



Investigation of livestock and fishery product supply status to central market : Focus on Southern Ethiopia with perspectives and future opportunities

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ABSTRACT : Marketing is the answer to the under development of developing countries. Despite the past six years data shows an accelerated increase of livestock and fish supply, the huge livestock resource base in Ethiopia, particularly Southern region did not fully harvested its out puts as its high livestock and resource potential. Yet, this resource base has incredible potential to contribute to income generation, employment creation, food security and nutrition, social security and poverty reduction. When adopted and practiced, marketing will help to develop appropriate technologies as developing nations provide for the needs of the people and enhance their standard of living, create job opportunities, wealth for entrepreneurs, a means towards affording education and enjoyment of leisure. Since the livelihood of smallholders is highly dependent on the cash income from livestock and livestock products, alleviating constraints to production, the export market and domestic trade and marketing structure, improving market information, and upgrading marketing infrastructures including health and sanitary conditions will increase the welfare of smallholder producers, urban consumers and improve the national balance of payments.

KEY WORDS : Livestock marketing, Supply economics, Food security, Export trade, Southern Ethiopia

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INTRODUCTION

Livestock can be an important source of income to people. However, for livestock keepers in developing countries it is not that simple and risk management plays an important role as well.

Not only producers are involved in cattle trade, but also middlemen, traders, trading co-operatives and exporters. Livestock can generate income through the sale of livestock products at either formal or informal

markets (Thornton, 2010).

Eskola (2005) distinguishes four types of markets; 1) local village markets, 2) regional markets, 3) national markets and 4) export markets.

The farmers themselves are traders at these markets. Although access is relatively easy, supply is often limited. Regional markets operate in the center of a region.

The objectives of the assesement were:

–To overview the past six years livestock production and marketing supply status from Southern parts and quantify the challenges and opportunities for future development so as to derive recommendations for development of current livestock marketing through

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strengthening value chain approach.

Livestock production, marketing and its supply in Ethiopia :

Livestock production in Ethiopia :

Ethiopia is repetitively exemplified as the most potential country in livestock resource. The resource forms an integral part in the agricultural system and basis of livelihood for entire rural and semi-urban population in most part of the country. The purpose of livestock production is diversified and includes the provision of draft power, food supply, source of income, means of transportation, alternate energy source. With regard to the national economy, Livestock production plays a significant role in the country’s national economy. It contributes about one-third of agriculture’s share of GDP, or nearly 17 per cent of total GDP.

Contagious diseases and parasitic infections are major causes of death, factors that are exacerbated by malnutrition and starvation due to frequent drought. Recurring drought is a factor for the loss of huge livestock resource that influences the animal population, although it is difficult to determine the extent of losses. Practically all animals are range-fed. During the rainy seasons, water and grass are generally plentiful, but with the onset of the dry season, forage is generally insufficient to keep animals nourished and able to resist disease.

In spite of the existing enormous livestock resource and great potential for increased livestock production, the productivity is disproportional lower due to various livestock management problems, prevalence of major endemic diseases, poor feeding and high stocking rate on grazing lands. Thus, the contribution of this sector in the agricultural economy of the country remains lower. Indeed, it accounts for merely 30 per cent of the national agricultural output and 40 per cent of the agricultural export (MEDAC, 2006). Lack of support services such as extension services, insufficient data with which to plan improved services and inadequate information on how to improve animal breeding, marketing, and processing are also critically affect the production.

The farmers should be train on various aspects of improving cattle productivity (nutritional, health and breeding management) in communal areas and developing their entrepreneurial skills. It is important to consider extension of preferential traits of livestock’s for farmers for the improvement and sustainability of the dairy cattle.

Livestock marketing in Ethiopia :

The livestock marketing structure follows a four-tier system, of which different actors involve in buying and selling of beef cattle in the market system . In Ethiopia, particularly in Southern part, both legal and illegal livestock marketing systems are operating at different magnitudes. Small farmer exporters and traders are the major actors in the illegal cattle marketing system while medium- to large scales licensed exporters are dominantly operating in the legal system. Most cattle sales are related to farm households’ cash needs and commercial orientation. However, cattle sales are also induced by fear of theft and insecurity (Elias *et al.*, 2007).

Ethiopia’s livestock and leather production stand high in strategic economic importance because of their numbers, diversity, important place in the rural economy, and their present and future economic contribution to generate employment, wealth, tax revenue and foreign exchange.

