

SESSION I: INTRODUCTION AND OPENING

INTRODUCTION: Dr. Solomon,

Dear participants,

I am most pleased to see so many of you here today to attend this workshop besides your busy work schedule. I hope your participation in this work would make a difference in adopting a strategy and approach through hot discussions and dialogue to address poverty issues of the many livestock keepers.

The workshop participants are expected to clearly spell out the goals, objectives and purposes of the pro poor livestock policy initiatives with the context of the Ethiopian rural and urban poor whose livelihood is closely attached to the livestock sub sector.

Finally, wishing a successful deliberation in your stay, I would like to invite Dr. David Kimenye, livestock expert, AU/IBAR, to give highlights of the pro poor livestock policy initiatives.

Dr. David Kimenye,

Madam moderator and dear participants,

It is indeed a high honor and privilege for me to welcome you to this workshop on “pro poor livestock policy initiative”.

What is pro poor livestock initiative? It was launched by FAO with the primary aims to support the poor to solve the chronic poverty situation through integrated livestock development approach. It is the rural poor who occupy the pivotal places as the number of poor is already very large and is rising year after year. There is a need to bring a meaningful change in the life of the poorer section of the society. To alleviate this problem, livestock services that include input supply, marketing, research and extension and above all credit facilities are of paramount importance.

PPLI has embarked on a program that enabled the development of strategic planning to extend the horizon of intervention so as to stimulate and strengthen the involvement of livestock keeper, policy makers and development workers to bring changes that have positive impact on the livelihood of the poor.

Specific objectives of the initiative are:

- Support and facilitate formulation and implementation of livestock policies.
- Enabling institutions for enhancing the impacts on pro poor interventions.

Why livestock? Because;

- Livestock play a critical role to improve the lives of rural poor.
- So far livestock did not play their destined role although there are huge technological advancements.

Why now? Because;

- The world has recognized the magnitude of poverty as an entity that need to be addressed in a holistic manner with great emphasis to livestock production systems.
- Policies have to be formulated and implemented.
- The donor communities have agreed to give funds if and only if there are good policies and institutions on the ground to alleviate poverty.
- This is an opportunistic time to come up with best options to support the poor.

Within the framework of the overall initiative, the program attempts to establish regional hubs with the ultimate aims in the formulation, adoption and implementation of policies that best promote equitable, safe and clean livestock farming. Five geographical regions have been selected that include South Asia (Bangladesh, India, Nepal), Southeast Asia (Cambodia, Lao PDR, Thailand, Vietnam), East Africa (Ethiopia, Kenya, Uganda, Tanzania, Sudan), West Africa (Burkina Faso, Mali, Mauritania, Niger, Senegal) and Andean region (Bolivia, Ecuador, Peru).

The regional hubs will perform in the identification of policy issues that impact directly on poor livestock keepers, and enhancement of local capacity for policy analysis, formulation and implementation.

In Africa, FAO appointed AU/IBAR to run the first phase. Countries included in this program would entertain the fostering of policy dialogue aimed at the promotion of pro-poor livestock policies at national level and eventually establish partnership with relevant stakeholders.

The first approach at each country level would be to appoint a consultant and then perform a field visit to collect relevant data on the role and contribution of livestock to economy of the people and the nation at large. The results of this exercise would be synthesized, and documented as initial country report, which finally would be reviewed at a national workshop.

So far the project had appointed consultants at AU/IBAR and identified resource person at each country level who would be able to undertake the field data collection together with the consultants.

The project would focus on livestock with the understanding that livestock contribute to boost agricultural produce and alleviate poverty.

Key issues:

- Market
- Market access
- Livestock services (health, nutrition)
- Monitoring and evaluation
- Awareness creation (advocacy)
- Capacity building
 - Organizational setup
 - Communication

Today we are here to review country report and based on the findings it is expected to identify real problems of the livestock sector that created great obstacle to its development and strangled their contribution to the livelihood of the majority of poor people in the country.

SESSION II: PRESENTATION OF THE ETHIOPIAN COUNTRY REPORT

AN OVERVIEW OF LIVESTOCK PRODUCTION IN ETHIOPIA.

**A DRAFT DOCUMENT PREPARED FOR PRO POOR LIVESTOCK POLY
INITIATIVE**

BY

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PRO POOR POLICY INITIATIVE COUNTRY REPORT FOR ETHIOPIA

1. INTRODUCTION TO THE WORK

SHORT INTRODUCTION OF PPLPI

Pro poor livestock policy initiative is a FAO initiated project which will strive within a time of six years, to facilitate and support the formulation and implementation of policies and institutional changes that have a positive impact on the livelihoods of a large number of the world's poor. In view of the critical role played by livestock in supporting and sustaining their livelihoods, the initiative said to have a distinct focus on livestock.

The basic rationale of the initiative as put in the document, derives from the realization that technology oriented projects in the livestock and related sectors have failed to deliver significant improvements in the livelihoods of the poor, and that an enabling institutional and policy environment is indispensable for enhancing the impact and sustainability of pro poor interventions.

Objective

The objective of the project is a strengthened capacity in FAO member nations and international organizations to formulate livestock sector and related policies and implementation plans that reduce poverty, whilst managing environmental and public health risks.

Outputs and activities

The principal outputs the project aims to achieve are:

1. Portfolio of livestock related interventions for reducing poverty through policy and institutional change
2. Increased awareness and consideration of the potential contribution of livestock and the livestock sector to poverty reduction
3. Effective systems for livestock policy information, analysis, decision-support as well as for monitoring and evaluation
4. Mechanisms For stake holder representation in the negotiation of policies and institutional changes that better support poor peoples livestock-dependent livelihoods.

To materialize five geographical regions are selected as pilot areas for the first phase of the regional components of the project; among which the east African hub that comprises of Ethiopia, Kenya, Tanzania and Uganda.

HOW THE FIELD WORK WAS DONE

This work or collection of relevant information was carried out through interviewing key informants from Ministries, Teaching institutions, NGOs and professional associations. Relevant electronic documents, reports, past and draft documents were also referred.

WHICH PEOPLE WERE INTERVIEWED

People from the Parliament, MoA, Livestock Marketing Authority, Farm Africa, CARE Ethiopia, USAID, ILRI, Ethiopian Economics Association, FAO, Ministry of Finance and Economic Development were communicated.

2. IMPORTANCE OF THE LIVESTOCK INDUSTRY

The main means of livelihood in rural Ethiopia is agriculture.

Livestock are major national wealth of the Ethiopia and only means of livelihood to millions of people. Livestock production is an integral part of the country's agricultural system. The different ecological zones allow the production of various species of livestock which represent a major national resource.

Ethiopia has the largest livestock population in Africa. It is estimated at around 35–40 million tropical livestock units (TLU) which includes 30 million heads of cattle, 42 million heads of sheep and goats, about 7 million equids, one million camels and over 53 million chicken. Cattle play the most important role in the farming economy followed by sheep and goats. Cattle found in Ethiopia are mostly unimproved Zebu. The main cattle breeds identified and characterised so far include the Boran, Fogera, Horo, Sheko (Gimira), Abigar (Nuer), and the Adal. These main cattle breeds are indigenous to specific regions of Ethiopia. The Fogera and Horo, well known for their milk, are reared around lake Tana and Eastern Welega regions, respectively. The Boran, a renowned beef breed, is found in the southern and eastern parts of the country, while the Gimira and Abigar breeds in the south-west are considered to have tolerance to high tsetse challenge. European breeds, especially Friesian and Jersey, have been imported for many years and crossed with the indigenous cattle. Some seven sheep and about five goat breeds have been identified so far in Ethiopia. However, only few of these have been studied and characterised to some extent. These include the Horro, Menz, Adal (Afar) Arsi and Black-Head Ogaden Sheep, and the Adal (Afar) goat. Few exotic breeds of sheep and goats have been introduced into the country for crossbreeding. Among these, the Awassi and corriedale sheep have been used for meat and wool in the highlands while the Anglo-Nubians are preferred for milk and meat production in the lower altitude of the mixed farming systems. With poultry, the indigenous birds comprise over 99%, while the remaining 1% includes improved exotic chickens imported by various bodies and their crosses with native birds.

Livestock production systems in Ethiopia are determined by climate, the types of crop grown, livestock species reared, and their economic importance to the producer. In the highlands, livestock are subordinate but economically complementary to crop production, the main agricultural activity of the farmers. In this ecological zone, livestock especially cattle provide traction, which is a vital contribution in the overall farm force requirement. Livestock also provide milk, meat, cash income, manure and serve as a hedge against risk.

In the semi-arid lowlands, cattle again are the most important species because they supply milk for the subsistence of the pastoral family. In the more arid areas, however, goats and camels are the dominant species reared. The former provide milk, meat and cash income while the latter are kept by nomadic pastoralists for milk, transport, and to a limited extent for meat.

The sub-sector represents one of the major national resources. This resource, however, makes a disproportionately small contribution to the national earnings, especially export income, and to national food production.

The livestock resource of the country is characterised by low productivity levels. Average yields per animal slaughtered or milked are estimated to be 110 kg of beef,

10 kg of mutton and 210 kg of cow milk. Egg production is between 55 to 80 with an average egg weight of 45 kg. Livestock production growth rates are very small and lagging behind population growth which is increasing at a higher rate; thus resulting a decline in per capita consumption of livestock products. At present the per capita consumption of milk and meat is estimated to be 16 kg and 10 kg respectively; putting Ethiopia the least even from its neighbouring countries, despite its high livestock resource than all African countries.

Sectoral Distribution of GDP (%), 2000/01

Agriculture	45%
Industry	11%
Distib.	15%
Other services	29%

Sources of Income for Rural and Urban Households (1999/2000)(%)

<i>Sources of income</i>	<i>Rural</i>	<i>Urban</i>	<i>Total</i>
<i>Own agricultural Enterprises</i>	72.5	4.6	63.3
<i>Household Enterprise other than agriculture</i>	5.4	30.3	8.7
<i>Wage and Salaries, bonus, overtime and allowances</i>	2.9	41.2	8.0
<i>House and other rents</i>	0.2	0.5	0.3
<i>Dividends and profit share as well as bank savings</i>	3.9	8.7	4.6
<i>Gift remittances</i>	3.5	8.1	4.1
<i>Other receipts</i>	11.6	6.7	11.0

Source: Poverty Profile of Ethiopia, March 2002, MOFED

LIVESTOCK POPULATIONS

Number of livestock, poultry and beehives population by type and sex for private holdings CSA* 2001/01

Type and sex	Male	Female	Total
Cattle	15869.99	19513.32	35383.31
Sheep	2914.86	8523.34	11438.20
Goats	2880.79	6740.10	9620.89
Horses	610.02	643.93	1253.95
Asses	1570.82	1843.88	3414.70
Mules	125.10	131.39	256.49
Camels	140.23	186.24	326.47
Poultry			37763.99
Beehives			3327.37

*Urban and nomadic areas not included

Estimated Livestock Numbers('000) provided by Regions

Region	Cattle	Sheep	Goats	Equine	Camels	Poultry	Beehives
Tigray	2140	2600	3000	360	30	3170	130
Afar	215	115	231	18	84.6	101.1	6.9
Amhara	8936.2	3825.6	3700.1	1402.6	5.6	9067.2	610.8
Oromiya	19000	5200	3500	1800	700	9200	1313
Benshangul	110.3	37	104.1	10.6	-	349.9	248.8
SNNPR	7700	2400	2200	1300	-	4569.7	1230
Gambella	16.5	5.4	3.4	-	-	107.3	11.8
Harari	19.4	3.6	18.3	2.7	-	18.8	1.2
DireDawa	61.4	37.6	79.9	9.7	19.9	67.1	2
Somale	2308.6	7983.7	3134.1	231.7	1342	-	-
Addis Abeba	25	4.3	5.6	5.6	-	16.4	0.6
Toatal	40532.4	22212.2	15976.5	5140.9	2182.1	26675.5	3555.1

Source: National Livestock Program, Volume 3, 1998

NATIONAL PRODUCTION LEVELS

(In ,000 tones)

Meat including mutton	401.9
Milk	1,184.3
Eggs	74
Honey	28.5
Wax	3.2
Fish	15.7

Pre capita consumption in Kgs

Meat including mutton	7.02
Milk	20.68
Eggs	1.23
Honey	0.29
Fish	0.247

Annual off take of livestock for domestic consumption

Cattle	7%
Sheep	33%
Goats	38%

Source: (Animal and fishery resources sectoral development 5 years action plan 200/01 - 05 MoA)

3. LOVESTOCK PRODUCTION SYSTEMS

PASTORAL

Pastoralism can be defined as a way of life through which people get their livelihood by keeping domestic animals on a natural forage source. (Sandford, 1986)

The lowlands are home to a diverse array of pastoral people who depend on livestock for their subsistence. The pastoral areas in Ethiopia cover about 690,000 square km or 59 percent of the entire country (Coppock, 1994). The human population is roughly estimated to be about 5.1 million, of whom 3.4 million are pastoralists (Sandford and Yohannes, 2000). About 50 per cent of these are found in Somali Regional State, followed, in order of decreasing size by the Regions of Afar, Oromiya (Kereyu, Borena and Bale zones), Southern Nations, Nationalities and Peoples Region, Gambella and Beni Shangul. So far the national livestock census data by the Central Statistics Authority does not include the livestock population in these pastoral areas and some estimates put the total numbers at 11 million cattle, 10 million sheep, 8 million goats, 2.5 million camels and just under a million equines (mainly donkeys) (Sandford and Yohannes, 2000).

