

Review and Identification of a Livestock Sector Strategy and Programme to Address Food Insecurity and Economic Development in Somalia



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Abbreviations

AfDB	African Development Bank
ASAL	Arid and Semi-Arid Land
AU/IBAR	African Union / Inter-African Bureau of Animal Resources
CAHC	Community-Base Animal Health Care
CAHW	Community-based Animal Health Worker
CBPP	Contagious Bovine Pleuropneumonia
CCPP	Contagious Caprine Pleuropneumonia
CERELPA	Central Regions Livestock Professionals' Association
COMESA	Common Market for Eastern and Southern Africa
CSU	Common Service Unit AU/IBAR PACE Project
CVL	Central Veterinary Laboratory
CVO	Chief veterinary Officer (=Director of Veterinary Services)
DG	Director General
DVO	District Veterinary Officer
DVS	Director of Veterinary Services (=Chief Veterinary Officer)
EC	European Commission
ECHO	European Commission Humanitarian Office
ECSALI	Enhancement of Capacity of Somali Agricultural and Livestock Institutions Project
ECSOU	European Commission – Somalia Operations Unit
EDMU	Epidemiology and Data Management Unit
EMPRES	Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases - a priority global programme of FAO
EPR	End of Project Report
EXCELEX	Export and Certification of Livestock for Export Project
FAO	Food and Agriculture Organisation of the United Nations
FEM	Final Evaluation Mission
FSAU	Food Security Analysis Unit (managed by FAO)
FVM	Faculty of Veterinary Medicine
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
ICRC	International Committee of the Red Cross
IGAD	Inter Government Authority on Development
ILRI	International Livestock Research Institute
INGO	International Non-Governmental Organisation
ITP	Itinerant Training Programme
JNA	Joint Needs Assessment
JSP	Joint Strategy Paper
LAS	League of Arab States
LICUS	Low Income Countries Under Stress
LMIS	Livestock marketing Information System
M & E	Monitoring and Evaluation
MoL	Ministry of Livestock, Somaliland
MoLAE	Ministry of Livestock, Agriculture and Environment, Puntland
MoU	Memorandum of Understanding
MTE	Mid-Term Evaluation
NAHA	Nomadic Animal Health Assistant
NGO	Non-Governmental Organisation
NUG	National Unity Government of Somalia
OIE	Office International des Epizooties (World Organisation for Animal Health)
PACE	Pan African Control of Epizootics
PATTEC	Pan African Trypanosomiasis and Tsetse Eradication and Control
PDS	Participatory Disease Search

PMU	Project Management Unit
PPR	Peste des Petits Ruminants
PULPA	Puntland Livestock Professionals' Association
RP	Rinderpest
RVF	Rift Valley Fever
RVO	Regional Veterinary Officer
SAHSP	Somali Animal Health Services Project
SERECU	Somali Ecosystem Rinderpest Eradication Coordination Unit
SISAS	Strategy for the Implementation of Special Aid to Somalia
SOWELPA	South Western Livestock Professionals' Association
SoLNAVA	Somaliland National Veterinary Association
SLCCIA	Somaliland Chamber of Commerce, Industry and Agriculture
SLPF	Somali Livestock Professionals' Forum
SSS	Somalia Support Secretariat
STVS	Sheikh Technical Veterinary School - located in Somaliland
SVP	Somali Veterinary Professional
TAD	Transboundary animal disease
TADInfo	Transboundary Animal Diseases Information System
TFG	Transitional Federal Government of Somalia
ULPA	United Livestock Professionals' Association
UN	United Nations
UNDP	United Nations Development Programme
VIC	Veterinary Investigation Centre
VSF	Veterinaires sans Frontiere
WAHD	World Animal Health Information Database - of the OIE
WB	World Bank
WHO	World Health Organisation of the United Nations
WTO	World Trade Organisation

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Executive Summary

Background

Somalia ranks amongst the poorest countries in the world with a per capita income of \$ 226. Incidence of poverty in Somalia is very high, on average 73% of the population lives under the poverty line of \$2 purchasing power parity per capita per day and 43% lives in absolute poverty i.e. under the poverty line of \$1 per capita per day. The situation is even more critical in rural areas where about 80% and 53% of population lives in general and absolute poverty, respectively. The region also experienced severe drought shock in 2005 and 2005/2006, which destroyed the livelihoods of many agro-pastoralists and pastoralists. The severe floods which followed in Nov-Dec 2006 destroyed crops, displaced thousands of people and triggered an outbreak of animal diseases. The civil war also brought about the destruction of both public and private assets such as road infrastructure, factories, hospitals, schools and businesses. Government services have virtually ceased in some areas due to severe shortage of staff and operational budgets. There remains a humanitarian crisis with an estimated (by FAO in February 2009) total of 3.2 million people, or 43% of the total population being in need of Emergency Assistance.

