Review of past policies and strategies for livestock in Ethiopia





ETHIOPIA LIVESTOCK MASTER PLAN BACKGROUND PAPER

Review of past policies and strategies for livestock in Ethiopia

Ministry of Agriculture International Livestock Research Institute

February 2013

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Design and layout—ILRI Editorial and Publishing Services, Addis Ababa, Ethiopia.

ISBN: 92-9146-414-7

Cover images: ILRI/Zerihun Sewunet

Citation: MoA and ILRI. 2013. Review of past policies and strategies for livestock in Ethiopia. Addis Ababa, Ethiopia: Ministry of Agriculture and International Livestock Research Institute.

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Preface

In 2012, the Ministry of Agriculture commissioned ILRI to develop several background papers to inform the development of a livestock master plan and roadmap for Ethiopia. The papers were developed by teams of people brought together for this task.

The production of the background papers was supported by the Improving the Productivity and Market Success of Ethiopian farmers project (IPMS) funded by the Canadian International Development Agency (CIDA). The eight papers are listed below and are all available at https://cgspace.cgiar.org/handle/10568/51565.

- Animal health strategy and vision for Ethiopia.
- · Animal production vision and strateghy for Ethiopia.
- · Apiculture value chain vision and strategy for Ethiopia.
- · Dairy value chain vision and strategy for Ethiopia
- · Livestock extension vision and strategy for Ethiopia.
- Hides, skins and leather value chain vision and strategy for Ethiopia.
- · Live animals and meat value chain vision and strategy for Ethiopia.
- · Review of past policies and strategies for livestock in Ethiopia.

Background

In all Government of Ethiopia (GOE) policies and strategies, livestock development is a priority for stimulating economic growth, reducing poverty and achieving food security. Most rural households in Ethiopia keep livestock and livestock makes significant contributions to rural livelihoods and the national economy, including through the foreign currency earnings made through export of live animals, meat, dairy products, hides, skins and leather products. Livestock contributes 15 to 17% of overall GDP and 35 to 49% of agricultural GDP. On a national level, livestock contributes a significant amount to export earnings in the formal market (10% of all formal export earnings, or USD 150 million per annum) and the informal market (perhaps USD 300 million per annum). Livestock also have significant economic and social importance at the rural household level, both for highland smallholder farmers and lowland pastoralists and agropastoralists. Livestock sustains and supports the livelihoods of approximately 70% of the rural households (G/Mariam et al. 2010).

Livestock also provide indirect benefits to rural households, serving as a store of wealth, as a source for fuel and fertilizer from manure and draught power for land preparation for crop production. The most important function of livestock in the mixed farming systems of the highlands of Ethiopia is the provision of draught power. In the highlands 30–40% of the herds are work oxen. More than 90% of crop production in Ethiopia is dependent on animal draught power and early land preparation using animal traction is a key element in achieving higher crop yields (MoA 2007). In return, crop residues are the main source of animal nutrition, eaten in situ or conserved and fed to animals in times of feed scarcity. In real terms, the value of draught power and manure is probably about 57% of total output from the cattle herd. Livestock offer a particular package of benefits to pastoralists, for whom few alternative livelihoods exist. In addition to direct income benefits, livestock provide indirect benefits, serving as a means to store assets for those beyond the reach of the banking system, as a source for fuel and fertilizer from manure, and as draught power for farm production (G/Mariam et al. 2010).

Even though livestock data and statistics for Ethiopia are limited, it is clear that given the significance of livestock resources the potential of livestock to contribute to the economic development of Ethiopia is great. The CSA survey of 2011/12 shows that the total cattle population of Ethiopia is about 52 million. About 99% of the total cattle in the country are local breeds, the remaining being hybrid and exotic breeds. About 24.2 million sheep and 22.6 million goats are estimated to also be found in the country, while the total poultry population is estimated to be about 45 million (CSA 2012).

Furthermore, with continuing rapid growth in population and urbanization, and income growth, the demand for milk, meat, and other livestock products is expected to increase, paving the way for the livestock sector to become a major driver of agricultural development that can contribute significantly towards increased rural income and employment.

Although livestock are of major importance to Ethiopia's rural and national economy, and the potential for contributing to economic growth is great, the livestock sector needs more support and investment to realize its potential.

Livestock policies and strategies

In Ethiopian policy and strategy documents livestock development is indicated as one of the focus areas of the government. Since 1992 the government of Ethiopia has introduced a range of policies and strategies to guide economic development and address the food insecurity problem. The policies and strategies for agriculture and rural development reflect the potential of the agricultural sector in the nation's development.