Rainfall is erratic and the extensive production systems are characterised by mobility and flexibility. Traditional social systems are strong. Livestock are the principal means of production. Livestock are marketed to meet cash needs, which include purchase of grains, ceremonies and incidentals. Diseases such as CBPP, CCPP tick and tick-borne diseases as well as FMD are important. The availability of veterinary care is limited, however the proximity of Kenya has positive implications for the availability of informally supplied veterinary inputs.

Ethiopian pastoralists belong to about 29 different ethnic groups classified in either of the casuistic or nilotic stock (Coppock, 1994; The dominating pastoralists are the Somali, the Afar, and the Borana-Oromos tribes in habiting the Southeastern, the Northeastern and the Southern range lands respectively. The Nuers along the Baro River and the Kereyu-oromos near the Awash National park are also pastoral communities with some sporadic crop cultivation practices. The pastoral population is sparsely populated with an annual growth rate of 1.5 to 2.5, which is much lower than the growth rate of the high land population (Taffesse, 2001)

Pastoral Production Strategies

Resource Management Strategies: Pastoralists have their own traditional strategies of managing vital resources (water, forage, labour). These are practices meant to ensure availability of range resources and economically rational vitalization to sustain their life in highly delicate ecosystem. (Scones, 1996)

- **Mobility:** pastoralists move their herds in response to the spatial and temporal variability of forage and water. (Swallow, 1994) pastoral production system has been found to be more effective than even, the industrialized ranching system. (Cossins, 1985; Cossin and Upton, 1988)
- **Splitting:** pastoralists divide their stock into different herding units based on species of animals, their maturity stage and reproductive condition. Cattle and sheep are pastured on grass lands because they are effective grazers while goats are let to live on

degraded areas to browse the bushy plants which are not eaten by other species camels are kept in areas of low water availability for they can withstand long lasting water deprivation

- Lactating cows are given special care and quality feed and kept around the home herded by adult men and milked by women. Other adult animals are herded by young men at places far away from their vicinity.
- Interval of watering: pastoralists water their animals every other or two days depending on the distance of watering site, feed availability and amount of family labour. In times of feed scarcity animals are deliberately deprived of water as to reduce their feed intake and imitate physiological response to feed shortages which is likely to occur in times to come (western and Finch, 1986)
- Reservation: pastoralists reserve prime dry season grazing lands in high potential areas and anybody is not allowed to pasture on these reserves without common agreement (Scones. 1994; Getchew. 2001) Some individuals with very high number of livestock may be asked by pastoral leaders to destock some of their animals in times of forage scarcity so that the whole community will not be in a problem (Solomon,)

Risk Aversion Strategies: risk aversion is the most crucial part of management particularly in pastoral production system. This involves the following aspects (Scones. 1996)

Herd size: pastoralists are interested in the long-term survival of their herds despite losses due to drought and disease. Because of this they do not want to sell many animals and consequently are less interested in increasing productivity. The cultural perception of herd of animals as a prestige is neither compatible nor important in the 21st century in which all economic activities are mediated by cash.

Diversification: Pastoralists maintain a flexible mixture of different species of animals having a wide range of physiological and anatomical peculiarities. (Van Scones, 1982) This enables them to spread risks and increase efficiency of tracking the range resources in the variable landscapes.

- Female Dominated herds: -keeping more females is to ensure optimal milk supply and also to ensure fast recovery in the aftermath of disasters.
- Social Security systems: -part or all the herds are given to persons residing in different areas so that risks are spread. Animals are made to graze at different landscapes since all areas will not be stricken by drought at the same time.

Characteristics of pastoral production systems

The pastoral production system is subsistence-oriented with multiple production objectives. Pastoralists are rational in decision-making under uncertainty and have developed risk mitigation strategies. Pastoralists have high degree of organisational

and spatial flexibility and strong social networks. The societies have developed complex, multi-layered strategies of resource allocation, decision-making and coping mechanisms to environmental stresses.

Challenges

Pastoralists are highly vulnerable to shocks and stresses arising from recurrent drought. Droughts not only reduce their major capital asset (livestock) but also exacerbate their vulnerability to environmental shocks, as witnessed in the recurrent droughts of the past decades. There was no comprehensive assessment of drought-induced loss of livestock in pastoralist areas. The available reports lack conclusive figures and/or fail to follow proper study procedures. Assessment of the very recent drought of May 1999 to May 2000 by the Pastoral Appraisal Team (PAT) (Sandord and Yohannes, 2000) led to the conclusion that the southern two-third part of the Somali Region () and the northern strip Borana in Oromiya Region (suffered catastrophic losses (>70% of dominant species). Other areas experienced moderate (20-40%) to severe (40-70%) losses. Details are presented in Table 1.

Such big losses require long recovery periods, which means that the affected communities will continue to be vulnerable to further stresses (drought, flood insecurity, disease outbreak, etc.).

AGRO-PASTORAL

Agro pastoralists are sedentary farmers who cultivate the food crop both for sale and subsistence and keep the livestock at the same time. Shifting cultivation is a common practice in some and migration of herd is not a regular feature Migration may be restricted to certain times of the year, may be to get the dry time pasture at high elevation or aftermath of crop harvest or to avoid disease occurrence.

In some places they often follow mixed farming system. It is commonly found in low lands of Bale, Arsi, Shewa and currently even the very lowlands are transforming from pure pastoral to agro-pastoral.

SETTLED MIXED CROP-LIVESTOCK

Mixed farming is practiced in 20% of highland, which accounts for an area of 947630ha. Out of this, most part of land is used for annual and perennial crops leaving hardly seven per cent for grazing and seven per cent as fallow land. Here, the 85% per cent of the country's human population and 70% of the ruminants' population compete for the land. The average farm size ranges from 0.5 to 2.0 ha. The climate is conducive for both crop farming and livestock production. Food crop production is main agricultural activity and livestock are subordinate and complementary to crop production. The herd size is around six in East Hararghe and Twelve in central highland. Cattle are kept for draught power, although rarely accounted in financial terms, is most important function of cattle in mixed farming system of high land. Small ruminants, poultry and honey immediate cash income.

- *Mixed farming, high potential cereals:* Gozamen and Dejen Woredas, East Gojam Zone, Amhara Region Lemu and Mesha Konteb Woredas of Hadiya Zone in SNNPR. This area primarily produces "teff" and wheat using animal traction in subsistence systems. Livestock are kept for draught, manure, milk and meat production. Black leg, anthrax, pastureullosis and helminthiasis are the most economically significant animal health concerns. Limited small-scale dairying

and fattening are practiced near towns. Availability of veterinary care, especially private services, is limited.

- **Mixed farming, low potential cereals:** Gera Keya and Basona Woredas, North Shoa Zone, Amhara Region, Raya Azebo, Debub and Semen Woredas of Southern Tigray Zone, Tigray Region, Tahtay Kararo and Laelay Adiabo Woredas of Western Tigray Zone, Tigray Region, and Tenga Bergele Woreda of Central zone, Tigray Region, Arba minch Zuria and Gofa Zuria Woredas of North Omo Zone of SNNPR. In this area soils are degraded and drought is a chronic problem. The agroecological zonation is purely cool highland with limited to no vegetation coverage. Livestock are kept mainly for draught, manure, and meat production in subsistence systems. Sheep are the predominant species. Black leg and pasteurellosis occur sporadically. Endoparasites such as lungworm and liver fluke are highly endemic. Availability of veterinary care, especially private services, is limited. *Under mixed farming, low potential cereals* are also Gambella Woreda of Itang zone, Gambella Region, And Asosa Woreda of Asosa Zone, Beneshangul-Gumuz Region. These are heavily affected by trypanosomiasis, ticks and tick-borne disease.

- **Mixed farming, perennial cash crops:** Seyo and Ghimbi Woredas, West Wollega Zone, Habro Woreda of West Hararge Zone, Oromia Region, Alemaya Woreda of East Hararge Zone, Oromia Region, Kochore Woreda of Gedeo Zone, SNNPR and Dale and Awasa Zuria Woredas of Sidama Zone in SNNPR. Coffee is the major crop with some enset and chat (in some areas Chat dominate) also produced. Grazing land is limited. Livestock are kept for manure, milk and meat and to a limited extent, draft power. Some of the area is heavily affected by trypanosomiasis, ticks and tick-borne disease. Availability of veterinary care, especially private services, is limited.

RANCHING

Abernosa, Gobe, Andassa, Metekel, Yabello and Wolaita cattle ranches and the Debrebirthan and Amed guya sheep ranches are the state owned ranches to be mentioned. These ranches are mainly kept for the purpose of serving the demand for improved breeds and preserving some valuable gene sources of local breeds.

DAIRY SYSTEMS

Dairy farming is largely traditional and as a result, there is severe shortage of dairy products in the country. The annual total national cow milk production is estimated at 926,849 MT. and assumed to be produced from 4,174,994 milking cows. At this rate of production the milk consumption per capita remained to be 16 kg./ head / annum as compared to the average world record 100 kg./ head / annum. This figure shows shortage of milk, thus production and productivity needs improvement. However the efforts that will be made to improve production and productivity will not be successful unless the market is in place. It is also quite common to find milk production areas at great distance from areas of heavy demand for dairy products. What ever the reason may be, dairy farming without a secure market outlet is rather useless activity.

For what is already produced and for what will be produced in the future in the rural areas, the milk must have access to market at better price and in more secure way. The existing marketing situation does not encourage farmers to produce more milk. For e.g. under peasant farmers condition a cross bred cow produces on average 8 l/day, out of which 3 lt. per day could be used for home consumption and backyard processing while the remaining 5 l. are sellable products and require a market outlet.

Under this production system the traditional utilisation system of milk is maintained. Even from local cows when the herd size per household is large surplus milk for market is evident. If a market exists for the surplus milk produced, the farmer will be encouraged to manage, feed and breed the cow in a better way to improve production. Market is an incentive for a farmer to improve production. However, marketing functions in the dairy industry in the country is lagging behind. Therefore, the prevailing poor marketing system and improper price structure continue to be major constraints to the progressing farmers. To offset the situation, provision of better breeding and improved feeding methods could be integrated at field level with better and sustainable market arrangements. If appropriate steps are not taken right at the moment, a negative effect on the development is likely to frustrate increased output. Marketing milk stimulates not only increased milk production, but also raise dairy farmers incomes due to better price and better marketing system and at the same time improve living standards, create employment opportunities and improve the nutritional well being of the population in rural as well as urban areas.

The bulk of the milk (97 %) is produced in the rural areas by smallholder farmers. Linking the rural production to urban consumers by establishing rural and urban milk marketing and processing units constitute important contributions to dairy development and Peasant farmers have to be market oriented. Improvement efforts in developing the market will provide more economic advantages in addition to the input and social or cultural function advantages of the livestock. This will lead to increase the supply of locally produced dairy products at the same time decreases reliance on imported dairy products.

Local stock (i.e. indigenous cattle)

1. Milk yield per cow per annum up to 1998 is 222 kg (CSA ,96) there after it is 315 kg
2. 12.5 % of the total herd population is considered as lactating cows.
3. Lactation length is assumed to improve from the current 189 days to 210 days.
4. Annual growth rate of cattle population is assumed to be 1.2.

NON-RUMINANT SYSTEMS (PIGS, POULTRY)

Piggery is not a common practice in Ethiopia, There are very small commercial farms that rare swine. The majority of the population in the country do not consume pork.

There are about 58 million poultry in Ethiopia. The majority are traditionally reared at back yard freely feeding them selves. In the rural areas chickens are primarily reared for immediate cash income through the sale of eggs and usually male chicken mostly during holidays.

4. POTENTIAL CONSTRAINTS AND OPPORTUNITIES

The major production constraints that have impaired the exploitation of such a large resource are the **feed supply, animal health, genotype and marketing systems.**

Inability to feed animals adequately through out the year is the most widespread and major constraint of livestock development in Ethiopia. In drier areas the quantity of forage is often insufficient for the number of livestock available. In wetter areas feed supplies are usually ample but forages are poor in quality; mainly their protein and energy content is low. In the mixed agriculture areas crop residues and by products are largely wasted or inefficiently used due to lack of knowledge and capacity to process and conserve foodstuffs.

The major cause of direct economic losses and a significant cause of poor productivity in livestock is the widespread prevalence of a wide range of internal diseases and parasites in all agro-ecological zones of the country. The direct losses due to mortality is generally estimated to be in the order of 8-10% of the national cattle herd, 14-16% of the national sheep flock and 11-13% of national goat herd per annum. Economic losses greater than that suffered from mortality occur indirectly through slow growth, low fertility and decreased work output that result from morbidity. Besides affecting the quantity and quality of livestock products, the prevalence of infectious and economically important animal diseases in Ethiopia exclude the country from profitable international markets, thereby greatly reducing the country's foreign exchange earnings. Poor husbandry practices and inadequate veterinary services are the major factors favouring the expansion of livestock diseases.

Although Ethiopia posses various breeds/types of animals suitable for the different agro-ecological zones, this diverse indigenous genetic resource is not properly utilised. Most breeds are **not characterised** nor have their merits been identified. This lack of information has lead to a failure to exploit the desirable traits of the indigenous stock. Animals are not selectively bred and inbreeding is a common phenomena resulting in losses in livestock and livestock products. The traditional livestock production systems do not favour the introduction of modern animal breeding strategies and techniques. Lack of clearly defined breeding strategies and insufficiency of investment made in the past in the area of breed improvement have hampered the genetic development of the indigenous stock.