Livestock product export trade in Ethiopia :

The main traders rout in the south is channeled from Southern Ethiopia into north and northeastern Kenya. The purpose of the meat processing industries in Ethiopia is to produce and supply high quality meat products to the domestic and export markets. The export market is the main market of the meat processing industries of the country. Products supplied to the local and overseas markets by these companies are chilled/frozen beef, goat

Table 1: Ethiopian major sources of foreign exchange (USD)

	Amount	Share
Goods exports	2747.2	-
Service exports	668.1	-
Major agricultural export goods		
Coffee	841.8	31%
Gold	461.7	17%
Oilseed	326.6	12%
Chat	238.3	9%
Flowers	175.5	6%
Live animals	147.9	5%
Pulses	137.9	5%
Leather and leather products	103.8	4%
Meat and meat products	63.3	4%
Fruits and vegetables	31.5	1%
Others	219.1	8%
Total agricultural export	2066.4	88%

Source: National Bank of Ethiopia, 2010-2011 Annual report

meat, mutton, chilled veal, chilled camel meat and red offals.

Live animal export trade outlets in Ethiopia :

Unofficial cross-border trade is practised in the eastern, western, Southern and north western border lands of Ethiopia. In addition to the Ethio-Sudan cross-border huge livestock trade, there are other important cross-border livestock trade operations: Ethio-Somalia, Ethio-Kenya and Ethio-Djibouti. The cross-boarder trade with Sudan involves predominantly male cattle. Un-castrated and fattened oxen are also exported legally. Few medium to high quality female animals are also exported, which are used for slaughtering in Sudan or for live animals re-export to Egypt, Libya and Yemen. Most of the borders are characterized by arid and semi-arid agro-ecologies where livestock play dominant role in household livelihoods. Eastern Ethiopian/Somaliland cross-border livestock trade accounts for the largest share among the four borders in terms of the volume and value of export from Ethiopia. Port of Berbera is the main outlet for livestock exports.

Livestock population status of Ethiopia :

In total livestock population numbers, Ethiopia now ranks sixth in the World for cattle population, seventh for goats and tenth for sheep which collectively put Ethiopia among the top eight producers of these animals altogether globally and first in Africa. The global share of Ethiopia in the above population reached 2.9 per cent.

Major livestock marketing structure and supply status in Southern Ethiopia since 2000-2005 E.c. :

Most livestock markets in the Ethiopia, particularly Southern Ethiopia are administered by the respective

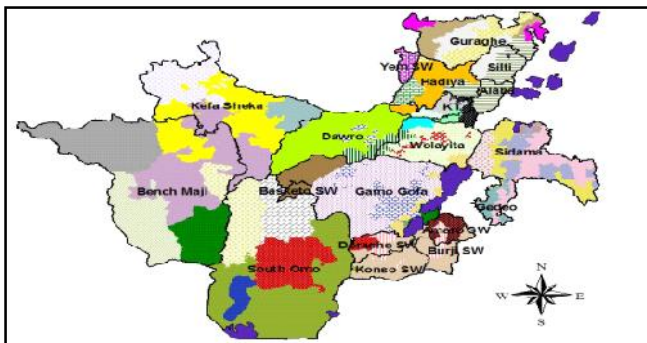


Fig. 1 : Regional livelihood zones on which livestock produced and marketed

towns' municipalities.

Most woredas have just one livestock market and it is usually in the capital of the woreda. These are known as secondary markets and feed into the terminal markets which are located in the large, regional cities. Some secondary market places are fenced but do not have any infrastructure. Others have not even fencing; merely a designated area from which market activities are conducted. In some cases, the same fenced area is used for both large and small ruminants. In others, separate enclosures are used for the different species. Markets are dispersed with remote markets lacking price information. Generally, the number of animals offered in a market is usually greater than the number demanded, so there is excess supply. This effectively suppresses producer prices since the more mobile trader is better informed on market prices, while better information combined with excess supply place the trader in a better position during price negotiation.

In Southern Ethiopia's livestock supply is heavily influenced by the severity of the dry season; low sales volume characterizes the July–September main rainy season, and the fasting period (February–April), but trade peaks immediately following these periods (Negussie, 1983).