The Agricultural Development Led-Industrialization (ADLI) strategy was the first comprehensive strategy launched by GOE and it has continued to influence the formulation of successive policy, strategy and development plans, including the Rural Development Policies and Strategies (RDPS 2003), the Plan for Accelerated and Sustainable Development to Eradicate Poverty (PASDEP 2005/06–2009/10) and the current Growth and Transformation Plan (GTP 2010/11–2014/15).

In the context of this study, an attempt is made to outline policy directions, strategies, goals and challenges indicated in these documents as follows:

Rural Development Policies and Strategies (2003)

As indicated in the Rural Development Policies and Strategies (RDPS) document the basic directions of agricultural development include:

Labour intensive production system: The strategy underlines that accelerated and sustained growth can be brought about in Ethiopia not through capital-intensive but through labour-intensive production methods. When we say that we should apply labour-intensive methods, we expect to promote advanced technology and farming methods that are, nevertheless, not labour-displacing in nature. The strategy is to enable the development of the agricultural labour force through skill development and improving access to health services so that it can readily use improved agricultural technologies to increase agricultural production and productivity.

Proper utilization of agricultural land: A fundamental aspect of the proper use of land is to guarantee the availability of land to people who seek to make living out of farming. Another aspect is sustainable use of land; i.e. taking care not to deplete its natural resource base.

Agro-ecology based production system: Ethiopia is characterized by the existence of many agro-ecological zones, which differ in terms of rainfall, soil types, altitude and the like. The strategy is to take these differences into account while planning and implementing interventions targeted for the development of the agricultural sector.

Integrated development path: A fundamental aspect of the proper use of land is to guarantee the availability of land to people who seek to make living out of farming. Another aspect is sustainable use of land use; i.e. taking care not to deplete natural resource base.

As stated in RDPS animal resources development is to progress as part of the development of the agricultural sector. The basic policy directions related to livestock and pastoralist are directly and indirectly treated under the indicated strategic directions. Specifically livestock development related strategies are detailed in relation to development paths with different agro-ecological zones and integrated development. The RDPS also recognizes that pastoralism is an important social system which can make a significant contribution to agricultural growth. The policy seeks to ensure pastoral livelihoods and their asset bases and addresses issues of drought; livestock marketing; veterinary; livestock feed; water development; and environmental protection and management.

The agricultural development strategy in RDPS includes the need to be consistent with particular conditions prevailing in each agro-ecological zone. Accordingly, livestock development related strategies and directions are outlined under three broadly categorized agro-ecologies, namely, drought prone areas, reliable rainfall areas and pastoral areas.

One approach towards animal resources development in both drought prone zones and reliable rainfall zones is to introduce and reproduce improved animal breeds. The development of animal resources includes improvement of the productivity of livestock through improvement of animal breeds focusing on the selection and multiplication of high-yielding local breeds and those from neighbouring countries. This strategy is justified by the fact that local breeds are well adapted to conditions in the country and can be widely accessed by large number of farmers. It is also stated that more exotic, high-yielding animals, which require a great deal of care and management may be raised and kept on modern farms mainly around cities and towns where there is more infrastructure.

Increasing animal feed production (both in terms of variety and quality) is another priority area indicated in the RDPS. Better land use management and agroforestry programs are considered as potential basis for increasing animal feed production. The planed interventions will focus on enabling proper exploitation of lands (not to deplete natural resource base) that are not cultivated (particularly for conservation reasons) so that such lands may serve for the production of animal feed and thus satisfy increasing demands. In drought-prone regions the focus is on integrating animal resources development with efforts towards environmental protection. In this regard, animal feed can be produced on lands that are not appropriate for farming particularly if the whole activity is integrated with environmental protection programs. In the highland areas, where backyard farming, water conservation and irrigation may be practised, farmers will be encouraged to grow grass varieties suitable for animal feed instead of relying extensively on open grazing on pasture. It is also stated that private investors will be encouraged to participate in the setting up of animal feed factories, and, where private investment proves difficult, the regional governments themselves may do so.

Developing and disseminating relevant technologies (technologies adaptable to different agro-ecological zones of Ethiopia) that would enhance the livestock subsector and upgrade farmer skills as well as their productive capacity is also indicated as one of focus areas in the RDPS. Accordingly, it is indicated that development agents (DAs) trained in animal resource development and veterinarians will be assigned to each kebele.