Livestock marketing system in Ethiopia is poorly developed and hence the quality and quantity of marketable livestock and livestock products for both domestic and export market are very low. Due to lack of collection systems as well as processing and distribution facilities, the flow of livestock products from the producing rural areas to the urban centres where there is high demand is impaired by many factors; among which poorly developed infrastructure mainly road is one. The marketing of live animals and meat is constrained by inadequate infrastructure, shortage of transport facilities, prevalence of animal diseases that restrict export, seasonal fluctuations of supplies and absence of market information and promotion systems.

CONSTRAINTS TO THE LIVESTOCK INDUSTRY

Diseases

Major animal diseases

Out of the 15 list-A diseases, as designated by OIE, 7 of them are known to be endemic in Ethiopia. These are foot-and-mouth disease, contagious bovine pleuropneumonia (CBPP), lumpy skin disease, pest des petits ruminants (PPR), sheep and goat box, African horse sickness, and Newcastle disease. The major list-B diseases in Ethiopia are anthrax, blackleg, pasteurellosis, contagious caprine pleuro pneumonia (CCPP), trypanosomosis, rabies, tuberculosis, and tick and tick-borne diseases.

Effects of livestock diseases

The major cause of economic losses and lowered productivity of livestock in Ethiopia is the widespread prevalence of different diseases in all agro-ecological zones of the country. The main effects are due to deaths, reduced production in meat, milk, eggs; decreased draught power output, lowered quality of animal products and by-products, and the risk of zoonoses to human health. Estimated mortality rates reach 8-10% for adult cattle, 14-16% for sheep, and 11-13% for goats. The loss due to

mortality alone is estimated to exceed Birr 720.4 million per year. Besides affecting the quality and quantity of livestock products destined for export, animal diseases in Ethiopia preclude the country from attendance of attractive international markets, thereby, greatly reducing the country's foreign currency earnings.

An estimated 180,000km² area in the fertile Southwestern parts of Ethiopia is infested with the tsetse fly. This leads to a high prevalence of the tsetse-transmitted trypanosomosis, which prevents the exploitation and development of the area for crop and livestock production. In addition, trypanosomosis reduces the quantity and quality of raw materials such as meat, hides, skins, etc. needed by local industries. Moreover, the presence of tick-borne diseases seriously hampered breeding programs targeting increased livestock productivity through introduction of improved genotypes. The effects of prevalent animal diseases are further exacerbated by the shortage of drugs, vaccines, and equipment required for their prevention and control. Vaccines against contagious bovine pleuropneumonia, anthrax, blackleg, pasteurellosis, sheep pox, and African horse sickness are mostly produced locally in sufficient quantities. However, vaccines against the economically important diseases such as foot-and-mouth disease, contagious caprine pleuropneumonia, various poultry diseases are either unavailable or scarce on the local market. Most drugs used in curative animal health care have to be imported incurring huge amount of much needed foreign currency.

The absence of an effective animal movement control system has greatly enhanced the widespread dissemination of dangerous disease and posed serious difficulties in implementing sound disease control actions. Furthermore the lack of a suitable organization and facilities has prevented farmers from getting full access to veterinary services. Informal livestock trade has also affected the national economy. Every year, 250,000 cattle, 750,000 goats and 100,000 camels are informally exported. 60-80% of livestock exported through the Berbera of Somalia are reportedly from Ethiopia, which for instance, contributed for Somaliland's livestock export annual earning of an estimated 200 million US Dollar.

BREEDS AND BREEDING

In Ethiopia there are a lot of cattle types but only a few cattle have received attention and their genetic merit has been more or less well identified. These are Barca, Borena, Fogera and Horro. There are also some other cattle which are expected to have good genetic merit based on phenotypic observation such as Abigar, Sheko, Fellata, etc. Most of these breeds are very important for the genetic improvement of the indigenous cattle in the area where they are found. On the other hand, for farmers who have the awareness about high genetic value cattle and market access for whole milk and milk by-products, genetic improvement ought to be through the introduction of high genetic value cattle.

Policy Issues

Cattle Breeding Policy

With the objective of better realisation of the genetic potential and with that of the introduction of new genes of an elite herd, the cattle breeding policy which is at draft

level will focus on two distinct issues namely: policy for indigenous cattle production and breeding policy for dairy cattle.

Policy for indigenous cattle

The indigenous breed types apart from their known merits for disease resistance, and their ability to survive and reproduce under very precarious feed supply and backward management, some of these breeds have proved to be more productive under improved management system. Studies on Borena, Barka, Horo, and Fogera breeds had indicated that improvement of these through selection is possible for fertility, conversion efficiency.

The long term objective is to preserve the genetic integrity of acknowledged cattle types and the creation of elite indigenous dual beef breeds for use in future improvement with the respective emphasis on improvement of traction power, beef production. There will not be any plan of introducing exotic blood for beef character.

The main indigenous breeds to be further developed will be the Borena, Barka, Horo and Fogera.

As drought power and beef will continue to dominate the output from cattle and the indigenous breeds had proved to be compatible with the existing environment, future emphasis would be given to the improvement of management in this respect.

The existing trends in the fattening of cattle is planned to be encouraged and strengthened and considered to be the basis for the stratification of the future beef industry.

Breeding Policy for Dairy Cattle

For milk character, the indigenous cattle did not prove to be high yielding and the potential for development of this character is low. Selection for milk yield is a long term process and can at most increase milk yield with 1% per year (4-5% per generation), Alternatively crossbreeding with exotic dairy breeds will increase the yield taking the beneficial character for disease resistance and feed efficiency from the local dam. To attain fast improvement for increasing milk production, crossbreeding programmes designed to be used by introducing exotic semen and indigenous dams.

Breeds intended to be used

Friesian and Jersey have been the most used breeds in pure-bred dairy and upgrading programme are the exotic breeds that would continue to be used.

Degree of up-grading

Different exotic blood levels are recommended according to agro ecological classification of the country and management levels of the farmers. The most important is the management level where on peasant farming level dairy farms the upgrading shall not exceed the 62.5 % exotic blood level in which the F₁ cows to be served with semen of as most 75%. Where supply of heifers with 75% foetus are made the female offspring when it reaches maturity designed to be served with bulls of less than 75% exotic blood or less to bring down the exotic blood. Accordingly

dairy farms are planned to be stratified on potentiality and milk shed area approach and this to serve as a basis to limit the exotic blood level. Where intensive dairy farming and proper marketing practised, the exotic blood level to be increased reaching to grade and pure exotic blood level.

Herd registration and recording

The success of a breed improvement programme is said to depend so much on the accuracy of the data collected and the analysis made in order to reach at conclusive interpretation. The national herd recording scheme plays an important role on breed improvement, and identification programme will be to provide objective data for use in the breeding programme for progeny testing and selection of the would be bull dams. Herd registration should be carried out classifying the cattle by breed source and region on proven stocks. Milk and performance recording together with quality testing would continuously be carried out to select for best performers for use as dams and sires for the future generation.

SMALL RUMINANT BREEDING POLICY

The sheep enterprise in all agro ecological zones' livestock system is the most important form of investment and cash income and provides social security in bad years (Getachew, 1988).

Given these advantages, it is not surprising that goats and sheep are found in many smallholder systems

Stratification of small ruminant production

The National Small Ruminant Breeding Policy is proposed to have the following broad production stratification for each major agro-ecological zone of the country.

A. Cool highlands (Dega and Wirtch, i.e. > 2500 masl)

- Increased sheep meat production, mainly for domestic consumption.
- Increased carpet and apparel wool production for cottage industry and industrial manufacture.

B. Warm highlands (Higher Woyna-dega, i.e. 1500 - 2500 masl)

- Increased sheep meat production, mainly for domestic consumption.

C. Semi-arid mixed farming systems (Lower Woyna-dega, i.e. 1200 1600 masl)

- Increased sheep and goat meat production, mainly for domestic consumption.
- Increased goat milk production for domestic consumption.

D. Arid rangelands (Kolla, i.e. < 1500 masl)

- Increased sheep and goat meat production, mainly for export.
- Increased goat milk production for domestic consumption.

Improve productivity by genetic selection within indigenous breeds

There are at least three reasons sighted why national programmes of genetic improvement should be established to cover each major indigenous breed. First, indigenous breeds have been subjected to natural selection favouring survival rather than production, and their responses to selection for economically important production traits need to be established. Second, it is necessary to ensure that sample populations of the indigenous breeds are retained as a national resource for possible future development. And third, indigenous genotypes are needed as a basis for comparison against which any present or future crossbreeding programmes can be assessed.

Therefore, improvement of the indigenous breeds through selection to be considered for those breeds which have potential to respond to the most economically important traits.

IMPROVE PRODUCTIVITY BY CROSSBREEDING

Crossbreeding with exotic genotypes understood as a valuable means of increasing those aspects of productivity from indigenous breeds which are not present at all (e.g. apparel wool), or which are not expected to show rapid responses to selection because of low heritabilities (e.g. fecundity), or which are so low to begin with that required levels of production will take a long time to achieve from indigenous breeds, even if they show rapid responses to selection (e.g. carpet wool, milk).

Therefore, in areas where the environment is favourable and where there is need and justification to improve productivity through introduction of new genes into the population a crossbreeding programme to be implemented.

In Ethiopia, of the various exotic small ruminant genotypes which have been introduced into the country, four assumed to have demonstrated particular promise: Awassi sheep for increased meat and carpet wool production in the cool highlands, corriedale sheep for increased meat and apparel wool production in the cool highlands, Dorper sheep for increased meat production in the lowlands, and Anglo-nubian goats for increased milk and meat production in lower altitude mixed farming systems.

Whether or not these are the very best genotypes that could have been introduced is immaterial. Their potential to increase the productivity of indigenous breeds is considered substantial, and any further increases that might be achieved from other genotypes are likely to be far too small to justify the cost of continuing new introduction.

Crossbreeding development therefore planned to focus on these four breeds. Other exotic genotypes are not in the plan to be introduced unless a strong case can be made for new production requirements that can't be satisfied from the existing breeds.

FEEDING AND WATER

Various studies indicate that:

Deficient diet in most parts of the country for most part of the year, in most years is predominant aspect of Ethiopia's livestock production. Hence there is nothing like feed security for livestock. The livestock feed is mostly derived from unimproved pasture and fallow land. Approximately 85% of the intake is used for maintenance

and little is left for production. In drier pastoral areas the amount of forage available is at all times insufficient for the large population of livestock. Similarly water is also scarce.

Much of the 78.1 million hectares below 1500 m.a.s.l receive insufficient rain to sustain arable production and support around 26 per cent of livestock population. At present in rangeland, situation is becoming hard for herders to feed number of animals needed for their family subsistence because of increasing population and fast encroachment of bushes and shrubs. The biomass yield of native pasture on average is in the range of 1.5 to 2.5 tons of dry matter per hectare and hardly can maintain one mature cattle.

Even in high lands there is emerging problem of feeding the livestock. Because of increasing livestock and human population, the land left for fallow or for grazing or for hay production is decreasing in an alarming rate. The patches of land that is left for animals are usually extensively degraded. Thus the animals have no place to graze particularly during crop growing season-season of plenty. During this season crop thinning and defoliation are the source of feed. After harvesting, animals have access to after moth. In dry season, major supplements are wheat and teff straw in good rainfall area of high land. In middle altitude area maize, sorghum and millet stover are used. In inset cultivation region pseudopodium of inset, leaves of banana and offal's of vegetation crops are main sources of feed. The crop residues are usually of low quality and are also required for fuel, construction and other purpose (30 per cent) for generation of household income. In better-endowed agro-ecological zones of the country, feed may be adequate in quantity but it is often deficient in quality. For most part of the year, low protein and energy coupled with high lignin and cellulose content limit the production.

Small holders farm encamps about eight per cent or almost 10 million hectares of Ethiopia. Their holdings are really small and often fragmented. More than 26 percent of all the agricultural land is in holdings that are two hectares in area. These holdings are poorly managed. The areas of natural pasture are taken over for cropping and crop residues and byproducts are important diet of cattle. Further farmers cannot reduce their animal number to balance feed resource. They cannot allocate their land for forage production and they cannot come out of communal land ownership. Thus there is an urgent need for better management of fallow land of peasant holding, by sowing legumes which will not only improves the soil condition but also provides higher quality cattle feed for better genotype. In these areas fitting of forages in to cropping system (such as sequential cropping, forage crop rotation, relay cropping and inter sod transplanting) is another method to increase the feed resource to meet the demand of improved genotype. Intensive use of nitrogen fixing fodder trees, forage development is also recommended.

It is reported that around 14 million tons of crop residues are produced annually and out of this 95 percent is cereal straw and hardly 5 percent is from legumes. A total of about 3.3 million tons of D.M can be obtained from after moth grazing of cultivated land. But crop residues provide only 10-15 percent of total feed required by livestock. However, in some localities under specialist production systems contribution of crop residues may be as much as 50 percent of feed eaten by the livestock. Thus, it indicates that crop residues are insufficiently used in other area

and often wasted due to lack of knowledge to process and enhance the nutritive value and ignorance of conservation technique.