The Livestock Sector

Somalia has a traditional livestock sector based on nomadic pastoralism and a growing private sector led export industry (partly as a result of the disappearance of the central government). The livestock sector dominates the economy, creating about 60% of Somalia's job opportunities and generating about 40% of Somalia's GDP and 80% of foreign currency earnings. Despite many problems including insecurity, political instability and bans by some major importing countries over the past 18 years, the number of animals and meat exported has grown steadily thereby boosting the economy and livelihoods in rural areas. Somalia currently exports 3 million sheep and goats, 176,000 cattle and 11,000 camels per year, plus varying quantities of carcasses from between 340,409 (2005) through a peak of 718,903 (2006) and a low of 377,395 (2008). This has been largely due to the resilience of the livestock sector and the entrepreneurship of the private sector, supported by substantial diaspora contributions and external donor funding. The private sector has also shown its strength and resilience in legal, quasi-legal or overtly illegal livestock marketing and export of live animals and products of animal origin. The private sector led export industry has helped to mitigate the impact of state collapse and war on the Somali people. Exports are used to exchange for imports of cereals, as the country has a significant cereal deficit. The livestock sector and exports therefore has a major impact on the country's food deficit and overall food security, which has worsened recently and therefore the need for increased growth of the livestock sector, is even more pressing.

EC and Other Donor Support

Donor support to development in the livestock sector has been considerable during the 2002-2008 period, with the EC, the main, donor funding some 20 projects costing over € 25 million. In addition, other donors have funded a further 10 projects for an estimated € 10 million. In broad sub-sectors the EC funding devoted some € 9.5 million to animal health, €8.6 million to marketing and € 6.1 million to HRD. Other donor support is split roughly 50/50 between marketing and production/animal health projects, though several projects cover one or more aspects.

The main target groups and beneficiaries covered a wide range of stakeholders including: pastoral and agro-pastoral livestock producers, livestock and meat traders and transporters, professional and trade associations in the three regions of Somalia including the Somaliland and Puntland Chambers of Commerce and Industry, Somali Meat Traders Association and veterinary associations, the public sector including the line ministries and local municipal councils, and finally international and local NGOs and UN agencies. Depending on the scope of the project, the main target groups and beneficiaries were either localized as is the case with milk, fodder and local slaughter facility

development or wide spread throughout the country as is the case with Rinderpest eradication, support to livestock marketing and slaughter infrastructure, LMIS and delivery of animal health services and inputs.

Unfortunately the reviewed MTR, MTE and end of project reports reveal that the projects did not have baseline data to enable impact to be quantified. In addition it has not been possible with the lack of accurate, appropriate and complete data on activities undertaken and their associated costs, the limited resources available and short time allocated to this study to be able to calculate a cost/benefit analysis for each intervention. It is therefore difficult to carry out cost/benefit analyses of each project completed. In addition, there is no without-project situation to enable true impact of EC projects to be calculated and it is also difficult to determine with certainty what the results were and/or what results could be directly attributed to the EC and what was due to other factors. Thus, whilst a large number of vaccinations were undertaken, the laboratories that could have been used to confirm the presence of disease before vaccination and effectiveness of the vaccination (through sero-conversion) were either not functional, as is the case in Somaliland and South Central Somalia, or not fully functional, as is the case in Puntland. Also, as KSA continued to "allow" Somali livestock through Yemen and Egypt even after the declaration of the official bans in 1999 and 2000, and before any credible animal health inspection and certification was put in place, any increase in live animal exports may not be solely due to improved disease surveillance and control efforts and the associated support to the private or public sectors, but due to other considerations. Finally the UAE allowed the export of Somali meat into the market before the export slaughter facilities met international construction and operating standards or established credible quality assurance systems. Again this shows that while the efforts by EC and other development partners to institutionalize regionally and internationally acceptable procedures to promote the export of meat, other factors come into play.

This should not be taken to imply that the EC and other development partner investments have had no impact, but rather that they demonstrate the magnitude and complexity of the problems in the Somali public administration and the livestock sector and the intrigues of the Somali live animals and meat export trade. The importing countries have appreciated the support given to date by EC funded projects as shown by the positive comments by the UAE, Yemen, Oman and KSA veterinary officials in formal functions. They are hopeful that in due course Somalia will be in a position to export quality assured meat and live animals inspected and certified by credible entities which will most likely be private sector-based. The acceptance in February 2009 by large Somali livestock traders to use the Berbera and Bosaso quarantine stations to access the KSA markets supports this line of argument. It is thus, a worthwhile strategy for EC projects to invest in consultative meetings between Somali live animals and meat exporters through their associations and the authorities and traders in KSA, UAE and other Middle East markets to foster good relations as the projects continue to support the establishment of the required systems and standards.

In spite of the above limitations, the Mission feels that the overall impact of these projects has been appreciable. Milk and domestic slaughter and meat market development were significant, with only one project, ECSALI, considered a relative failure. Capacity building efforts that focused on the public sector supporting the development of policy and legal framework, helped create an enabling environment for the private sector. However, despite years of continued technical and financial support, the public sectors in the three regions of Somalia remain relatively weak, especially in the South Central Region, where high staff turnover and continued civil instability has made it difficult to set up functional institutions. The impact of the EC funded projects is reviewed in the report, mainly in technical terms, but where possible in economic terms, from which the main points are summarised below.

EC funded projects in Marketing have laid the foundations for disease surveillance and control, production of quality assured meat and healthy animals, laboratory support and adoption of traceability, the level of contamination and rejection at the terminal market in UAE have fallen by 30% and there has been an increase in hides and skins recovery rate (by up to 30%) and in the quality of sheep and goat skins. The beneficiaries of the live animal and meat export trade are spread

throughout Somalia and parts of Ethiopia. EC funded projects are currently testing a traceability system for both meat and live animals in preparation for more stringent export requirements that are expected from the importing countries. This is an essential activity that is yet to be completed. SERECU in collaboration with SAHSP have implemented activities to ensure that Somalia is declared free of Rinderpest without vaccination. SOLICEP aims to establish an animal inspection and certification system for Somalia and Ethiopia, but is yet to make any impact as it has not been granted the go ahead to implement activities in Puntland and Somaliland. This project is essential and these activities need to be fast tracked.