As clearly indicated in the RDPS, improving market access for livestock producers will be given high priority to benefit from the global comparative advantage Ethiopia has in livestock production. In this regard maximum gains can be achieved only when livestock producers are linked with domestic and international markets. Thus, improving livestock and livestock products marketing is one of the priority areas of focus.

Strategies for pastoral areas

As stated in the RDPS livestock focused development will constitute the basis for change and increased welfare among pastoralists. Consistent with and relevant to the agroclimatic conditions characterizing the pastoral areas as one of the main strategies is the development of water sources both for human and livestock use, to be integrated with pasture land administration. Pasture land administration refers to all activities related with the planning, utilization and protection of pasture/grazing lands. As stated in the RDPS pasture land administration requires the creation of laws and policies that clearly define the rights and responsibilities among various beneficiaries and support providing

agencies and the effective implementation of these laws and policies. Although there are longstanding community traditions associated with the use of pasture lands, the whole structure needs change without losing sight of the traditional practices. It is further stated that improving the supply of pasture does not mean simply receiving what nature offers, but rejuvenating depleted pasture resources and using such resources prudently. This is planned to be achieved through the leadership provided by the ethnic chiefs and elected representatives. The RDPS stated the need to maximize the use of the local knowledge and skills in the planning and implementation of development programs in pastoral areas.

In pastoralist areas the other strategy to be adopted is increasing awareness among herders to make livestock production market-driven. Putting in place an efficient marketing system for animals and animal products is indicated as critically important for sustainable development as well as for the improvement of herders' commercial culture. As part of putting in place an efficient livestock marketing system in the pastoral areas the first focus area is to increase livestock/especially cattle offtake.

Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005/06–2009/10)

PASDEP was a five year development plan (2005/06–2009/10) formulated to ensure an achievement of meaningful agriculture development that targets enhanced sectoral contribution to the achievement of the Millennium Development Goals (MDGs) while attaining accelerated and sustainable development. PASDEP gave emphasis for the smallholder farmers where they were expected to play a leading role in agricultural development of the country. To this end, the role of the government was to facilitate appropriate conditions through providing necessary infrastructure, land and new technologies to enable smallholder farmers obtain relevant market information and fairly compete in the market.

During the PASDEP period specialization, diversification and commercialization of agricultural production were promoted based on agro-ecological zones. In view of this, encouraging farmers and pastoralists to focus on agricultural activities where they have the best comparative advantage was one of the directions of PASDEP. Furthermore, the PASDEP gave importance for targeted interventions for drought prone and food insecure areas. In drought prone and food insecure areas the major agricultural development activities targeted were aimed at increasing the income of the farmers and pastoralists through activities focused to enhance food security through measures to reduce the volatility of production (for example through irrigation where feasible), and increasing off-farm income opportunities, and, where appropriate, voluntary resettlement to more productive areas. Livestock resource development with a special focus on small ruminants, small-scale irrigation and water harvesting were also part of this strategy.

With regard to the livestock subsector the following were achievements during the PASDEP period (MoFED 2010).

- The plan for meat production was to reach 837,000 t (including goat and camel meat) and 605,000 t of meat was
 produced by the end of the plan period (2009/10).
- The plan for milk production (including goat and camel milk) was to reach 3,391,000 t by the end of the plan
 period when the achievement was 3,261,000 t, which is 96% of the plan. Scarcity of improved breeds, inadequate
 results in the area of pasture development and shortage of animal feed were mentioned as the main causes of low
 performance.
- With respect to animal health the plan was to increase the number of animal health clinics to 3600 and the achievement was 2275 health clinics. It was also planned to increase the supply of animal vaccine to 289,500,000 doses per annum while the achievement was only 96,000,000 doses.

The Comprehensive Africa Agriculture Development Program Ethiopia Study (CAADP 2009)

The Comprehensive Africa Agriculture Development Program (CAADP) Ethiopia Study extensively reviewed the agricultural policies and strategies in Ethiopia and identified some policy and strategy gaps in the livestock subsector. The study indicated that livestock policy is not clearly stated. Particularly the policy coverage of the pastoral and agropastoral development issues was found to be inadequate. Specifically the study underscored the need to have clear policy and strategy for the following focus areas of interventions: issues related with pastoral and agropastoral areas land use and administration, animal feeds, animal breeding and transboundary livestock diseases.