A total of 50 thousand tons of various types agro-industrial by products such as oil seed cake, milling byproducts, brewery byproducts, and sugar industry byproducts are produced annually. As in many other developing countries substantial amount of oil seed cake is exported from Ethiopia (70%) without concerning the starving animals. With more efficient genotype these ingredients can be better utilized at home.

On the whole feed resource situation in most of the area limit the introduction of exotic inheritance in general, and large breeds like Friesian and high level of exotic inheritance in particular. One should perceive that improved high grades under this environment of feed availability might not respond as good as low grades or even local cattle when offered with limited feed and fodder.

Over 30 percent of feed cost comes from grain resources for dairy cows in developed countries. Ethiopia cannot afford this luxury of feeding grains when people are starving. Therefore in Ethiopia, like in all other tropical countries, it is not the ability to convert the high quality feed (grain) in to milk that is important, it is the ability to convert low quality forage and crop residues into milk.

Therefore, the breeding plan is assumed to be designed to use the existing feed resource in most efficient way by stratification of genotype to match the feed resource.

Livestock Population Available Feed and Feed Requirement

Class of Livestock	Livestock Population (TLU)	Type of Feed	Available Feed/Year (DM)	Feed Requirement t/TLU/year	Total Feed Requirement tDM/year	Balance
Cattle	23379968	Natural Pasture	56537655	2.28	53306327	
Sheep	2537350	Aftermath	4014720		5785158	
Goats	1809425	Improved Forage	18000		4125489	
Horses	2200000	Crop Residue	4651314		5016000	
Asses	2600000	Agro-Industrial By-Products	124823		5928000	
Camels	1070000				2439600	
Mules	441000				1005480	
Total	34037743		65346512		77606054	-12259542

The available proportion of grazing land in the highland, from the total grazing land in the country, is estimated to be 12 %.

Annual feed supply and demand in the highland and pastoral area

Item	Unit	Total	Highland	Pastoral
Natural grazing	tDM/year	56,537,655	6,784,519	49,753,136
Aftermath	"	4,014,720	4,014,720	
Improved forage	"	18,000	18,000	
Crop residue	"	4,651,314	4,651,314	
Agro-ind. by-products	"	124,823	124,823	
Total		65,346,512	15,593,376	49,753,136
Livestock population	TLU	34,037,743	26,137,743	7,900,000
Feed requirement	tDM/year	77,606,054	59,594,054	18,012,000
Balance	"	-12,259,542	-44,000,678	+31,741,136

MARKETING CONSTRAINTS

Livestock and Livestock Products Marketing Development Sub-Programme

Livestock in most areas of the country are managed traditionally, production and productivity are at their lowest level; as a result, livestock and livestock products are primarily utilised for home consumption. The producers sell their produce when they have surplus to their requirement or they are in need of cash for personal expenditure, to purchase agricultural inputs and consumer goods or pay taxes. Thus, generally the production system is said to be survival oriented.

Compared to the huge livestock resource potential of the country, and its close proximity to the Middle East countries (world's largest market for live animals) where the demand for Ethiopian animals is high and have good reputation, the share of the export market is insignificant.

The existing livestock and products marketing system is characterised as being traditional. Live animals are traded in open areas, which have no facilities. Transportation in most cases is on hoof, which leads to a considerable weight loss of the animals, about 30%, and deterioration of conditions, physical injuries or even death. Trucking is very limited and is exercised only during holidays, and festivals to move finished cattle and small stock to city centres and exportable animals to Djibouti. Poor infrastructural development has hampered the flow of trade stocks from pastoral areas to consumption sites, which encouraged cross border informal trade. The producers don't have access to timely market information, which will help them to make production and marketing decisions.

About 75% of cattle and 95% of sheep and goats slaughtering is undertaken at the backyards where there are no slaughtering and curing facilities, leading to deterioration of meat, hides and skins quality as well as substantial wastage.

In the dairy sub-sector, shortage of dairy products in the country and consequently the growing demand for these products motivate existing farmers to produce more. However, lack of awareness, poor /absence of improved marketing and improper

price structure continue to be major constraints to the progressing farmers. In general the introduction of improved marketing system is particularly important because the production increase is unlikely to be sustained unless the products can be traded in the domestic /export markets. *It is therefore important to develop an integrated production, feeding, health and marketing programme to achieve a sustainable production in the sector.*

The livestock and livestock products marketing development sub-programme is aimed at improving the marketing system by gradually reducing or eliminating the main impediments of the sector through up-grading livestock markets, improving livestock transport system, setting-up market intelligence unit, establishing dairy products marketing and processing system, dairy technology training centre, animal husbandry equipment manufacturing centre, and collection and quality improvement of hides and skins.

The livestock markets of the country are widely and unevenly distributed throughout the country starting from small rural towns to wereda, zone and big city centres. According to the survey made by Animal Resources Marketing Development Department (ARMD) of MOA in 1975/76 E.C, excluding those located in rural towns, there were about 150 markets of different category termed as primary, secondary and terminal, having a weekly throughput of less than 500, 500-1000 animals and more than 1000 animals respectively.

The markets in most cases are controlled and operated by municipalities as they are major source of revenue. This has been confirmed by the livestock marketing study of MOA-PARC III programme 1995, in that the average contribution to municipal revenue from livestock fees and tax was 49% in 7 towns located within a radius of 200 km from Addis Ababa.

Despite this, the fees are not utilised for either maintaining or up-grading the market centres. As a result, most of them are with out facilities, except perimeter fences constructed for the purpose of tax collection. They lack watering facilities, feeding areas, shelters for attendants, weighing scales for animals and veterinary services etc. It is estimated that more than 2.2 million heads of cattle and 15 million heads of sheep and goats are annually marketed from the country's total herd through the formal and informal marketing system, of which almost all are supplied for domestic market. The share of export market is not comparable to the potential. During the last three years, the average export figure for live sheep and goats amounts to only 0.17% of total sales. This shows that the export market is at its lowest level and needs to be further developed in order to exploit the untapped livestock resource potential of the country.

On the other hand, the movement of the trade stock in the country is dominated by trekking, involving the transfer of animals from production sites to nearby primary markets, then passed to secondary and finally to terminal markets by any one of market participants, i.e., producers, middlemen, traders, butchers or exporters. Trucking is the second most important means of livestock transport, which in most cases used to move small stock and finished cattle to big consumption sites. The utilisation of railways is limited to transport animals from Dire Dawa to Djibouti and Addis Abeba for export and local consumption.

Trekking is slow and exposes the animals to weight loss and other physical injuries while the general cargo trucks, which are in use at present, are not standard and ample for transporting livestock. Thus, the existing livestock transport system is inefficient and not properly organised so as to draw surplus stock from remote areas and market centres to domestic as well as export markets.

In general the low level of transport services and facilities of the markets are not conducive to efficient marketing. Producers/traders are not initiated to bring their animals to market places as a result, quite a considerable proportion of the animals offered for sale are transacted outside market centres. In order to create more conducive environment and more competitive marketing conditions for market participants, i.e. buyers, sellers, middlemen, market officers, exporters, etc. there is a need for up-grading livestock markets and arrange appropriate transport means.

LACK OF LIVESTOCK DATA

Data available regarding livestock are; too old, based on assumptions and unreliable. Irrespective of the agro ecological zones or belonging to any particular ethnic group; people are not volunteer to tell the number of animals they own. Therefore; there is a pressing need to come up with a solution for tackling this strong shortcoming for proper palnning.

INSTITUTIONAL CONSTRAINTS

The organizations or institutions concerned for the development of the sector, be it production, marketing, veterinary services or the research are not organized in such a way that they work closely under one umbrella. To mention; the Animal and Fishery Resources and Animal health regulatory Department are under the Ministry of Agriculture; while the Livestock Marketing Authority is under the Ministry of Trade and Industry. The research part of the production and animal health are under the Ethiopian Agricultural Research Institute. Given the huge livestock resource the country owns; Ethiopia has failed to establish a strong livestock institution.

5. POVERTY

Poverty Profile of Ethiopia

(From PRSP Document)

Recent statistical data on poverty and other indicators of welfare are available from the Welfare Monitoring System, which has been managed by the Ministry of Finance and Economic Development (MOFED). Data on income poverty are available from two national Household Income Consumption and Expenditure (HICE) surveys carried out by the Central Statistical Authority (CSA) in 1995/96 and again in 1999/2000.

Trends in Real Consumption Expenditure and Calorie-Intake

Items	1995/96			1999/00		
	Rural	Urban	National	Rural	Urban	National
Real Food Expenditure Per Capita	577	790	607	609	631	612
Real Non-Food Expenditure Per Capita	466	625	488	392	830	451
Real Total Expenditure Per Capita	1035	1411	1088	995	1453	1057
Kcal Consumed Per Day Per Adult	1938	2050	1954	2723	1861	2606
Share of Food in total Expenditure	0.60	0.56	0.60	0.67	0.53	0.65
Household Size	5.1	4.7	5.0	4.9	4.6	4.9
Adult Equivalent Household	4.2	3.9	4.2	3.9	3.8	3.9

Size						
Gini Coefficient	0.27	0.34	0.29	0.26	0.38	0.28

Source: *Poverty Profile of Ethiopia, March 2002, MOFED.*

Comparisons among urban areas indicate that Addis Ababa has had the highest per capita consumption expenditure closely followed by Afar and Benshangul-Gumuz¹ in 1999/00. Taking each region by its own, Tigray has recorded the lowest per capita consumption expenditure in the country. Compared to the year 1995/1996, the per capita consumption level for 1999/00 has declined in Tigray, Afar, Somalie, Oromiya, Benshangul-Gumuz, Gamebella, and Harari. On the other hand, Addis Ababa, Amhara, SNNPR (though marginally), and Dire Dawa have witnessed increases in per capita real expenditure.

Comparisons between regional estimates derived from the 1995/96 and 1999/2000 HICE surveys, however, must be viewed with caution as, especially in the smaller regions, the means are derived from fairly small samples and are therefore subject to substantial levels of sampling error. In addition, most of the regions that show a decline in per capita consumption are those most affected by adverse weather conditions and the border war in 1999 and 2000.

Overall, urban areas witnessed an increase in per capita real consumption expenditure between the two survey years, but with considerable variation among regions.

Income distribution in Ethiopia seems to be more evenly distributed in both rural and urban areas compared to other Sub-Saharan Africa (SSA) countries. The overall consumption Gini coefficient for 1999/2000 is found to be 0.28. Income inequality appears to be higher in urban areas (0.38) than in rural areas (0.26). The low level of inequality is consistent with the overall picture of Ethiopia as a very poor country, with a low per capita income. In addition, the egalitarian land holding system might have contributed to a more equal income distribution in rural Ethiopia. While the data from the two surveys suggest that inequality has changed slightly between 1995/96 and 1999/2000, with a small decline in the Gini coefficient in rural areas and a small increase in urban areas, these changes are not statistically significant.

Trends in the Level of Consumption Poverty

The food poverty line used in Ethiopia is based on a basket providing 2200 kcal per adult equivalent per day. In 1995/96 prices, this basket cost Birr 647.8 per year. After adjusting for the non-food component, the total poverty line (both food and non-food) was estimated at Birr 1075.0 in 1995/96. The same "basket" and poverty line is used in 1999/00 to maintain comparability between the two survey years.

The proportion of people in Ethiopia who are absolutely poor (those whose total consumption expenditure was less than the total poverty line) during the year 1999/00 was 44%. The proportions of people who are classified as poor are 37% in urban areas and 45% in rural areas indicating that rural poverty is higher than urban poverty. The moderate changes in consumption levels between 1995/96 and 1999/2000 have translated into small changes in poverty incidence. The data indicate that consumption poverty head count indexes have declined by about 3 percent at national level, by over 4 percent in rural areas and have increased by about 11 percent in urban areas. None of these differences, however, are statistically significant and the continuing high level and depth of poverty in Ethiopia clearly

¹ The relatively high per capita expenditure figures for smaller regions could largely be attributed to population (sample) size and the levels should not be taken at face value and calls for careful interpretation. One should make note of the fact that these results are based on sampled households.

shows the challenge ahead. While little can be said about trends between 1995/96 and 1999/2000, the fact that poverty has not apparently increased, especially in rural areas, despite the considerable worsening of exogenous conditions between the two years does indicate that the government's development strategy and safety-net programme have been effective.

Trends in Poverty Head Count Indices (Po) by Rural and Urban Areas Percent

Location	1995/96	1999/2000	% Change Over 1995/96
Rural	47.0	45.0	-4.2
Urban	33.3	37.0	11.1
Total	45.5	44.2	-2.9

Source: Poverty Profile of Ethiopia, March 2002, MOFED.

The levels of consumption poverty also show significant variation among rural/urban areas and across regional states. By 1999/00, the highest rural poverty incidence was recorded in Afar followed by Tigray and Benishangul-Gumuz regional states. The lowest rural poverty incidence was recorded in Harari regional state followed by Addis Ababa and Dire Dawa city administrations.

Among the urban areas, the highest poverty was recorded in Tigray followed by SNNPR, Gambella, and Addis Ababa. The lowest poverty incidence (among urban areas) was indicated in Somalie followed by Afar and Benishangul-Gumuz regional states. In general, consumption poverty is higher in rural than urban areas of the country. While there has been some improvement in the depth and severity of rural and national poverty in 1999/00 compared to 1995/96, it was shown that the incidence of poverty has not improved much between the two survey years.