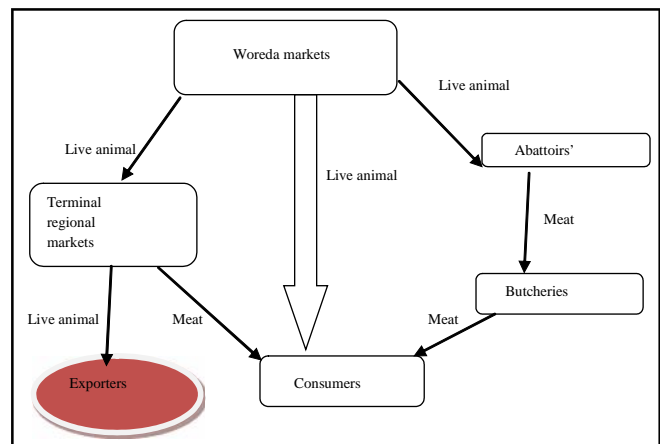


Fig. 2 : Main typical livestock market structure in through SNNPRS

Consumers buy meat through one of the three structures: buying and slaughtering live animals, from markets and from abattoirs. They may purchase live animals directly from the lower woreda market and slaughter by themselves or they may get meat from markets, which by-pass the formal procedures through

abattoirs; or they may access from butchers who process the meat via abattoirs.

Livestock product supply to central market from Southern Ethiopia (2000-2005 E.c) :

It is acceptable and real to deliver huge amount of livestock products supply to central market through Southern routes and is important to legalize and upgrade the supply condition more than the current data. As seen from the Table 2, the livestock supply status was increased in tens fold (10 times the actual data) from Ethiopian years 2000 to 2005, which shows increase from 671,083 to 5,844,367 in year 2005. This shows that Livestock market supply is highly increasing in alarming rate from year to year.

As seen from Fig. 3, there is an accelerated increase rate in years 2004 and 2005, because of it is assumed that, there is a great attention and focus of the government on the sector to harvest the untapped resources of production and foreign export exchange rate of livestock.

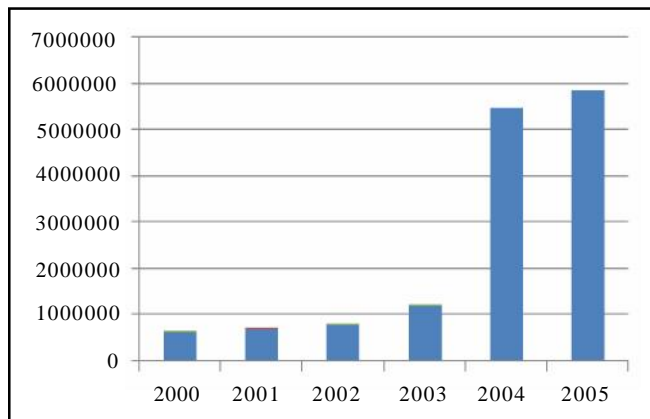


Fig. 3 : Total livestock supplied to central market

Dairy market supply in Southern Ethiopia :

Households that produce milk typically produce such a small amount that it is consumed entirely by the households.

As seen from the below Fig. 4, the dairy supply status from Southern cluster was increasing unexpectedly and it has a higher increase on year 2005, which shows increase to 20000 in year 2005.

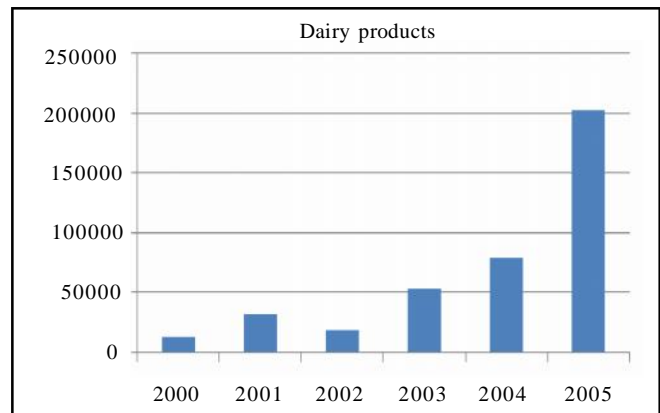


Fig. 4 : Total dairy products supplied to central market

Improved co-operative operations would offer scale economies and valued skills, market access and value added services. There are many opportunities to improve yields per cow, to improve collection, reduce transaction costs - all of which would directly improve producer incomes-and to increase processors' capacity utilization.