Policy Investment Framework (PIF)

The other relevant document on the Ethiopian agriculture is the Policy and Investment Framework (PIF) for the agricultural sector that provides a strategic framework for the prioritization and planning of investments that will drive Ethiopia's agricultural growth and development (2010–2020). Livestock development is one of the priority investment areas as indicated in the PIF. One of the strategic objectives of PIF is to achieve a sustainable increase in agricultural productivity and production. Productivity gains are expected to come from the scaling up of best practices. During the PIF period it is targeted to increase livestock production and productivity annually by 8 and 4%, respectively.

Agricultural Growth Project (2011-2015)

The Agricultural Growth Project (AGP) is a multi-donor funded program meant to be consistent with the GOE Growth and Transformation Plan (GTP), and is aimed at increasing agricultural productivity and market access for key crops and livestock products in targeted high potential woredas, including through increased participation of women and youth.

Relevant to the livestock sector, AGP focuses on improving animal health services delivery and livestock breed improvement. AGP will help to equip the regional animal health laboratories, woreda veterinary clinics, and kebele animal health posts; upgrade skills of professional staff; and strengthen community-level outreach by training of community animal health workers. Livestock breed improvement focuses on upgrading the genetic potential of livestock (especially dairy cattle) in the AGP woredas and beyond.

As stated in the AGP document, the livestock sector will also benefit from implementing support for scaling up best practices. Specifically strengthening extension services and support to innovation and adaptive research is to build the capacity of farmers and farmer groups to actively participate in the identification, demonstration and application of innovative practices and technologies.

AGP also is to finance the construction, rehabilitation, and/or improvement of small-scale infrastructure that contributes to increased productivity; and improves mobility and access to markets from which the livestock sector can benefit.

Vision and targets of the Growth and Transformation Plan (GTP)

Vision and strategies of GTP

GTP is a five year development plan of Ethiopia for the period of 2010/11–2014/15. Ethiopia's economic sector vision which guides the GTP is:

'Building an economy which has modern and productive agricultural sector with enhanced technology and industrial sector that plays a leading role in the economy, sustaining economic development and securing social justice and increasing per capita income of the citizens so as to reach the level of middle income countries' (MoFED 2010).

A number of the PASDEP principles were rolled forward into the current five year Growth and Transformation Plan. One of the strategic pillars of the GTP is maintaining agriculture as a major source of economic growth. During the GTP period, smallholder farmers are expected to play a leading role in agricultural development of the country. This being the direction, GTP is planned to be implemented in the three broad development areas/agro-ecologies, i.e. adequate moisture, moisture deficit and pastoral areas.

In the moisture adequate areas livestock development is planned to be practised as part of the scaling up strategy. The focus is on the expansion of livestock fattening and dairy resources development technology. In addition, it is planned to put in place honey production technology that would enhance both the quantity and quality of honey. This includes modern beehives and poultry resources development technologies (including improved breeds, feed, health services etc.). To this effect, technology expansion is to be focused on breed improvement, pasture development and animal health. Cattle breeding through focusing on artificial insemination and the extensive implementation of better local breed selection and distribution are also considered as a centre of attention. In this regard, it is planned to gradually stop open grazing practices and to integrate with homestead pasture development, improving grazing land, use of forest hack, and developing pasture crops for zero grazing practices. To improve animal health services focus will be on prevention through provision of extensive vaccination services, training of animal health specialists, and expanding the institutions, including mobile service provision.

In the moisture deficit areas small ruminants, apiculture and poultry development will be widely integrated with the watershed development interventions. Production of feed is encouraged together with watershed development. To improve the livestock productivity in moisture deficit areas focus will be given to the selection and multiplication of indigenous breeds and using exotic breeds. To provide animal health care vaccine services will be expanded and control services will be provided.

In pastoral areas emphasis will be given to livestock breed improvement through selection and distribution of local breeds. Animal health services including mobile services will be expanded and capacity of those providing services to pastoralists will be improved. Emphasis will also be given to water recourses development for livestock and human. This initiative will be undertaken together with the improvement of pasture land and development of irrigation

schemes. For the pastoralists to benefit more livestock market system will be strengthened. To achieve this, animal transportation system and market information systems will be strengthened. Moreover pastoralists will be encouraged and supported to voluntarily organize into cooperatives to address their marketing challenges. Government will provide support to the private sector for investment in pastoral areas such as investment in slaughter houses and quarantine stations that meet the required standards.