By 1999/00, a decline in poverty incidence has been witnessed in most of the major towns of Ethiopia. Gonder Town (Amhara) had the lowest poverty incidence followed by Bahir Dar town. The highest poverty incidence was observed in Mekele town (Tigray) followed by Jimma town in the same year. Poverty incidence, depth, and severity seem to have substantially declined in Gonder, Dessie, Bahir Dar, and Debre Zeit towns. A modest decline in poverty incidence, depth and severity has been indicated in Mekele and Nazreth towns. On the other hand, Jimma, Harar, Addis Ababa and Dire Dawa are urban areas where poverty incidence, depth and severity were more pronounced by 1999/00. Most of the changes are based on small samples and care needs to be taken in interpreting the results as large percentage changes from very small bases are unlikely to represent real changes in welfare.

Although urban areas in general witnessed an increase in consumption poverty head count index, there has not been significant increase in the depth and severity of poverty between the two periods. As is already indicated, income inequality measured by the Gini coefficient declined for rural areas and increased for urban

areas while the per capita consumption of both urban and rural areas have not shown statistically significant changes (increase)

The changes in poverty levels in Addis Ababa are not entirely clear. While there has been an apparent increase in mean total consumption levels, there has also been some apparent increase in the incidence of poverty. If these results represent real changes and are not just due to sampling error, then the implication is that income distribution has become more unequal between 1995/96 and 1999/2000. There are some indications that this is the case, but more detailed analysis is needed before more definitive conclusions can be reached.

Trends in the Level of Food Poverty

Households and the people living in them are defined as food poor if the food expenditure per adult equivalent is less than the food poverty line. Using this definition, the relative position of rural and urban areas in 1999/00 appears to have reversed compared to that of 1995/96. In the earlier period, food poverty was higher in rural areas than in urban areas. The results from the 1999/2000 HICE, however, indicate that the food poverty head count index was found to be lower in rural areas than in urban areas. There are a number of possible explanations for this and more investigation is needed to identify what exactly has happened. One possible explanation could be that spending in rural areas is weighted more heavily in favour of food items compared to the spending pattern of people in urban areas.

Trends in Food Poverty Head Count Indices (%)

Location	1995/96	1999/2000	% Change Over 1995/96
Rural	47	41	-12.6
Urban	32	47	43.7
Total	45	42	-6.7

Source: Poverty Profile of Ethiopia, March 2002, MOFED.

As indicated above the proportion of the population under food poverty in rural areas is about 41% whereas the corresponding figure for urban areas stood at approximately 47% in 1999/00. Compared to 1995/96, the national and rural food poverty head count index declined by 6.7% and 12.6%, respectively. The urban food poverty head count index increased by 43.7 percent.

The food poverty head count index has increased in all regions save Amhara, Tigray, Oromiya and Dire Dawa. By 1999/00, urban food poverty head count index has increased compared to that of 1995/96 across regions save Dire Dawa. Among the rural areas, food poverty has declined in Tigray, Amhara, Oromiya, Addis Ababa and Dire Dawa.

Distribution of National Poverty

In 1995/96, more than 50 percent of people living in consumption poverty resided in Amhara and SNNP regional states. By 1999/00, overall consumption poverty head count index in these regions had declined by 23 and 9 percent, respectively (Annex Table1.4). The influence of these two regions on the national consumption poverty is self evident given their weight in total population and agricultural production.

The income/consumption poverty analysis indicates that poverty is still a rural phenomenon as indicated by the contribution of rural areas to the poverty head count index. As indicated in the Table below, rural areas altogether contribute about

85 percent to total population while their contribution to total poverty head count index stood at about 88 percent in 1999/00. Urban areas altogether accounted for about 15 percent of total population while its contribution to total poverty head count index was a little over 11 percent in 1999/00. The contribution to total poverty head count index has slightly increased in urban areas (about 1.3 percentage points) while it decreased by the same magnitude (1.3 percentage points) in rural areas in 1999/00 as compared to 1995/96.

Contribution of Rural and Urban Areas to Total Poverty Incidence

	1995/96		1999/00	
	Population Contribution (%)	Contribution to Poverty Head Count Index (%)	Population Contribution (%)	Contribution to Poverty Head Count Index (%)
Rural	86.5	90.0	85.0	88.7
Urban	13.5	10.0	15.0	11.3
National	100.0	100.0	100.0	100.0

Source: *Poverty Profile of Ethiopia, March 2002, MOFED.*

Household Characteristics and Poverty

The analysis on the main household characteristics of the population was based on the results from responses of households common to the HICE and WM surveys. According to the survey results, the average family size for Ethiopia stood at 4.9 persons per household. Comparing poor households with the richer ones, it was observed that poorer households tend to have larger family sizes (5.8 & 5.4 individuals per household in the 1st and 2nd quintiles, respectively), which stood in contrast to 4.7 and 3.9 per household in the 4th and 5th quintiles. In general, poorer households in rural areas have a larger family size than their counter parts in the urban centres.

Household Characteristics of the Poor (National) (1999/00)

Household Characteristics	Expenditure Quintiles					Total
	1	2	3	4	5	
Household Size	5.8	5.4	5.0	4.7	3.9	4.9
Dependency Ratio	1.34	1.29	1.22	1.11	0.89	1.15
Age of Household Head	47	45	44	43	42	44
Household head is Female (%)	23	25	24	25	30	26
Divorced Female Household Head (%)	82	80	85	81	80	81
Widowed Female Household Head (%)	4	6	6	4	5	5
Illiterate Household Head (%)	83	77	74	68	60	71
Household Head Completed Grade 1 to 3 (%)	4	5	6	8	6	6
Household Head Completed Grade 5 to 6 (%)	3	4	5	5	6	5
Household Head Primary Complete (%)	2	2	2	3	4	3

Household Head in Junior High School (%)	1	2	4	3	5	3
Household Head in High School (%)	1	1	2	3	9	4
Household Head in Post Secondary School (%)	0	0	1	1	5	2

Source: *Poverty Profile of Ethiopia, March 2002, MOFED.*

Family size is closely linked to the average dependency ratio. Poorer households tend to have larger proportion of dependents than richer households: 134 per hundred for the 1st quintile and 89 per 100 for the 5th quintile. Though the ratios show the same trend in both rural and urban areas, they are larger for the former in each quintile. The differences between the rural and urban areas in this regard should, however, be interpreted cautiously as younger members of rural households are more likely to be engaged in productive activity. Poverty incidence, depth and severity also decrease with increases in the level of education (schooling) of the head of the household. However, as indicated in the table above no more than 5% of the population of household heads has completed primary school.

Members of poorer household tend to have older household heads compared to richer ones. Females head 26 percent of the households in the country. This feature, however, is more dominant in urban than in rural areas. According to the 1999/00 HICE & WM survey results, females head 41 and 23 percent of the households in urban and rural areas, respectively. There is no significant difference in income poverty between male and female-headed households in rural areas. In urban areas, however, female-headed households have been found to have higher poverty incidence, depth and severity than their male counterparts

Comparison of Poverty by Gender and Areas of Residence

Survey Year	Poverty index	Sex of Household Head	National		Rural		Urban	
			Index	SE	Index	SE	Index	SE
1995/96	P ₀	Male Headed	0.46	0.01	0.48	0.01	0.33	0.03
		Female Headed	0.42	0.02	0.46	0.02	0.34	0.03
1999/00	P ₀	Male Headed	0.44	0.01	0.46	0.01	0.34	0.02
		Female Headed	0.43	0.02	0.45	0.02	0.49	0.01

Source: *Poverty Profile of Ethiopia, March 2002, MOFED.*

Household Vulnerability to Shocks and Vulnerability Dimensions

Ethiopia has suffered from frequent disasters such as drought, famine, epidemics, flood, landslides, earthquakes, civil war, and mass displacement, as well as external shocks (for example, rapid declines in commodity prices). In assessing the vulnerability of individuals and the profile of shocks based on responses from the 1999/00 WM survey, it is clear that urban households were more vulnerable than

rural households in the survey period, perhaps because rural households have access to assets such as land and livestock.

In 1999/00, households in certain regions, particularly Tigray, SNNP and Somalie, perceived that living conditions were lower compared to a normal year, and that residents of these regional states suffered a shock in terms of sudden change in well being. This perception may be attributable to the fact that mean monthly rainfall was lower and more erratic in 1999/00 than 1995/96.

According to the survey results, the majority of rural households were able to cope with the shocks of 1999/00 while the coping ability of urban households was more limited. The major *ex post* risk coping mechanism of rural people is the sale of animal products and other agricultural outputs and loan from relatives, while urban peoples' main *ex post* coping instrument is reserve savings and loans from relatives. The role of modern banks as well as traditional sources of finance such as *Idir* and *Iqub* appears quite limited in the provision of security for both rural and urban households.

Sources to Obtain 100 Birr for Unforeseen Circumstances in a Week

Source to Obtain 100 Birr	Rural	Urban	Total
Sale of Animals & Animal Products	26	3	23
Sale of Other Agricultural Products ²	17	2	15
Reserved money	2	16	4
Bank or saving account	0	3	0
<i>Iqub</i>	0	1	0
<i>Idir</i>	3	2	3

Source: Poverty Profile of Ethiopia, March 2002, MOFED.

6. OPPORTUNITIES AND POSSIBLE POLICY DRIVEN IMPROVEMENTS IN THE LIVESTOCK SECTOR TO CONSTRAINTS

Overview of Development Goals, Policies, Strategies and Targets

Poverty reduction is the core objective of the Ethiopian government. Economic growth is the principal, but not the only, means to this objective

The FDRE recognises that in the absence of proactive development policies, it is impossible to create an enabling environment for accelerated development and attainment of improvements in the standards of living of the people. Based on the practical experiences and lessons learnt over the past ten years, and an assessment of the development experiences of countries that have attained rapid economic development, the FDRE has formulated policies and strategies to guide over all development with focus on rural and agricultural development.

² Include sales of grain and forest products

Fundamental Development Objectives of the FDRE

The fundamental development objectives of FDRE is to build a free-market economic system in the country which will enable:

- a) The economy develop rapidly,
- b) The country extricate itself from dependence on food aid, and
- c) Poor people to be the main beneficiaries from economic growth.

Ensuring Rapid and Sustainable Economic Growth

Ethiopia's existing realities reveal that there is an acute shortage of capital. In contrast, the country is endowed with a large number of working age population and a potentially cultivable land although land is still relatively scarce in some part of the country, particularly the northern and central high lands. It is believed that faster growth and hence economic development could be realized if the country adopts a strategy that help raise the employability of our labour resources and enhance productivity of land resources aimed at capital accumulation. Pursuing a development strategy that does not make extensive use of the manpower and intensive use of the land resources forfeits the considerable contribution that these resources could make to growth and capital accumulation. The country is to achieve faster growth and economic development by making use of technologies that are labour using, but land augmenting, such as fertiliser and improved seeds and other cultural practices.

The agricultural and rural-focused development strategy that the country has adopted is imagined to help accelerate economic development via stimulating and sustaining growth in agriculture. This growth in turn to lead to fast and sustainable growth in trade and industry through strengthening production and consumption linkages. Thus, the agricultural and rural-based development strategy to fosters for rapid and sustainable economic development not only in the agricultural sector but also in the rest of the sectors.

According to strategic plan: The accelerated and sustainable growth in agriculture leads to increased quantity and quality of agro-industrial raw materials supplied (forward production linkage) to the industrial and export sector. This will increase the demand for agricultural products, the income and the standards of living of farmers. This will in turn encourage farmers to use improved technologies, which will increase the demand for agricultural inputs such as fertilizer, improved seeds and farm implements (back ward production linkages). The increase in the income of farmers lead to increased demand for consumer goods and services (industrial and agricultural products) and thereby promotes industrialisation. These linkages will lay the foundation for accelerated and sustainable growth in the industrial and trade sectors. Thus, the rationale for adopting and implementing a rural and agricultural-centred development strategy has emanated from this basic principle.

Unless industry (secondary-modern goods producing sectors) and services (tertiary-distributive and other services) grow in conjunction with agriculture (primary - agriculture and allied activities), it is not possible to ensure accelerated growth and sustainable development. Such a growth process will improve the country's capacity for capital accumulation, which also in turn help channel resources for the development of the industrial sector. In an agrarian economy such as Ethiopia, the resources for the development of the industrial sector need to be generated via primarily creating strong bondages between agriculture and industry and subsequently exploiting these linkages via the concerted efforts of non-state actors, particularly the non-peasant private sector.

In this regard, the government has already recognized the key role that the non-peasant private sector is expected to play in directly taking part in agricultural production, agricultural marketing and processing agricultural products. The government will make every effort to enhance and buttress the contribution private sector (domestic and foreign) will make to agricultural development endeavors. The federal government, in collaboration with regions, will work hard to allocate land for commercial farming, make sure that there are adequate infrastructure facilities, and streamline and make efficient land lease procedures for entrepreneurs who wish to set up large - scale commercial farms. For those who want to rent land from farmers and take part in agricultural activities, the federal government, again in collaboration with the regions, will work out an efficient arrangement, which will safeguard the interests of all parties concerned.