EC funded projects in Animal health have supported the development of policy and regulatory frameworks for the livestock sector, particularly in Somaliland and Puntland, although surveillance is better developed in Central and Southern Region than in Puntland and Somaliland Project Zones. They also supported the establishment of laboratories and animal disease information system yet at present there are no functional laboratories and the disease information system has not taken root. Considerable funds from both the EC and ECHO have been allocated to vaccination campaigns implemented by INGOs throughout the country. However, vaccination returns only indicate the number of animals vaccinated and do not indicate the population size. In practice vaccination should cover at least 80% of the population for the vaccination to be effective, unless it is a strategic ring vaccination in a given area to contain a disease outbreak.

EC funded projects in Milk Production and Marketing have supported dairy development projects in Puntland and Somaliland whose direct beneficiaries included 8,200 pastoral milk producing families (49,200 direct beneficiaries) and 780 indirect beneficiaries and has proved that dairy development is an opportune intervention area in all regions of Somalia and especially suitable for women groups. These initiatives have also demonstrated benefits to be derived through supporting peri-urban producers and fodder production areas in rural and urban areas in the South Central Region. With increasing urbanization and urban populations in Somalia, demand for milk is likely to increase and therefore this sub-sector has considerable potential and gives significant economic benefits that go directly into household support.

EC funded project in HRD. Capacity building interventions in the public sector have been focused on government's role in establishing and enforcing regulatory frameworks, policy making and creating an enabling environment for the private sector. These have been relatively successful in Somaliland and Puntland to-date, although more support is required to consolidate efforts. However, one project was largely a failure in relation to public sector capacity building efforts due to frequent changes in senior public sector personnel, inadequate staffing levels, lack of running/maintenance costs and insecurity (the ECSALI project, which was a major capacity building exercise aimed to strengthen the public sector throughout the country), although it had some achievements in relation to the development of various master plans in agriculture and in South Central Region in livestock. EC funded projects have trained various cadres of service providers along the livestock production and marketing chains, as well as in-house and external training of administrators, accountants, meat inspectors, laboratory and animal health technicians and veterinarians in the public and private sectors. The trained lay and professional personnel are a boost to the Somali livestock industry but ways must be found to determine how best to support the Ministries to retain the staff. STVS has played an important role in training middle level veterinary staff. Three phases of support to the STVS have invested about €6.6 million to-date, but it remains underutilised, as student numbers are relatively low, and therefore it is dependent on donor operational cost support. The issue of whether the lack of financial sustainability to-date justifies targeting the institution further with the limited allocation of EDF funds available, or whether viability can be expected within the short term, is discussed in the report.

MAIN LESSONS LEARNT

- There remains the need for consolidation of efforts to-date in all sub-sectors throughout the country and for further investment throughout the country

- Further support to consolidate, achieve sustainability or expand recently completed or on-going EC funded projects warrants priority in terms of follow up or extension in the immediate first phase of the 10th EDF, especially as project staff are in place. This includes further support to livestock, meat and milk marketing, further development of livestock and meat market information systems, further support to the provision of animal health services by the private sector supported by the public sector, further HRD development and support to livestock production through improved fodder production.
- Future funding for public sector support should only be made when the socio-economic and political situation allows a critical number of staff to be in place and government budget priorities allow for on-going operation and maintenance costs. There was little or no impact in infrastructure development in the face of inadequate staff and lack of running/maintenance costs.
- While implementing activities which necessitate community dialogue, mobilization and participation, it would be better to support district organisations and veterinary/other professional associations, as the latter seem to be very committed, more stable, politically neutral and would provide a trained pool of human resource in the private sector that can be hired by the public sector.
- Projects aimed at improving animal health delivery services and livestock marketing, processing and trade have widespread benefits throughout the country as all producers/pastoralists can benefit from improved animal health/greater production, higher prices and greater volume of trade resulting from these projects. Similarly the benefits from training veterinarians and CAHWs in the private sector that supports pastoralists are widespread.
- This report highlights that whilst the EC funded projects have supported many initiatives in animal production, health and marketing over the last two decades, it is important that the achievements of these initiatives are verified by an independent assessor/evaluator to: (i) determine what has truly been accomplished as opposed to what was designed to be accomplished and (ii) develop baseline values in the future programme that can inform and be used to measure impact of future EC funded interventions.

Programming Mission

The EC Programming Mission¹, from mid-January to mid-March 2009 was not able to access most of the country due to security reasons and closure of the border with Kenya. Field visits were limited to Somaliland only (refer security status in January 2009 in Map 3, Annex 3 showing areas that are inadvisable to visit). The regions not visited were assessed as far as possible on the basis of previous visits made by team members during the last few years, reports and project documents, discussions with INGOs and FAO project managers, donors and some Somali regional administration officials in Nairobi. A consultative workshop was held in Nairobi attended mainly by INGO, UN agency and donor representative staff, plus Ministry officials from South Central Region to discuss the study team's findings and provisional intervention proposals. Additionally, the team engaged local professionals in Puntland and South Central Region to gather pertinent information in these regions.

