egg

In the marketing system, shank color, comb type, sex, body weight and feather color are the major determinants of poultry price. From these, sex, body weight and color are among the top three major determinants of poultry price. However, lack of coordinated, structured, and formalized marketing system is the major challenges of the poultry market in the pastoral area. As a result, local market, nearby town, local village, and roadside cover 33%, 42%, 23%, and 14% of the marketing destination of the poultry market respectively which constitute about 98% of the market share of chicken in the area [7].

Conclusion and Recommendation

Borana zone is known for its livestock production, where little was known about poultry production. However, beside livestock the production of poultry has become common along with livestock for selling purpose. In recent time, the introduction of exotic chicken breed was become known regardless its predefined genetic characterization. However, the current exotic breed poultry expansion is a business-based poultry distribution without any technical backup.

Nevertheless, the adoption of exotic poultry was limited to the level of 14% in the study area due to poor access to exotic breed and its high price. Beyond the production related gaps, marketing of chicken and its product was full of challenges in Borana zone. Thus, the following recommendations are rendered as the next phase of this study before the full encampments of improved breeds.

- The local chicken production and breeding characterization before the expansion of exotic breed to maintain the good genetic importance of the local breed
- The demonstration of different breed to select best breed with higher relative productive than local unlike the blind exotic breed recommendation.
- Mobilizing community-based poultry production, management and marketing need further interventions to meet the best poultry production demand
- Demonstration of poultry meat preparation and consumption along the poultry production need critical demands.

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