Although our economic development efforts are based on rural and agricultural development, we have already recognized that this cannot really go far unless it is supported by industrial development. The need for a coordinated and integrated agricultural and industrial development approach is also well recognized by the government of Ethiopia, as industrial development is eventually expected to play the leading role in our development effort. The government's industrial development strategy will be based on an appreciation of this reality. It is an important part of the government's industrial development strategy to assist and encourage both domestic and foreign private business, particularly the former, to participate fully in this development effort.

Rural-centred strategies that make extensive use of labour and intensive use of land are to be employed in the agricultural sector. In other words, the strategies target the vast majority of the people who reside in rural areas as the rural areas harbour the bulk of the rural poor as indicated in the section on poverty profile of Ethiopia.

ADLI & Food Security

ADLI is seen as a long-term strategy, during the first stage, and agriculture is to play a leading role in the growth of the economy. But the extremely small ratio of urbanization of the country could well raise market outlet as a critical issue owing in the main to inadequacy of domestic demand, thereby making exports a necessity. This implies that agriculture has to be made internationally competitive, and that part of its production has to be oriented towards exports.

For agriculture to continue serving as an engine of growth in the coming years, through the domestic economy and international trade, there has to be progress in terms of commercialization, with more intensive farming, increasing proportion of marketable output and correspondingly decreasing ratio of production for own consumption. Aside from deepening technological progress, it will mean greater market interaction on the part of the farmer. Thus, research and extension will be enhanced, application of inputs will be increased and diversified, new products will be introduced, irrigation will be expanded, service cooperatives will be encouraged, contractual production cum trading between farmers and traders will be fostered, production of tools and equipment for agricultural use will be promoted, and rural roads will be constructed. At the same time commercial farming will receive more emphasis and support. Leasing of land held by the government will be encouraged by specifying the conditions of lease to facilitate the collateralization of land, and foster land use based on environmental protection. Besides, an agricultural products exchange market will be established and implemented.

Extension of credit to the small farmer will gain importance with commercialization of agriculture, and give impetus to the establishment of rural banks. The first step is to carry forward the transition from loans underwritten by the regional governments to loans extended by micro-financing institutions entirely on their own. In the foreseeable future, it is expected that micro-financing institutions will be the dominant source of credit supply to smallholder farmers, and that the existing make shift arrangement of loan underwriting by the regional governments will be substantially phased out from the four larger regions. It may, on the other hand, be started in the remaining regions. The second step consists of graduating from a micro-financing institution to a rural bank, the essential dividing line being growth of deposits, and minimization of the reliance on equity capital for the extension of credit as is presently the case. The private sector will have greater opportunities to involve them in establishing micro financing institutions and the government will create conducive policy environment for the establishment of such institutions.

Cooperatives play important roles in facilitating input and output marketing as well as in promoting the provision of rural finance. To this effect, the government has recently approved for the establishment of Cooperative Commission at federal level. While the process of setting up such a commission at federal level is currently well underway independent Cooperative Promotion Bureaus are being established in regions.

The problem of food security and agricultural growth in pastoral areas is being conceived in terms of the development of the pastoral economy in its entirety. Water, pasture, veterinary service and livestock marketing are central interventions. The national strategy for pastoral development is discussed in Chapter VII of this document.

7. NATIONAL DEVELOPMENT POLICY FRAMEWORK (e.g. PRSP, NATIONAL PLANS)

The Major Thrust of Ethiopia's Sustainable Development and Poverty Reduction Program

The broad thrust of Ethiopia's strategy during the Sustainable Development and Poverty Reduction Program (SDPRP) period thus consists of:

- Overriding and intentional focus on agriculture as the sector is the source of livelihood for 85 % of the population where the bulk of the poor live. The government gives overriding primacy to the welfare of rural populace. Agriculture is also believed to be a potential source to generate primary surplus to fuel the growth of other sectors of the economy (industry);
- Strengthening private sector growth and development especially in industry as means of achieving off-farm employment and output growth (including investment in necessary infrastructure);
- Rapid export growth through production of high value agricultural products and increased support to export oriented manufacturing sectors particularly intensified processing of high quality skins/leather and textile garment;

- Undertake major investment in education and strengthen the on going effort on capacity building to overcome critical constraints to implementation of development programs;
- Deepen and strengthen the decentralization process to shift decision-making closer to the grass root population, to improve responsiveness and service delivery;
- Improvements in governance to move forward in the transformation of society, improve empowerment of the poor & set framework/provide-enabling environment for private sector growth and development;
- Agricultural research, water harvesting and small scale irrigation;
- Focus on increased water resource utilization to ensure food security;

ADLI & Food Security

Ethiopia's existing realities reveal that there is an acute shortage of capital. In contrast, the country is endowed with a large number of working age population and a potentially cultivable land although land is still relatively scarce in some part of the country, particularly the northern and central high lands. It is believed that faster growth and hence economic development could be realized if the country adopts a strategy that help raise the employability of our labour resources and enhance productivity of land resources aimed at capital accumulation. Pursuing a development strategy that does not make extensive use of the manpower and intensive use of the land resources forfeits the considerable contribution that these resources could make to growth and capital accumulation.

ADLI is seen as a long-term strategy to achieve faster growth and economic development by making use of technologies that are labour using, but land augmenting, such as fertiliser and improved seeds and other cultural practices. During the first stage of ADLI, agriculture is to play a leading role in the growth of the economy. But the extremely small ratio of urbanization of the country threatens to make inadequacy of domestic demand a critical constraint. This implies that agriculture has to be made internationally competitive, and that part of its production has to be oriented towards exports.

For agriculture to continue serving as an engine of growth in the coming years, through the domestic economy and international trade, there is a plan to make it progressive in terms of commercialization, with more intensive farming, increasing proportion of marketable output and correspondingly decreasing ratio of production for own consumption. Aside from deepening technological progress, it will mean greater market interaction on the part of the farmer. Extension of credit to the small farmer will gain importance with commercialization of agriculture, and give impetus to the establishment of rural banks. Cooperatives play important roles in facilitating input and output marketing as well as in promoting the provision of rural finance. The problem of food security and agricultural growth in pastoral areas is being conceived in terms of the development of the pastoral economy in its entirety.

Unless industry (secondary-modern goods producing sectors) and services (tertiary-distributive and other services) grow in conjunction with agriculture (primary – agriculture and allied activities), it is considered not possible to ensure accelerated growth and sustainable development. In an agrarian economy such as Ethiopia, the resources for the development of the industrial sector necessitate to be generated via primarily creating strong bondages between agriculture and industry and

subsequently exploiting these linkages via the concerted efforts of non-state actors, particularly the **non-peasant private sector**.

In this regard, the government has already recognized the key role that the non-peasant private sector is expected to play in directly taking part in agricultural production, agricultural marketing and processing agricultural products. The government will make every effort to enhance and buttress the contribution private sector (domestic and foreign) will make to agricultural development endeavors. The federal government, in collaboration with regions, will work hard to allocate land for commercial farming, make sure that there are adequate infrastructure facilities, and streamline and make efficient land lease procedures for entrepreneurs who wish to set up large - scale commercial farms. For those who want to rent land from farmers and take part in agricultural activities, the federal government, again in collaboration with the regions, will work out an efficient arrangement, which will safeguard the interests of all parties concerned.

Key Sectoral Measures and Cross-cutting Issues

Agriculture

Some of the proposed measures in the agricultural sector during the program period are:

- Introduce menu based extension packages to enhance farmers choice of technologies;
- Expand borrowers' coverage of micro-financing institutions;
- Establish an institute for diploma-level training of extension agents and expand agricultural Technical Vocational Education Training (TVET);
- Measures for the improved functioning of markets for agricultural inputs (fertilizer, seed) and outputs;
- Organize, strengthen and diversify autonomous cooperatives to provide better marketing services and serve as bridges between small farmers (peasants) and the non-peasant private sector;
- The possibility of establishing an agricultural products exchange market will be studied, and, if found feasible, implemented;
- Agricultural research, water harvesting, and small-scale irrigation;

The number of farming households to be covered by the Extension Package Program is expected to increase from the current 4 million (2000/01) to 6 million by the end of the program period. There were only 32,000 farmers when the package was introduced in 1994/95.

Food Security

Agricultural growth well understood by the government to contribute to improving the conditions of food security in the country. There are indications that excepting conditions of drought, even the present extension program could have sufficed to bring about a satisfactory level of national food security. However, as it stands now droughts occur far too often and food security in all its dimensions could not be sustained. Irrigation would have to be introduced in a significant way for a sustainable attainment of food security at the national level. However, food insecurity at the household level could still persist despite growth of food and cash

crops at national level. The solution would have to come predominantly from within agriculture

The medium-to long-term target is to reduce the absolute size of the food insecure rural population substantially and make them exit from food aid. In the short-run, the objective is to rely on fiscal transfer of resources to support a relatively small numbers of food-deficit households. For the country as a whole, tackling food insecurity at the household level is, arguably, the most effective and direct way of poverty reduction being envisaged by the government, and, no doubt, among the most important programs.

During this transition, there will be continued reliance on food aid. There are two main issues in this regard; ensuring a timely intervention to avoid lack of food, and using the resources of food aid to build the potential of agriculture and rural infrastructure. The concept of linking relief with development has been applied since the late 1980s. Various activities of environmental protection such as soil and water conservation, terracing and a forestation carried out over the years have shown positive results, and will be improved and continued in the future. Emergency capabilities have also been strengthened in the past few years by reorganizing the Disaster Prevention and Preparedness Commission (DPPC), and establishing a Food Security Reserve Administration (FSRA). Monitoring, surveillance, early warning, and strategic food reserves capabilities will continue to be augmented to better deal with emergency situations of famine.

8. POLICY FORMULATION PROCESS IN THE LIVESTOCK DSECTOR (- INDICATE ACTUAL STEPS FOLLOWED FROM PROBLEM IDENTIFICATION TO PROCLAMATION)

The Consultation Process & Overview of the Major Outcomes

The FDRE has recognized importance of the establishment of an organizational structure necessary and a primary step to co-ordinate the overall activities of the process of the PRSP throughout the country. At the national level, a Steering Committee composed of ministers and a National Technical Committee composed of professionals drawn from poverty-oriented federal sector ministries/government institutions as well as a Secretariat to carry out the daily activities were established. A similar structure was also adopted at the regional (state) level.

After making the necessary preparations since June 2001, the consultation process was officially launched in August 2001 in the presence of representatives of all stakeholders: government institutions, private sector, the donor community, non-government organizations (NGOs), and civil society. With the objective of gathering useful information for the preparation of the Ethiopian Poverty Reduction Strategy Paper, various consultative forums have been organized at different levels. The consultation process started at the *Woreda* (district) level followed by regional level consultations, which finally culminated with federal level consultations. The organization and management of consultation process are described in the chart on the following page.

The first consultation was held with the major stakeholder, the people, in 117 *Woredas* of the country. The agenda discussed in the three-day *Woreda* consultations mainly included: the nature and causes of poverty in order of their significance; trends in poverty over the past five years; factors that contribute to poverty; people's livelihood and associated problems; problems of socio-economic service delivery;

cultural and individual practices contributing to poverty; administrative problems and other governance issues; and poverty reduction measures that need priority attention. Altogether, about 6,000 people participated in all the *Woreda* consultations. The participation of women in *Woreda*-level consultations was highly encouraged, and high numbers of women attended.

Regional consultations were carried out in all regions between 6 to 18 February 2002, except in Afar region where it was conducted between March 9-11, 2002 and in Somali region from 26-28 March 2002. In regional consultations, about 2,000 people participated altogether. The main objective of the regional consultations was to discuss key findings of the *Woreda* consultations and gather supplementary ideas. The regional consultations also addressed policy and development issues not well covered in the *Woreda* consultations, so as to gather information that represents the whole region. In general, regional consultations differed from *Woreda* consultations in the depth and breadth of agenda they covered, the number and type of participants, and institutional representations.

Subsequent to the *Woreda* and regional PRSP consultations held throughout the country, a Federal PRSP Consultation was held at the UNECA Conference Center from 28-30, March 2002. 450 participants drawn from among high-ranking government officials, sector regional bureaus, prominent people, journalists, religious leaders, and representatives of the donor community, NGOs, professional associations, and the business community attended this consultation.

The Consultative Process for the Preparation of PRSP (Ethiopia)

In addition, the government has set up a pastoral development forum, which was attended by pastoral communities from all over Ethiopia to share perspectives and forge a common vision on pastoral communities development.

Ethio-Forum 2002 was also conducted by the ESRDF from 15th January to 4th February 2002 where ESRDF's and other agencies community development experiences were discussed with a view to further advancing the design of ESRDF II and contribute to the PRSP preparation.

Besides the *Woreda*, regional and federal level consultation forums, NGOs and private sector institutions have also created discussion forums for their respective members which facilitated their structured contribution both to the process and content of the Ethiopia's PRSP. The engagement of the media in the PRSP was quite valuable.

The Council of Peoples Representatives (Parliament) was also an active participant in the PRSP both as being member of the PRSP Federal Technical Committee and have attended and observed *Woreda* and Regional Consultation.

The donor community, known as the Development Assistance Group (DAG) in Ethiopia was an active participant by attending and observing the consultations at various levels.

Overall, extensive, inclusive and transparent consultations were held. As indicated earlier, the press, NGOs and the donor community who made positive reports, independently monitored the various consultations. For the summary of the *Woreda* and regional consultation outcomes, NGOs and private sector perspective. After completing the first draft PRSP, it was circulated to key stakeholders i.e., private sector, NGOs, and DAG- for comments who provided feedbacks and was used to strengthen the final SDPRP.