Subsequently the Mission prepared a Draft Report with provisional proposals for comments from the EC-SOU. These comments placed huge emphasis on: a) having cost/benefit analyses of both existing EC funded projects and for each of the interventions proposed by the Mission that would enable an assessment of past performance and selection of new interventions based on this criterion, and b)

¹ Team from Cardno Agrisystems Africa Ltd comprising Ian Talks (Team Leader), Dr. Solomon Munyua and Dr. Rachael Masake (Livestock Specialists), plus David Hopkins as Project Director

having a complete and in-depth review of the sector as a whole to enable the total needs of the sector to be assessed and costed. The nature of the situation in Somalia, the lack of reliable quantifiable data, the difficulty faced by the Mission based in Nairobi without access to much of the country to meet target beneficiaries at grass roots level and inability to obtain accurate current and relevant data including amounts of funds invested and the achievements from some EC funded projects meant that detailed financial or economic analysis could not be carried out. Even in the absence of these conditions, it would still be difficult to measure the economic impact of technical assistance and capacity building programmes in the livestock sector in Somalia due to the many factors contributing to programme impact. Figures, numbers and statistics on Somalia are estimates of varying reliability and to base planning on such figures or to use them to argue decisions constitutes a risk to the proposed programme. Nor was it possible to calculate the actual total funding requirement of the sector as a whole and for the whole country. There are gaps in the needs assessment, especially in rural areas, and especially in rural and urban areas of Puntland and South Central Region. A complete and thorough review of the sector at national level will have to await an improvement in security and penetration of the public sector into the rural areas, to allow full field access, improved data collection and stakeholder participation.

Formulation of a Livestock Sector Programme for the Next Five Years

The overall impression was that despite continued technical and financial support, much remains to be done for the Somalia livestock sector. Problem analysis has revealed a myriad of constraints and scope for considerable expansion of donor supported efforts to cover more of the target group of pastoralists, agro-pastoralists and peri-urban farmers and capacity building in both private and public sectors. Such support will require more funding than has been allocated from the 10th EDF funds to-date. In view of the fact that there are no detailed cost/benefit estimates to measure expected impact, the Mission has relied on the findings of the present study and the guidelines contained in the JSP and JNA to prioritise areas of interventions in the proposed programme in line with the limited resources available from the 10th EDF.

Some of the JNA guidelines that have been followed by the Mission include a broad assessment of the relative costs and benefits and extent of beneficiaries involved, provision of capacity building support that will lay the foundation for a longer term development should security and governance improve in the future, promotion of market and product diversification to sustain or increase exports and product quality, support to small scale production systems giving good socio-economic returns, promotion of proper and safe use of veterinary drugs, improvement in public hygiene standards at slaughter facilities and natural resource management, all with a focus on competent and supportive public and private institutions. These guidelines lead to a priority towards consolidation of existing projects concerned with private sector or supportive public sector roles that build upon successful interventions with a broad benefit throughout the sector. In addition, the nationally important livestock trade and especially the export trade face major challenges, namely competition from other livestock exporting countries for existing and new markets, and the need for compliance with livestock trade regulations and international standards.

Priority Programme

The proposed livestock programme comprises three main programme areas listed below, supported by co-funding of a census and associated dynamic studies that is common to the sector as a whole. Within each programme area, a number of priority interventions have been identified. They are grouped in a manner that would create synergy and in relation to their strategic importance to the national economy. For example support to animal health inspection and certification is an animal health intervention but which supports marketing. Support to human resource development would be an integral part of each of the programme areas as capacity building is needed throughout, including: (i) human resource development - including in-house, STVS and regional training, (ii) building the capacity of the ministries to retain staff to implement policies and enforce the legal frameworks and (iii) physical infrastructure - offices and storage area for the cold chain, LMIS database equipment

and computers and office furniture. The programme areas all come under the overall EC programme goals of food insecurity reduction and promotion of private sector-led economic development in partnership with government and the private sector.

- Component 1: Environmentally sustainable livestock and livestock products and marketing practices, value addition and services provision enhanced
- Component 2: Internationally recognized and cost-effective systems of animal health surveillance, inspection and certification system, and public and private veterinary services delivery system established and operational
- Component 3: Livestock sector institutions established/strengthened and sector policies, laws and regulations developed

They are listed in order of importance to the target communities and considering the chances of the activities being sustained by the beneficiaries and/or the public sector in the respective regions. M & E inputs are also proposed as they are considered a high priority, but it is understood that funding would be obtained from other EC sources. Details of the main priority interventions identified under each programme area are presented in the report. Based on the tentative allocations of the 10th EDF to the livestock sector, the total indicative costs for the three programme areas and the census is estimated at €13.75 million of which the EC contribution is €12.5 million. See Table 1 below;

Table 1: Cost Allocations to Main Programme Areas

Main Programme Area	€ million
1. Support to development and production environmentally sustainable livestock and livestock products and marketing practices, value addition and services provision	5.5
2. Support to establishment of internationally recognized and cost-effective systems of animal health surveillance, inspection and certification system, and public and private veterinary services delivery system established and operational	5.0
3. Strengthen/establish livestock sector institutions and develop appropriate sector policies, laws and regulations	2.0
4. Total EC contribution	12.5
5. Partner contribution	1.25
Total Funding	13.75

Total funding is about half the level of EC funding to development projects in the livestock sector in the previous 5-7 years. Actual cost will need to be determined at the project preparation stage along with expected benefits to each project. Details of main activities and inputs under each programme component are presented in the report and summarised in the programme log frame shown in Chapter 4.9.