Meat market supply in Southern Ethiopia :

Ethiopia has the Eighth largest livestock inventory in the world, yet the country's current share in the global export market for meat is quite small. In this meat supply

Table 2 : Livestock trading and supply status

Sr. No.	Types of products and animals	Measurement	Supply to central market in E. C					
			2000	2001	2002	2003	2004	2005
1.	Livestock	No.	671,083	717,254	827,624	1,250,520	5,471,139	5,844,367
2.	Dairy products	Tone	13,107	32,046	18,724	53,823.15	79,274	201,852
3.	Meat	Tone	38,663	27,028	12,160	918,62	121,000	247,597
4.	Fish	Tone	433.6	1464.5	5,838	2,798.88	3,792	7,336
5.	Honey	Tone	1956	568	5,368	1,339	5,054	14,740
6.	Bees wax	Tone	292.78	92.86	268.4	66.95	252.7	1095
7.	Skin and hide	No.	1,469,306	1,433,722	1,544,71	1,910,025	1,854,114	2,564,155

Source: Regional marketing and co-operative sector, Livestock marketing department

trend, Southern part of the country is playing its part on fattening and delivering to central markets through which export trade live animal and meat is facilitated abroad and its supply and contribution is increasing now-a-days (Fig. 5).

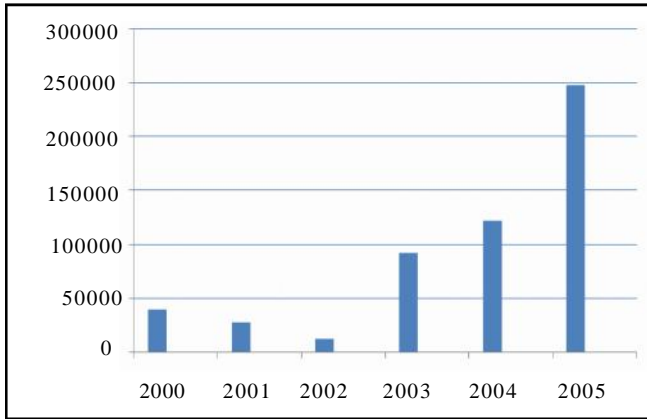


Fig. 5 : Total meat supplied to central market

Honey market supply in Southern Ethiopia :

Ethiopia has a potential to produce 500,000 tons organic honey and 50,000 tones of bees wax whereas the country currently produces only 43, 000 and 3000 tones of honey and bees wax respectively per annum and its contribution to the national economy (GNP) is around \$1.6m (UNDP cited by OXFAM,2011). Out of these honey production 97 per cent is sold formally and informally in domestic spot market and 42 per cent of total honey produced is from Southern and south western parts.

In Ethiopia bee keepers are in lack of competitiveness in honey market. To be competitive in the market place they require knowledge, hard work as well as building trust among actors taking a pro -active approach in positioning their product and their business in the market place. Increasing sales in this paradigm is not based on where you live that but on meeting changing demands from consumers and following the market trends including the price that the consumer finds attractive (ORDA,2010).

Honeybees are one of the few assets available to the rural poor to substantially supplement the family income, sometimes even double it. This means the family is food secured.

As seen from the Fig. 6, honey market supply shows a reshuffling trend since the years from 2000 to 2005.

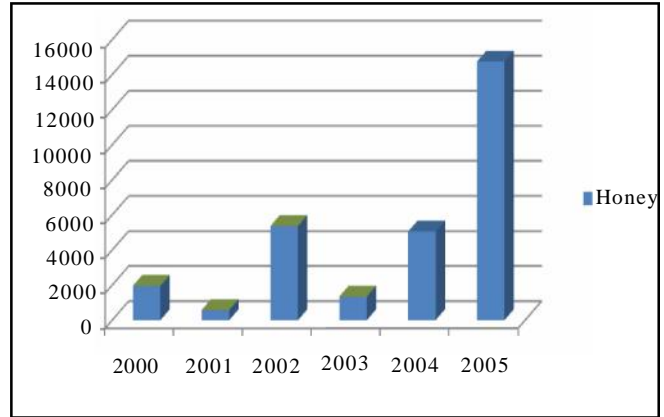


Fig. 6 : Honey supply to market

This may be because of climate change and the seasonal variation of rain and weather on which bee flora and their foraging behaviour depends on.