Contributions of the Consultations Process: The consultations conducted at the various levels contributed to the preparation of the strategy in the following ways:

- a) Confirming the broad development strategy, sectoral and cross-sectoral priority actions followed by the government
- b) Emphasizing decentralization and community empowerment
- c) Highlighting the significance of capacity building and cooperative effort of public, private, NGOs and communities
- d) Emphasizing the significance of efficient, effective, transparent and accountable public service
- e) Highlighting the negative effects of harmful traditional practices, in the struggle against poverty by households, communities and the country.

Accordingly, Ethiopia's Sustainable Development and Poverty Reduction Program (SDPRP) has provided core treatment to agriculture, food security, education, health, water (including irrigation) and roads measures to strengthen agricultural marketing (crops, livestock) and access to finance through micro finance institutions have also been included in the paper. These were principal concerns raised at all levels of consultations.

The extensive treatment of capacity building (public, private, NGOs, CBOs), the on going justice, civil service reforms and devolution to *Woredas* will address the general discontent with government service delivery, expressed during the consultation and also address accountability and empowerment concerns of good governance.

SDPRP also pays particular attention to strengthen the private sector, which was an area of concern in urban consultation. The Government has clear commitment that sustainable development and poverty reduction in Ethiopia will be sustained only with and through the private sector.

Crosscutting issues of gender, environment and HIV/AIDS are adequately addressed in the strategy paper. Again these were serious concerns of the consultations held at various levels. Consultations also emphasized that particular attention be given to pastoral communities - an area on which government has already preparations going on. As such the SDPRP has given space to this important concern of Ethiopian economy.

The consultations also expressed concern that the Government is not paying attention to urban areas. The Government has increasingly focused its attention on the needs of Ethiopia's rapidly growing urban population. The Government has prepared an urban management sub-program in the context of the National Capacity Building Program, which is given treatment in the SDPRP.

Policy Issues

Like most developing countries in Africa, Ethiopia does not have a specific livestock development policy. Instead, livestock projects are formulated and implemented on the basis of the overall government policy in the agricultural sector.

In 1992, a livestock development policy has been drafted as part and parcel of an overall agricultural policy of the country. The principal objectives of the draft policy document include achievement of food self-sufficiency in livestock products, improvement of nutritional status of the population, increasing employment opportunities through the promotion of agri-business, expanding livestock and livestock product exports, as well as boosting rural incomes. The major strategies considered to accomplish these objectives are promotion of conservation based pasture and fodder development programmes to meet the increased demand for animal feed, improvement of the genetic potential of the indigenous livestock

through appropriate breeding schemes, introduction and promotion of appropriate technologies that could enhance production, processing and marketing of livestock products and provision of effective extension and animal health services.

However, although the draft policy still remains as an integral part of the agricultural policy, there is a need to formulate more specific livestock development policies as related to the major constraints namely feeds and nutrition, animal health, livestock breed improvement and livestock and products marketing.

In Ethiopia the traditional small holder system occupies about 85% of the human population and accounts for over 97% of the total milk production of the country. Hence, the emphasis of the government policy will be on promoting small holder livestock development to ensure domestic self sufficiency in livestock products and to dispose of any surplus on the export market to earn the country much needed foreign exchange. Past livestock development schemes were dependent on governmental support while future development endeavours will be assisted by the private sector as a result of the conducive economic policy, which inter alia promotes and encourages the privatisation of services. Under the terms of the governments structural adjustment and trade liberalisation programme, the changes in the pricing and marketing arrangements for a number of farm products, including that of livestock, will give a strong incentive to farmers to produce what is wanted in the market place and hence, improve marketing efficiency and responds to producer and consumer requirements.

In the past significant subsidies were made for most livestock development programmes. The present draft policies do not favour subsidy unless there is strong justification to do so. The reduction and eventual elimination of Government subsidies will enable resources to be channelled to productive investment and will reduce the crowding out effect of Government borrowings on the funds available for private sector investment.

The Livestock development Masterplan document which is at pre draft level is expected to come up with decisive livestock development policy direction that the country would follow to reduce poverty.

9. CONCLUSION AND RECOMMENDATIONS

Livestock production is an integral part of the country's agricultural system. Ethiopia has the largest livestock population in Africa. This resource, however, makes a disproportionately small contribution to the national earnings, especially export income, and to national food production.

The livestock resource of the country is characterised by low productivity levels. Livestock production growth rates are very small and lagging behind population growth which is increasing at a higher rate; thus resulting a decline in per capita consumption of livestock products.

Animals are not selectively bred and inbreeding is a common phenomena resulting in losses in livestock and livestock products. The traditional livestock production systems do not favour the introduction of modern animal breeding strategies and techniques. Livestock marketing system in Ethiopia is poorly developed and hence the quality and quantity of marketable livestock and livestock products for both domestic and export market are very low.

Livestock in most areas of the country are managed traditionally, production and productivity are at their lowest level; as a result, livestock and livestock products are primarily utilised for home consumption. The existing livestock and products marketing system is characterised as being traditional. The livestock and livestock

products marketing development sub-programme is aimed at improving the marketing system by gradually reducing or eliminating the main impediments of the sector through up-grading livestock markets, improving livestock transport system, setting-up market intelligence unit, establishing dairy products marketing and processing system, dairy technology training centre, animal husbandry equipment manufacturing centre, and collection and quality improvement of hides and skins. Given the huge livestock resource the country owns; Ethiopia has failed to establish a strong livestock institution.

POVERTY

The proportions of people who are classified as poor are 37% in urban areas and 45% in rural areas indicating that rural poverty is higher than urban poverty.

The levels of consumption poverty also show significant variation among rural/urban areas and across regional states. In general, consumption poverty is higher in rural than urban areas of the country.

The income/consumption poverty analysis indicates that poverty is still a rural phenomenon as indicated by the contribution of rural areas to the poverty head count index.

The agricultural and rural-focused development strategy that the country has adopted is imagined to help accelerate economic development via stimulating and sustaining growth in agriculture.

Although the country's economic development efforts are based on rural and agricultural development, the government has already recognized that this cannot really go far unless it is supported by industrial development.

ADLI & Food Security

Water, pasture, veterinary service and livestock marketing are central interventions. The broad thrust of Ethiopia's strategy during the Sustainable Development and Poverty Reduction Program (SDPRP) period thus consists of rapid export growth through production of high value agricultural products and increased support to export oriented manufacturing sectors particularly intensified processing of high quality skins/leather and textile garment; agricultural research, water harvesting and small scale irrigation; focus on increased water resource utilization to ensure food security.

Agricultural growth is now well understood by the government to contribute to improving the conditions of food security in the country.

The Government has clear commitment that sustainable development and poverty reduction in Ethiopia will be sustained only with and through the private sector.

Policy Issues

Till recently, Ethiopia did not have a specific livestock development policy. Instead, livestock projects are formulated and implemented on the basis of the overall government policy in the agricultural sector.

In 1992, a livestock development policy has been drafted as part and parcel of an overall agricultural policy of the country.

In Ethiopia the traditional smallholder system occupies about 85% of the human population and accounts for over 97% of the total milk production of the country. Hence, the emphasis of the government policy will be on promoting smallholder livestock development to ensure domestic self-sufficiency in livestock products and to dispose of any surplus on the export market to earn the country much needed foreign exchange. In the past significant subsidies were made for most livestock development programmes. The Livestock development Master plan document which is at pre draft level is expected to come up with decisive livestock development policy direction that the country would follow to reduce poverty.

Pro-Poor Growth

Growth with equity is the optimal strategy for Ethiopia. Natural resources development and protection, and agro-forestry programmes are considered as potential basis for animal feed production, including flowers for bees.

Pastoral Areas

It is an accepted fact that improving the life of these people calls for a development strategy that is firmly based on livestock development. Therefore; natural resources and water development are given due attention. In these areas, although non-food livestock products will continue to be important, food production will increasingly be the dominant reason for keeping livestock.

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SESSION III: PLANNING

Moderator; Dr Zinash,

The moderator stated that the issue here is how to integrate our problems with other countries in order to exploit regional alliances to bring sustainable and useful change to the livestock sector that has been jeopardized due to poor livestock management

system. As explained earlier our duty to day would be to clearly understand and agree on the goals and overall purposes of the PPLPI.

To proceed with the exercise a working document has been prepared by the moderator and distributed to all participants. After going through the paper, the group has agreed on the goals and purposes of the project.

Goals: To improve the livelihoods of active poor livestock keepers.

Overall purposes: To promote competitive, safe, equitable and sustainable livestock farming by enhancing livestock keepers' capabilities in managing livestock farming and risks through improvements in policy and institutional reforms.

SESSION IV: IDENTIFICATION OF CORE PROBLEMS

The participants were divided into two groups to discuss various livestock development issues, and come up with the major problems of the livestock keepers that need to be given special considerations to stimulate the contribution of the livestock sector in the well being of the poor and marginalized section of the community. The moderator provided four major categories of problems for discussion. These are economic, social and cultural, risks and vulnerability, and technical and institutional. Based on the discussion points, the groups have identified the following.

Group I.

	Category	Problems
1.	Economic	
1.1	Market	<ul style="list-style-type: none"> ▪ Lack of access to domestic and external markets ▪ Lack of strong market integration channel ▪ Lack of market stabilization mechanisms and policy ▪ Low purchasing power ▪ Lack of safe, quality and sustainable supply and demand ▪ Lack of flexibility in letter of credit (LC) system ▪ Lack of appropriate utilization of regional blocks (IGAD, COMESA) ▪ Lack of market intelligence ▪ Poor ago-industry ▪ Absence of livestock marketing cooperatives
1.2	Saving and credit	<ul style="list-style-type: none"> ▪ Inappropriate resource and financial management ▪ Poor saving and credit system
1.3	Week non-farm employment opportunities	
2.	Social and cultural	<ul style="list-style-type: none"> ▪ Poor need and aspiration assessment ▪ Poor policy dialogue with poor livestock keepers ▪ Poor information networking ▪ Poor public education ▪ Lack of understanding regarding macro and sector policies affecting the livelihood of the livestock keepers ▪ Gender inequality in accessing resources and labor distribution ▪ Inter tribal conflict on resource utilization
3.	Infrastructure	<ul style="list-style-type: none"> ▪ Weak capacity to develop appropriate infrastructure policies

Group II.

	Category	Problem
1	<p>Risk and vulnerability Risk</p> <p>Production Risk</p> <p>Market Risk</p> <p>Security (conflict, politics)</p>	<ul style="list-style-type: none"> ▪ Natural resource degradation as the result of climatic variation (drought, flood, erosion etc) and livestock diseases ▪ Undiversified livelihood ▪ Price fluctuation (input and outputs) ▪ Livestock ban ▪ Absence of asset based credit and insurance ▪ Resource based conflict
	Vulnerability	<ul style="list-style-type: none"> ▪ Lack of capital ▪ Reforms and policies
1	<p>Technical and institutional</p> <p>Technical</p> <p>Animal health</p> <p>Livestock feed</p> <p>Livestock breeding</p>	<ul style="list-style-type: none"> ▪ Poor service delivery ▪ Stringent safety standards and sanitary requirements ▪ Improper feed resources utilization and management ▪ Lack of breeding policy enforcement mechanisms
	Institutional	<ul style="list-style-type: none"> ▪ Inadequate laws and regulations ▪ Lack of law enforcement mechanisms ▪ Poor institutional set-up

The reporter of each group presented the findings of the corresponding group and the participants commented that most of the problems identified could be rearranged. Therefore, the overall problems extracted from the two groups were clustered in the following manner.