GTP planned targets and progress

Major planned targets for the developments of the livestock sector during the GTP period are shown in the following table. Taking into consideration the performance during the previous two years of the GTP, achievement of some of the targets is on the right track. Achievement of targets for livestock vaccination, export of hides and skin, trained personnel, animal disease surveillance, production of improved livestock sperm gene, vaccine production, establishment of animal health posts and quarantine stations are promising. On the other hand, achievement of targets on extension service provision in pastoral and agropastoral areas, cross boarder disease control, export of other animals products (meat export, live animal export, and honey, wax and zibad), provision of improved hybrid cattle and production of animal fodder are far behind the annual plans and targets for the end of the plan period.

GTP planned targets and progress for livestock sector

Description of targets	GTP base year	Planned target end of GTP 2014/15	Achievements	
	2009/10		2010/11	20011/12
ncrease improved livestock cattle breeds (%)	10.3	37	12.37	35
ncrease production of improved livestock sperm gene (million dose)	0.35	2	0.534	0.64
Reduce the proportion of low grade hides and skin (%)	50	15		
ncrease the proportion of livestock vaccinated (%)	40	65	41	45.78
ncrease the production of improved animal fodder seed (quintals)	50,000	145,000		12,700
ncrease the number of improved milking cows	140,428	537,553	157,801	189,268
ncrease live animal export (number)	333,743	2,353,000	577,660	785,000
icrease meat export (t)	10,180	111,000	16,575	18,803
ncrease live animal and meat export earnings (million USD)	125	1000		
mount of liquid Nitrogen produced (thousands of litres)	55	630	168	206
ncrease number of improved hybrid cattle	390,078	1,493,203	438,337	501,272
ncrease number of hides and skin exported (in thousands)	6027	7050	15,999	9842.2
ncrease amount of animal products exported (honey, wax and zibad) n tonnes	300	603	128.98	35.12
crease number of animal health posts built (cumulative)	2275	3375	2322	2345
ercentage of cross boarder diseases controlled (%)	10	60	13	3.7
lumber of animal diseases on which regular surveillance conducted	8	10	8	10
mount of vaccine produced in million doses	93.8	226.63	122.55	138.43
Jumber of trained workers on community animal health care cumulative)		170	204	282
crease amount of vaccine distributed (in million doses)	96.8	217.93	129.26	86.61
lumber of improved one day chicken (in thousands)	250	400		
lumber of new animal quarantine stations established—cumulative	7	10	7	11
ncreased beneficiary of the agricultural extension services chousands)	5090	14,640	9044	10,505
astoralists and agropastoralist beneficiary of the agricultural «tension services (thousands)	190	1140	194.55	516

Sources: MoFED (2010) and MoA (2012).

Challenges

Based on the review of existing policies, strategies and reports, the major challenges that remain include:

- Low level of livestock productivity mainly due to inefficient artificial insemination (AI) service delivery leading to shortage of improved livestock breeds, limited access to animal health services, and limited access to feed and water supply. Particularly livestock feed shortage is crucial in both highlands where grazing land is scarce and in the lowlands due to rangeland degradation and extensive encroachment of invasive species. The widespread influence of diseases and parasites affects production through increased mortality and affects productivity through low fertility, slow growth and limited milk production leading to yet less efficient use of feed (MoA 2007; G/Mariam et al. 2010; USAID 2010).
- Low offtake rate due to weak marketing systems with high transaction costs, and limited access to market
 information in both the highlands and lowlands; reluctance of pastoralists to commercialize cattle because of
 social importance; and lack of alternative assets and competition of draught power with meat from young males in
 highland mixed crop–livestock systems (MoA 2007; USAID 2010).
- Lack of sufficient supportive livestock development policy and institutional framework. Policy gaps exist in the areas
 of pastoralist livelihood resilience, dairy development, animal feed, animal breeding, and transboundary livestock
 diseases. In relation to this, limited government budget allocation and limited investment in research and technology
 development are some of the constraints (MoA 2007; USAID 2010).
- Informal cross border trade driven by weak highland–lowland linkages and higher incentives offered by illegal traders. Constraints such as health and SPS standards, feed and other costs of fattening and lack of branding undermine the potential for beneficial entry to formal export market (MoA 2007; G/Mariam et al. 2010; USAID 2010).

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ISBN: 92-9146-414-7



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The Improving the Productivity and Market Success of Ethiopian Farmers (IPMS) project, funded by the Canadian International Development Agency (CIDA), was a research for development project that worked with the Ethiopian Ministry of Agriculture (MoA) to transform the smallholder subsistence farming system to a more commercial-oriented agricultural system. To contribute to this transformation process, the project used a value chain systems approach, focusing on the MoA's extension system, value chain actors, service and input suppliers. https://ipmsethiopia.wordpress.com/



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