Bees wax trade :

Beeswax is the material that bees use to build their nest. It is manly produced by young honey bees that secrets wax from their wax glands. According to its purity and colour valued for different functions. Light coloured wax is more highly valued than dark coloured wax which is likely to have been contaminated or overheated. As seen from the Fig. 7 below, wax marketing supply shows a similar trend as honey market supply, because of similar reason as honey.

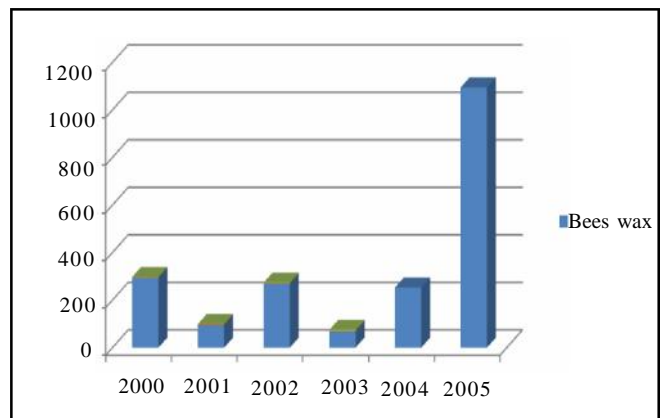


Fig. 7 : Bee wax supply

Hide and skin supply from Southern Ethiopia :

In Southern Ethiopia, It is interesting and focusing on hide and skin production, so as the amount of its products supply to central market through Southern routes

increased in double trend and is important to legalize and upgrade the supply condition more than this. As seen from the below Fig. 8, the hide and skin supply status was doubled from Ethiopian years 2000 to 2005, which shows increase from 1,469,306 to 2,564,155 in year 2005. This shows that hide and skin market supply is strictly increasing from year to year.

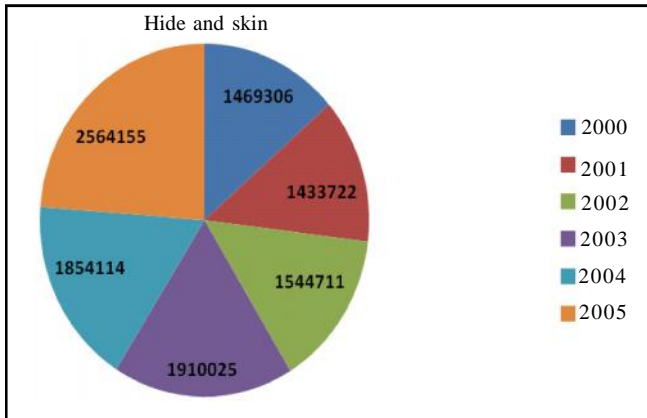


Fig. 8 : Hide and skin market supply from Southern Ethiopia

Fish supply status in Southern Ethiopia :

Ethiopia has an estimated fishery resources potential of about 40,000 tons per year. This potential source can be grouped under two categories *i.e.* Lakes fishery and riverside fishery.

According to federal fishery resource development information the average annual production of fish by species was 15,000 metric tons.

According to the report of the regional Board, the average annual fish production of the region from all its water bodies amounted 7228 tons in the year 2010 and its market supply was 5838 and its market supply reached 7336 in year 2013/2005 E.c.

According to the data on Fig. 9, Fish production status has also a reshuffling trend and it is also a result from different reasons like, climate change, invasive species in the lakes, siltation, illegal fishing, over-fishing and size of fishing nets just to list some.

Despite the fact that, the fishing capacity has increased, the benefits shared for the small scale fishermen appeared to be low because of limited added value for the small scale fishermen.