Justification

Despite the poor data and lack of detailed cost/benefit analyses, the dire need of the population and the clear contribution that the livestock sector can make to alleviate their plight, makes it possible to argue that a number of significant positive economic outcomes can be expected from the proposed programme in order to make a strong case for providing continued support to the livestock sector. Estimations of the main economic benefits, the target beneficiaries and justifications for each programme area are presented in the Log Frame in Chapter 4.9 from which the main justification for providing continued support to the sector include:-

- In 2007 it was estimated that 65% of Somalis were directly engaged in livestock production and another large segment was employed in ancillary activities. It is estimated that some 5.6 million people (70% of the population) are rural of which about 55% are pastoralists and agro-pastoralists. 3.1 million (40% of the population) lives in urban areas and creates a ready market for milk and milk products.
- Based on estimated offtake rates and the number of sheep and goats slaughtered for home use, some 17% (1.19m) are consumed in urban and peri-urban areas. The milk, for both home consumption and sale, and livestock slaughtered for home consumption and sale provide about 60% of calorie intake by the people in rural and urban areas. It is therefore important that milk production and marketing and improvement of local livestock marketing infrastructure including domestic slaughterhouses and meat markets are supported. In addition to contributing to local economies, such actions will improve the quality of milk and meat thus safeguarding human health and also improve offals and hides and skins recovery from the model slaughterhouses. The improved production and management of offal and hides and skins will expand sources of income to stakeholders in the livestock production and marketing chains.
- The export of 3.0 million and 0.5 million live animal and carcasses respectively accounts for an estimated 80% of exports in normal years but exports have been periodically interrupted by bans imposed by importing countries mainly on the grounds of preventable and controllable livestock diseases. Thus, the livestock sector, and especially the live animal and meat exports, is under threat from economically and socially important animal diseases such as Rift Valley Fever, Brucellosis, Foot and Mouth Disease and emerging diseases.
- Poor animal health service delivery and provision of quality inputs remain some of the biggest challenges to the animal resource base and livestock export-based Somali economy. Much remains to be done to get the animal health services in both the private and public sectors up to a level that meets producer's needs. The programme concentrates on operationalising the laboratories financed by the EC under SAHSP, SOLICEP, SERECU, and the provision of follow up support to the private veterinary associations to provide drugs and vaccines. It is important that the regions of Somalia are supported to establish functional disease surveillance, treatment and control systems to address the economically and socially important diseases that can affect human health and / or interfere with regional and international trade. Effective disease diagnosis and surveillance supported by timely vaccination and treatment contains disease and enhances productivity of livestock.
- Improvement of veterinary drugs supply and control through establishment of an active veterinary board or inspectorate to curb the influx of fake drugs into the market and would assist in preventing misuse that can damage both human health and export markets if drug traces are found in meat.
- A system for tsetse control using community implemented baited Tsetse traps to reduce the fly population along the rivers augmented by the provision of subsidized trypanocidal drugs through the established private sector veterinary drug outlets. If instituted during dry season when livestock concentrate along the river basins, the provision of trypanocidals will reduce incidences of Trypanosomosis, which without check can result in high morbidity and mortality especially in young stock. To ensure that the subsidized trypanocidals do not affect the performance of the private sector veterinary drug suppliers, the products will only be provided through their outlets before the dry season.
- The processing and export of livestock, which earned about 120 million USD in 1997 and 250 million USD in 2007, accounts for at least 60% Gross Domestic Product (GDP) and provides the main source of Somali livelihoods including the much needed wealth and job creation for youth and women at points of production and processing. The development and growth of livestock market infrastructure especially in secondary and terminal markets in municipalities will go along

way to supporting this key productive sector. In addition, it is important that the nascent livestock and meat information systems are harmonized and supported to inform the pastoral livestock producers and traders at the primary and secondary markets.

- It is equally important that meat quality assurance and traceability and animal health inspection and certification systems that meet the regional and international standards are established while the public sector develops supportive policy and legal frameworks.
- Intensification and expansion of livestock production can be achieved by promotion of fodder production, where socially and environmentally acceptable and sustainable, and improving the exploitation of the range on a sustainable basis. It is, however, critical that such actions are preceded by the identification of practical and sustainable range improvement / rehabilitation interventions that are acceptable to beneficiary communities and where selection of target areas takes into account the prevailing socio-economic and political realities.
- The benefits of improved food security, employment and economic development and a reduction in the vulnerability of the rural and peri-urban poor are in line with EC's overall policies.
- The support provided to the public and private sectors to date has laid some foundations for future growth of the public sector and expansion of the private sector. Coordinated support is required to consolidate these gains while creating a pool of trained human resource in the private sector by funding their training and outsourcing their services
- The livestock sector remains one of the biggest employers in Somalia and thus can gainfully engage youth who are drifting from the rural to urban areas. The programme purposefully focuses on women and youth, as they play a major role in the sector especially in milk and livestock marketing and operations at slaughterhouse and meat markets, with expected significant benefits at rural household level and to help stem the drift of young people out of the sector.
- To inject elements of sustainability, the proposed programmes would focus on consolidating and building on the gains made by the existing interventions and capacity building in both private and public sectors, and on ownership through beneficiary participation and involving the public sector in planning and M & E activities.
- Without support to the livestock sector, the consequences for the economy, employment and food security and the resultant need for food aid and emergency assistance is likely to be significant.