	Category	Problem
1	Inadequate knowledge	<ul style="list-style-type: none"> ▪ Lack of knowledge on the livestock resources, their role and contribution ▪ Poor understanding of the impacts of policies on the sector ▪ Poor attention to the indigenous knowledge
2	Marketing	<ul style="list-style-type: none"> ▪ Inadequate policy for market stabilization ▪ Poor negotiation on regional and other markets ▪ No market integration ▪ No grades and quality standards ▪ No added value ▪ No cooperatives and groups ▪ No credit markets
3	Livestock services	<ul style="list-style-type: none"> ▪ Animal health ▪ Animal feeds and nutrition
4	Awareness creation	<ul style="list-style-type: none"> ▪ Advocacy ▪ Negotiations
5	Information management and sharing network	<ul style="list-style-type: none"> ▪ Lack of information management and sharing network ▪ No strong livestock early warning system
6	Capacity	<ul style="list-style-type: none"> ▪ Lack of capacity to formulate policies ▪ Conflict management (social institutions) ▪ Low investment ▪ Low infrastructure ▪ Limited off-farm job opportunities

SESSION V: OUTPUTS AND ACTIVITIES USING LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<u>GOAL:</u> The livelihoods of poor livestock keepers improved	Livestock sector growth larger than overall economic growth		
<u>Overall purpose:</u> Promote competitive, safe, equitable and sustainable livestock farming by enhancing poor livestock keepers' capabilities in managing their farm and risks through improvements in policy and institutional reforms	<ul style="list-style-type: none"> ▪ Increased household income ▪ Increased response of government ▪ Increased quality and safe products 		
<u>Specific objectives</u>			
1. To enhance and strengthen the capacity and capability of the governance and institutions in formulating appropriate livestock policy and institutional reforms	<ul style="list-style-type: none"> △ Appropriate information networking developed and improvements in the capabilities of key institutions in information management that assist in planning and policy formulation △ Improved professional competence and efficiency of functional experts in designing livestock developments that target poor livestock keepers △ National veterinary services, breeding and 	<p>Reports of focused group Surveys and beneficiary interviews</p> <p>Key informant interviews</p> <p>Periodic reports by stakeholders</p> <p>Supervision reports</p> <p>M&E reports</p> <p>Review of documents</p>	<p>Existing favourable political environment continues</p> <p>Donor and government matching fund released on time</p>

	<p>natural resource management policies with legislative or enforcing mechanisms developed</p> <ul style="list-style-type: none"> Λ Coherent policy (based on evidence and research to understand the root cause of conflicts, institutions, environments,) for conflict management and economic integration were formulated for pastoralists Λ Involvement in policy formulation, implementation and decision making of poor livestock keepers and others, the hitherto disadvantage members of the communities increased Λ The capacities of pressure groups for lobbying and advocacy is enhanced 	<p>Participatory monitoring & evaluation</p>	
<p>2. To enhance understanding and bring attitudinal/advocacy change on the role of livestock to the livelihood of poor farmers and country's economy and the impact of macro economic policies and sector issues on the development of the</p>	<ul style="list-style-type: none"> Λ Appropriate methodology for estimating livestock resources developed and implemented Λ Developed decision support system for policy makers, development workers and farmers to improve livestock production Λ Reliable data/information generated enabling in decision making based on the understanding the impact macro and sector polices on the competitiveness of the livestock sector Λ Better understanding of gender role and contribution to livestock production and 	<p>Reports of focused group surveys and beneficiary interviews</p> <p>Key informant interviews</p> <p>Periodic M&E reports by stakeholders</p> <p>Review of programme document</p> <p>Training/workshop review reports</p> <p>Focussed studies</p>	<p>Existing favourable policy environment continues</p> <p>Donor and government matching fund be available and released on time</p>

livestock sector	<p>service delivery</p> <ul style="list-style-type: none"> Λ Good quality technical publications, baseline and assessment reports on the role of livestock produced, effectively utilised and widely disseminated Λ Increased sensitization of the importance of the livestock sector done at different levels 		
<p>3. To promote the livestock keepers income (off-farm, on-farm and economic diversification) and manage risks</p>	<ul style="list-style-type: none"> ➤ Improved knowledge and skills in saving and investment capabilities of rural women and men ➤ Better access to credit market ➤ Number of livestock keepers trained in micro enterprise and related skills, ➤ Marketable products increased (diversity, quantity, quality) ➤ Number of market groups, unions, cooperatives organised ➤ Improved livelihoods diversification through promotion of alternative sources of income-skills and; stimulating the rural economy: ➤ Entrepreneurship and management capacity of Credit Institutions and Cooperatives enhanced and developed ➤ Improved income (per capita income-consumption) and saving; asset creation ability ➤ Improved access to services and inputs 	<p>Field, household and focussed surveys Supervision and survey reports Financial reports</p>	<p>Timely budget transfer from donor, government</p>

	<ul style="list-style-type: none"> ➤ Change in the capacity to provide technical support ➤ Improvements in the amount and quality of appropriate technologies ➤ The capability and capacity of farmers to adopt new technologies increased 		
<p>4. To establish effective market system that benefit the poor livestock keepers from competitive market</p>	<ul style="list-style-type: none"> ➤ Appropriate and policy enabling environments developed and implemented (reducing tariff and non-tariff barriers for livestock inputs and exports, simplified procedures for customs, licensing, regulation;) ➤ Guidelines on quality and standards for livestock and livestock set and enforced for implementation ➤ Enhanced international and inter-African markets through harmonized grades and standards and support of international and regional blocks in political leverages for bilateral/multilateral agreements, and linkages ➤ Capacity and capability developed for establishing and/or promoting export zone ➤ Improved capacity in adding value of animal products ➤ Improved poor farmers access to the credit market ➤ Improved market infrastructure resulted in reduced 	<p>Field, household and focussed surveys Supervision and survey reports Financial reports</p>	<p>Existing focus of poverty reduction of regional and international organization continue</p>

	➤ the transaction cost		
Outputs			
<p>1.1. Capabilities and capacities of in information network and sharing strengthened</p> <p>1.2. Improved in developing appropriate policy based on facts and findings</p>	<p>1.1. Achievements in key organizations and institutions</p> <p>Λ Necessary operational physical infrastructures and soft wares constructed, renovated or/and upgraded;</p> <p>Λ Studies and trainings undertaken and; study reports, training, working manuals, etc produced; findings/information shared; and utilised</p> <p>1.2.</p> <p>Λ Number of strategic policies and institutional reforms</p> <p>Λ Number of poor livestock keepers participated in policy formulation, dialogue and in decision makings</p> <p>Λ Number of livestock keepers benefited out of each capacity building events</p>	<p>Field and periodic reports</p> <p>Working manuals and guidelines</p> <p>Target focussed surveys</p> <p>Field visit</p> <p>Technical publications</p> <p>Key informants interview</p> <p>Training report</p> <p>Impact assessment, M&E and financial reports</p>	<p>Timely budget transfer from donor</p> <p>No significant change in institutional set up</p> <p>Civic society favored the program</p>
<p>2.1. Attitudinal changes and increased advocacy for strengthening the sector.</p> <p>2.2. Development of tools, methods and models for decision support system</p>	<p>2.1. Attitude change and advocacy</p> <p>➤ Better understandings by experts, development workers and policy makers on the roles of livestock and impact of policy and institutional reform</p> <p>2.2. Approaches and tools</p> <p>Λ Number of tools and models developed</p> <p>Λ Type of research approaches used</p>	<p>Key informants interviews and field visits</p> <p>Focussed survey workshop reports and proceedings</p> <p>Periodic M&E reports by organisations</p>	<p>Sustained support by communities in providing the necessary information</p> <p>Revolving fund</p>

<p>3.1. Livestock keepers motivated</p>	<p>3.1.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Number of farmers trained in skill development and improved production through diversification 	<p>Household survey and impact assessment</p>	<p>Existing favourable policy environment continues</p>
<p>3.2. Saving and investment capabilities of rural women and men increased through enhancements of their technical know-how and skills in off-farm income generation opportunities, through better access to services and increased credit provision</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Policies and institutional reforms that expand the ownership and control of the poor over productive assets <input type="checkbox"/> Attitudinal change in engaging on-farm employment and innovative attitudes to improve <p>3.2.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Percent increase in number/types of off-farm income generating (including agro-processing) activities initiated and developed; Number of households involved (with adequate credit facilities). 	<p>Field survey and annual reports of RRA; Consultants supervision; Market place studies of Focussed survey Impact assessments and M&E reports</p>	<p>Donor and government matching fund released on time</p> <p>Staff turnover reduced</p>
<p>3.3. Develop capacities of the support system</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Percent increase in number of credit beneficiaries and amount of money disbursed for investment in off-farm income generating activities (Percent, female members of the communities) <input type="checkbox"/> Number of cottage industries, cooperatives and other business ventures established/promoted; <input type="checkbox"/> Improved quality and quantity of marketable off-farm products produced and delivered in various markets <input type="checkbox"/> Percent of saving deposits mobilised, reinvestments and off-farm labour led to 		

	<p>increase in income to percent of the total population; Percent of whom managed acquiring a good value assets [Percent/Number of women members]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Enhancements of the environments that enhance institutional development of poor livestock keepers <p>3.3-</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increased availability of technologies for agro-processing and add diversification <input type="checkbox"/> Number of extension staff trained in economic diversification <input type="checkbox"/> Improved livestock service delivery system <input type="checkbox"/> Number of private and NGO's participating in livestock delivery system 		
<p>4.1. Appropriate and enabling marketing policies developed</p> <p>4.2. Bilateral and multilateral trade agreements strengthened</p> <p>4.3. More participation of livestock keepers in competitive marketing enhanced</p>	<p>4.1.</p> <ul style="list-style-type: none"> < Policy, guidelines and legislatives put in place < Number of private investors engage in livestock marketing <p>4.2.</p> <ul style="list-style-type: none"> < Participations of regional blocks and international organizations in assisting market policy harmonization, negotiations and linking inter-African trades <p>4.3.</p> <ul style="list-style-type: none"> < Number of rural farmers and pastoralists 	<p>Reports from health centres/bureaus</p> <p>Household surveys</p> <p>Focussed Group Interviews</p> <p>Programme reports</p> <p>Impact assessment reports</p>	

<p>4.4. Availability of basic market infrastructure strengthened</p>	<p>actively participate in livestock marketing (local, outside)</p> <ul style="list-style-type: none"> < Increased country revenue from livestock marketing <p>4.4.</p> <ul style="list-style-type: none"> < Development of export zones at strategic location < Number of market infrastructure and means of livestock transport developed < Increased investment in disease surveillance and health management 		
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Activities

1.1.x

- Λ Development of information networking
- Λ Training in information management, networking, and use of new ICT soft wares
- Λ Develop guidelines and manuals for resource inventory and analysis
- Λ

1.2. x

- Λ Undertake participatory policy research
- Λ Collect and analyse gender disaggregate data
- Λ Strategies and policies for conflict management in pastoral areas
- Λ Undertake awareness creation on the benefit of employing participatory policy and development formulation
- Λ Trainings of farmers, development agents

2.1. x

- Macro and micro-economic analysis
- Analysis of country sector and institutional reforms; and region polices in their implication affecting the livelihoods of poor livestock farmers
- Strategies for effective coordination of all stakeholders
- Workshops and publication on the evidences and facts to the various organizations and people
- Increased usage of mass media for advocacy
- Production of ICT materials and usage

2.2. x

- Λ Develop methodologies, models and policies that can be used in understanding of resources and their management
- Λ Improve the capacity of the national research system in policy and institutional reforms
- Λ Undertake focused thematic research in an integrated manner
- Λ Information and tools to analyse the impact of norms, institutions on various livestock strata and mechanisms to catalyse the required change

3.1. x

- Training of farmers in skill development and improved production
- Develop appropriate institutions that encourages motivation of farmers
- Understand and strengthen traditional knowledge

3.2. x

- Develop appropriate credit and saving system
- Develop and strengthen small-scale agro-processing activities
- Training on food safety, quality and standards
- Training on credit and saving
- Understanding and factors that can strengthen the capacity of informal social insurance to cope with the covariate of food security risk
- Understand the role of credit market in rural areas to cope risk and break vulnerability

3.3.x

- Improve the capacity of the research system to generate appropriate technologies (in situ or imported and tested) for agro-processing and add diversification
- Training of extension staff trained in economic diversification
- Develop appropriate livestock service delivery system
- Develop appropriate enabling environments both policy and institutional reforms that encourage private investors and NGOs' to participate in livestock delivery system

4.1. x

- < Develop appropriate enabling policy environments, simplified procedures
- < Develop procedures, guidelines to assist in harmonization of standards
- < Develop appropriate institutional reforms and policies that enhance delivery of quality veterinary medicine
- < Enabling environments to encourage private investors engage in livestock marketing
- < Develop norms, standards, to facilitate safe livestock farming

4.2. x

- < Developing strong trade link using many strategies
- < Develop platform and facilitating negotiation with regions, strengthening the negotiation and decision making process

4.3. x

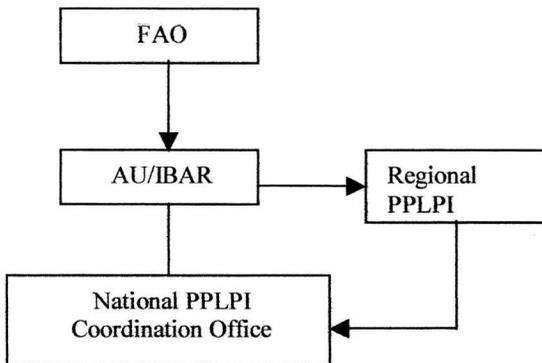
- < Monitor the attributes that encourage or discourage rural farmers and pastoralists in participation of livestock marketing (local, outside)

4.4. x

- < Develop capacities and awareness to develop export zone
- < Develop capacities and capabilities of disease surveillance and health management at a national level
- < Introduce animal identification, certification, and legislatives for animal movements

SESSION VI: MANAGEMENT OF THE PROJECT

Project Structure



The participants have discussed the issue in greater length and have reached at a decision that the PPLPI at the national level be structured under the relevant line ministry (MoA ?) to have a link with the country's development agenda and policies. However, there were reservations on the mere fact that the project activities may be jeopardized with the extended bureaucratic system particularly in facilitating the required input supplies as per the need and demand. To avoid such unnecessary up and down the project management would be given a semiautonomous right to administer the budget and other related activities.

A managing board whose members would be the major stakeholders would direct the overall management and organization of the project. A separate office established under the auspices of the responsible line government body would undertake the routine activities of the project. The office would have a manager, administration, finance and some other auxiliary staff.

SESSION VII: CONCLUSION

It makes equally clear that improvements in the current livestock system are needed to ensure the sustainable contribution of the sector in poverty alleviation in the rural community. The question arises, at this junction, would be what kind of approach and interventions are needed to lay the basis for improved livestock production system that again lead to the improvement in the quality of life of the livestock keeper.

Therefore the PPLI approach could take into account the diverse livestock base and aspirations from rural poor to ensure a meaningful change in the livelihood of the beneficiaries.