The small scale fishermen communities have been marginalized from government institutions due to lack of communication and the buying-agent system of the

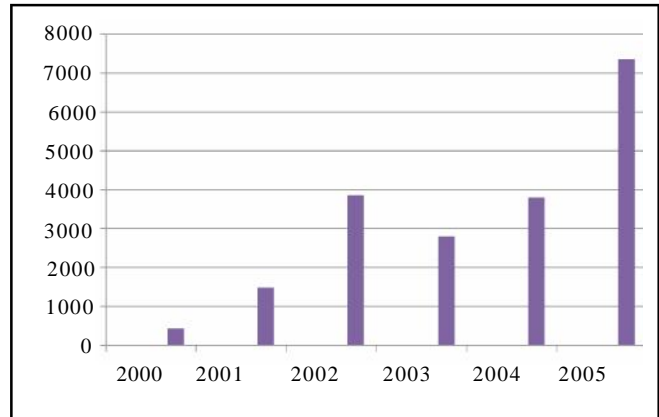


Fig. 9 : Fish market supply

domestic firms. The fishermen became dependent on the traders for the supply of basic necessities and inputs for fishing. The Kenyan fish traders were now mainly supplying the essential food items, fishing gears and twines which in turn reduced their power in the fish price negotiations. There is also no advance payment from collectors or fish traders, who are privately required to bring fish to them for sale. Competition is not seen especially at the fish assembling and trading points in the lakeside.

The local fishermen should also be provided with adequate credit and marketing facilities to develop a collective marketing system. The domestic private firms lack capital, efficacy, technology, commitment and faces serious problems including heavy losses and waste, poor handling and preservation methods, packages and fish quality. Yet, the current fish supply generally exceeds the fish demand of the traders.

Constraints and opportunities of livestock production and marketing : The country and Southern Ethiopia:

Over all constraints:

- Inability of government to institute effective disease control measures
- Limited animal genetic resources for quality breeding
- Inadequate research on livestock and research-extension – farmer links
- Limited marketing infrastructure, poor market organization and information
- Poor public-private sector partnership in policy formulation.
- Unreliable data on national herd numbers,

- productivity, slaughter numbers and prices, livestock weights and consumption levels per capita.
- Inefficiency in the marketing chains. Too many middlemen, traders and brokers earning relatively high margins, overpriced products.
 - Inaccessibility to affordable credit facilities for traders and producers.
 - Low purchasing power for consumers.
 - Lack Inadequate and or enforcement of standards and quality control.
 - High cost of production.
 - Limited access to lucrative international markets.
 - External constraints, like adverse macroeconomic conditions (high taxes, high interest rates), lack of institutional support.
 - Quality constraints, like little understanding of processors' requirements, lack of laboratories and instruments for quality control, price and quality of the veterinary services.
 - Financial constraints, like lack of capital to invest in assets, equipment and inputs that would improve quality;
 - Gender constraints, in comparison to men, women face higher disadvantages, in particular in terms of mobility, access to assets and to productive resources and access to market information, with the result that they find it more difficult to access and maintain profitable market niches and capture a larger slice of incomes.
 - Infrastructure constraints, like lack or inadequacy of, among others, roads, electricity, weighing stations, cattle dip, slaughtering and processing facilities (which raises transaction costs, exacerbates information asymmetries between producers and traders and discourages investment in processing)
 - Information constraints, like limited access to market-related information (e.g. on prices, value chains, competitors, consumer preferences);
 - Skills and knowledge constraints like lack of business management skills (e.g. production planning) and in particular, inadequate access to the knowledge and technologies needed to meet rising sanitary standards, making it extremely difficult for smallholders to gain credible certification of compliance with marketing requirements.

Over all opportunities for improvement of livestock production and marketing :

- Secure and adequate access to basic production inputs together with risk coping mechanisms for natural disasters and price shocks;
- Dissemination of livestock market information to livestock producers;
- Linking of poor livestock keepers to expanding urban markets.
- Increased political will- currently significant increased political will to improve livestock marketing as a strategy for poverty eradication compounded by recent increased government investments in market infrastructure
- Untapped local/regional markets- in the central markets most commercial attention and most supply chain development efforts have focused on the high-income market for premium cuts. Thus, a very large market potential remains untapped.

In order to characterize the listed and other related constraints and potentials on livestock and fishery marketing, finding out economic value and so as to forward scientific information for further research, development intervention and remedial policy measures to be taken.

Conclusion and recommendation :

Globally, livestock sector is growing faster than any other agricultural activities; and Ethiopia as a whole and particularly in Southern region, the demand for meat and related products is rising along with urban populations. To meet that demand, contribute to economic development and boost foreign exchange, the regional government will focus on both regional and international trade and a supportive policy environment will contribute significantly to meeting both domestic and regional demand and for the sectors future betterment, it is recommended to engulf and work with the opportunities part shown on this paper.

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