THE WAY FORWARD

The Mission has recommended a number of programme areas and priority interventions that match the likely funding available under the 10th EDF, **although there is considerable flexibility and scope for more interventions should more funding materialise, whether from the EC or from other donors.** Following agreement on the priority programme and overall funding levels, project identification, design, costing, evaluation and implementation arrangements through packaging of the various interventions into a number of distinct projects will be the next step.

1 Country Background

1.1 Physical

Somalia covers an area of approximately 638,000 square kilometres in the Horn of Africa and borders Kenya to the southwest and Ethiopia to the west and northwest. It also has a small border with Djibouti to the northwest. The long coastline, which is estimated at 2,960 km, has over the centuries allowed trade with the Middle East. Traditional livestock movements straddle these borders with large numbers of animals converging to the ports in the North for export. Total numbers exported annually are far higher than any of the countries in the region at approximately 3 million a year. Somalia's landmass is dominated by arid and semiarid rangelands for which pastoralism is the most appropriate form of land use. Some 55% of Somalia is classed as rangeland, 19 per cent as other land, 14% as forest and 12% as suitable for cultivation. The whole of Somalia is, however, used as pasture for its animals. A map showing the eco-climatic zones is attached in Annex 4. Most of the country has an average rainfall of only 100–200 mm, although some small usually elevated areas have an annual average rainfall of 500–600 mm. Open water evaporation usually far exceeds rainfall and is in the range 1,600–2,400 mm per year in the south of the country. Droughts occur regularly at intervals of 2–3 years in the 'der' season and 8–10 years in both the 'der' and 'gu' seasons.

1.2 Economic

According to the World Bank Watching Brief, Somalia ranks amongst the poorest countries in the world with a per capita income of \$ 226. Incidence of poverty in Somalia is very high, on average 73% of the population lives under the poverty line of \$2 purchasing power parity per capita per day and 43% lives in absolute poverty i.e. under the poverty line of \$1 per capita per day. The situation is even more critical in rural areas where about 80% and 53% of population lives in general and absolute poverty, respectively. To aggravate the situation, the Horn of Africa is prone to extremes of weather events, including drought and floods. The region experienced severe drought shock in 2005 and 2005/2006, which destroyed the livelihoods of many agro-pastoralists and pastoralists. The severe floods which followed in Nov-Dec 2006 destroyed crops, displaced thousands of people and led to the destruction of assets, including food stores, irrigation infrastructure, river banks, roads and bridges. The floods also triggered an outbreak of animal diseases. The events led to the collapse of traditional coping mechanisms that were under pressure from the civil unrest and collapse of state structures. A chart of the traditional coping strategies of pastoralists in Somalia is attached in Annex 3, Table 3. Without access to these traditional coping mechanisms, the target communities resort to destructive coping mechanisms including commercial charcoal burning, which only serve to feed the cycle of poverty and violence.

Donor support to Somalia has been substantial and, owing to its economic importance, the livestock sector has received considerable donor support during the last five years, with some € 40 million for development aid, plus significant amounts of emergency aid directed at providing relief to livestock producers.

Diaspora contributions have also played a central role in Somali's economy with an estimated one third of these contributions used for household survival, the rest destined to private investments, which have boosted private sector resilience, despite the civil war, and has seen a growth in trade, especially livestock exports. The private sector has to a significant extent, mitigated the impact of state collapse and war on the Somali people. Remittances, however, are likely to decrease with the current global economic recession. This coupled with a likely fall in demand for exported meat and increases in some food import and commodity prices will further increase pressures on food security and livelihoods in all parts of the country. In fact the humanitarian situation of the populations in some regions in Puntland and South Central is becoming critical and deteriorating due to the compounding impacts of rising food and fuel prices, droughts and insecurity. According to the FSAU

February 2009 report, a total of 3.2 million people, or 43% of the total population of Somalia are in need of Emergency Assistance and this represents a significant increase during the last year.

Livestock remains the most important production sector of Somalia, despite export bans, as approximately 3 million animals are exported each year, which creates about 60% of Somalia's job opportunities and generates about 40% of Somalia's GDP and 80% of foreign currency earnings. Taxation of livestock trade and export is one of the major revenue sources for the local administration, especially in Somaliland and Puntland, where exports take place. The civil instability also brought about the destruction of both public and private assets such as road infrastructure, factories, hospitals, schools and businesses. Further details of economic activities and sources of income for pastoralists and agro-pastoralists and socio-economic effects of the prevailing political environment are attached in Annex 8.

1.3 Human and Social

In 2006, the population of Somalia was estimated to be 7.7 million (World Bank). About 70% of the population lives in the rural areas, where food security and livelihoods are largely dependent upon livestock and to some extent crop production, especially in the South. Of this 70%, some 55% are pastoralists and agro-pastoralists, 24% are crop farmers and 1% is fishermen. The other 20 % of the population are urban dwellers.

Even before the civil war, Somalia was a food deficit country and has remained so ever since with a worsening trend in the last year. This is demonstrated in the graph of cereal production and food imports identified in Annex 3, Chart 1. At the household level in the rural areas, 20-60% of the rural poor produce their own food requirements in any given year and the rest is purchased or obtained through barter. As a result, individual production and purchasing power are the key determinants of food security. The nutritional status of populations throughout Somalia is poor with malnutrition levels continuing to exceed internationally accepted norms.

A decline in the Human Development Index (HDI) from 0.30 to 0.22 puts Somalia near the very bottom of the world ranking of this indicator and other basic indicators are all at the bottom of the scale. The latest UNDP HDI however does not quote an index for Somalia. As a further problem, the very limited health and other facilities are concentrated in urban areas and rural dwellers and the nomadic population has virtually no access to health, education or other social services.

2 Livestock Sector Analysis

2.1 Main Characteristics and Features of the Livestock Sector

Most donors and some NGOs have produced livestock review documents. The latest major sector reviews are: (i) EC Strategy for the Livestock Sector in Somalia, 1999, (ii) Towards a Livestock Sector Strategy, prepared by FAO/World Bank/EU in 2004; and (iii) Regional Livestock Study in the Greater Horn of Africa and Individual Country Profile for Somalia, ICRC, 2005. Each of the regions has produced their own livestock policy documents, although that in South Central is still at a draft stage. There is a need to produce and agree on an updated common livestock document for the whole country, but such a document may have to await the establishment of a single national government and secure peaceful conditions.

2.1.1 Production

Livestock are an indispensable source of human livelihoods and welfare in all three regions of Somalia. They are the main source of individual and collective wealth with animal production and marketing being the major source of food, income, employment and social status for most of the population. Despite the collapse of the Somalia state in 1991, exports to the Middle East and Kenya have remained the largest foreign exchange earner. This is partly due to the resilience of the producers and support from local authorities, informal institutions and development partners. Initially the export of live animals dominated the trade but with the 1999 ban by KSA and other traditional trading partners in the Middle East, the traders diversified and are now exporting chilled meat to UAE. However, animals are still reaching KSA via Djibouti and Yemen. While the live animal exports exploited a demand window created by the high demand for sheep before and during Hajj, the chilled meat exports have had to withstand stiff competition from Australia, South America, other African countries and Asia.

Most of Somalia is arid or semi-arid with erratic rainfall making pastoralism the only suitable form of livelihood. To manage this pasture-based livestock production, pastoralists practice seasonal or annual mobility of livestock in search of pasture over a large area of rangeland. The mobility and limited amount of vegetation often leads to conflict over range resources. In the Horn of Africa pastoralism as a livelihood is in crisis due to the increase in resource conflicts and political violence in pastoral areas. It has been difficult for the pastoralists to regain their previous migratory patterns in search of food due to inter-clan hostilities, privatization of land and fencing off of flood plains for fodder and grain production. As a result, there is widespread range deterioration. While conventional wide scale range rehabilitation and/or improvement efforts are time consuming, expensive and may lead to conflicts, it is imperative that studies to identify communally owned areas that can benefit from practical and cost effective rehabilitation/improvement efforts are identified for future interventions by EC or other development partners. A similar approach has been adopted by the WB funded RRRRLP project in Somaliland and Puntland with encouraging results.

There are no reliable recent estimates of total livestock resource base and off-take. Annex 3, Map 2 presents the distribution of animals by regions in 1990. Total numbers are likely to have increased in the last 10 years as shown for Somaliland in the table below, although all data are estimates.

Tables 2. 1: Livestock populations in various parts of Somalia

Tables 2.1 a: Livestock Populations in Various Zones of Somali

Zone	Livestock species and number				Total animal numbers
	Camels	Cattle	Sheep	Goats	
North-western	1,308,260	308,960	5,837,320	4,790,000	12,244,540
North-eastern	1,347,700	435,890	3,448,720	7,096,180	12,328,490
Central	1,003,340	461,860	1,098,680	370,580	2,934,460
Southern	1,217,470	1,340,870	707,020	1,860,110	5,125,470
Juba Valley	1,417,460	2,061,850	741,860	2,047,800	6,268,970
Total	6,294,230	4,609,430	11,833,600	16,164,670	38,901,930

Adapted from FSAU Report of 1999

Tables 2.1 b: Livestock Populations in Somaliland

Year	Animal Species				Totals
	Goats	Sheep	Camels	Cattle	
1998	6,072,250	6,909,123	1,443,625	340,950	14,765,948
1999	6,367,169	7,146,030	1,475,560	348,493	15,337,252
2000	6,519,981	7,267,513	1,491,791	352,326	15,631,611
2001	6,676,460	7,391,060	1,508,200	356,202	15,931,922
2002	6,836,695	7,516,708	1,524,791	360,110	16,238,304

Source: Somaliland, Ministry of planning, 2003

Tables 2.1 c: Estimated livestock population in Puntland

Species	Population	Percentage (%)
Camels	2,500,000	14.0
Cattle	500,000	3.0
Sheep	6,000,000	33.0
Goats	9,000,000	50.0
Total	18,000,000	100

Source: Puntland, Ministry of Livestock, Agriculture & Environment, (September 2007)

Quoted total livestock numbers for Somalia as a whole vary with the information source but present numbers are estimated at about 16 million goats and 12 million sheep, 4.6 million cattle and 6.3 million camels, giving a total of 39 million head, which is relatively large in comparison to the human population of 7.7 million and accounts for the large numbers exported annually. This surplus of protein in livestock is exchanged for imported cereals to meet the deficiency in cereals. Thus the livestock sector and exports have a major influence on the ability of Somalis to access imported cereals and on the country's food deficit and food aid in cereals and therefore on the overall and household food security situation in Somalia (refer Annex 3, Chart 1 Cereal Production and Food Imports)

Off-take percentages are estimated at 1.6% for camels, 11.3% for cattle, 23.3% for goats and 27.3% for sheep. Irrespective of the source of data, however, the pressure to supply more animals from a resource base that cannot be verified is putting livelihoods of livestock producers and traders at risk. It is imperative that a complete census is undertaken to inform the industry and ensure sustainability of the livestock resource base and to identify the extent of Ethiopian livestock entering Somalia.

2.1.2 Animal Health

Animal diseases and parasitism (internal and external) are a major constraint to optimal animal production and productivity in Somalia. A complete list is presented in Table 2 in Annex 3. The main diseases compiled from various sources including public sector, INGOs, livestock producers, traders and processors from the three regions of Somalia with no attempt to rank the diseases in terms of economic importance, as incidence and prevalence may vary from region to region and area to area, are as follows:

- Camels: Camel pox, Brucellosis, Ecto and Endo-parasites, Trypanosomiasis, Hemorrhagic Septicaemia
- Cattle: Rift Valley Fever (RVF), Foot and Mouth Disease (FMD), Contagious Bovine Pleuropneumonia (CBPP), Lumpy Skin Disease (LSD), Brucellosis, Anthrax, Blackquarter and Trypanosomosis
- Shoats: Peste des Petits Ruminants (PPR), Sheep and goat pox, Contagious Caprine Pleuropneumonia (CCPP), Brucellosis, Ecto and endoparasites

Of the listed diseases, RVF, PPR, FMD, CCPP, CBPP and LSD are socially and economically important diseases as they can affect humans and/or disrupt trade in livestock and livestock products.

The centralized public sector-led animal health and input supply system collapsed with the federal government in 1991. Since then various development partners have supported the regional administrations to establish functional and credible animal health and input supply systems. The EC, initially through PACE Somalia and subsequently through the SAHSP I and II, has strived to support both the private and public sectors to effectively address the animal disease situation, including the establishment of veterinary laboratories. Despite years of funding and technical support there are no functional laboratories that can undertake even the very basic diagnosis. Disease diagnosis is still difficult to achieve for those lacking overt, pathognomonic clinical signs. Most of the disease diagnosis is carried out through clinical examination, often by non veterinarians or para-veterinarians. As is in other countries with pastoral communities, the pastoralists in Somalia often choose to buy drugs from local markets or petty traders and treat their own animals and only revert to professionals in difficult cases or in cases where many animals are affected at a time. However, relocation of most qualified and experienced veterinarians to urban areas has left a shortage of qualified staff in the field. There is thus a real risk of under or over dosing, using expired drugs, using wrong drugs and marketing animals with very high drug levels. The latter is especially critical as it threatens both live animal and meat trade in that importing countries are very sensitive to drug residues and may slap bans based on finding traces of residues.

Rinderpest deserves special mention as it was one of the diseases that led to the ban by KSA in 1999. EC funded the PACE project to spearhead the control and eradication of Rinderpest from Africa. With the eradication of the disease from all other areas of Africa achieved, except the Somali Eco-system, EC funded AU-IBAR to implement the SERECU project to spearhead efforts to eradicate the disease from the Somali eco-system with technical support from SAHSP. This investment has paid off, as Ethiopia, Kenya and Somalia have applied for certification of Rinderpest free status without vaccination from the OIE. Once the status is achieved this will be one of the biggest achievements in animal health in Somalia.

2.1.3 Somali Livestock Marketing

Marketing is mainly a private sector affair through dealers and local markets where dealers buy livestock. Livestock are used to supply local requirements, are shipped to various countries in the Arabian Peninsula, and trekked or transported to markets in Kenya and Ethiopia. Livestock also enter Somalia through the borders with Ethiopia and Kenya.

The Somali livestock sector has faced a myriad of challenges due to the conflicts and destruction of public institutions supporting the livestock sector since 1991. Public livestock sector institutions were relatively weak due to lack of adequately trained manpower and poor budgetary allocation. Despite these problems, the number of animals and meat exported has grown steadily, largely due to the resilience of the livestock sector and the entrepreneurship of the Somali private sector, thereby boosting the economy and livelihoods in rural areas. The table below presents statistics on livestock exports by the two main ports in Puntland and Somaliland.

Tables 2. 2: Number of Live Animals Exported from Bosaso Port (1997-2006)

Year	Sheep and goats	Cattle	Camels	Total heads
1997	494 320	17 831	14 599	526 750
1998	516 020	29 492	3 938	552 450
1999	636 000	36 320	11 658	683 969
2000	571,455	27,604	8,177	607,236
2001	548,853	42,248	1,950	593,051
2002	1,412,450	53,313	9,720	1,475,483
2003	1,483 409	71,328	4,259	1,558,996
2004	1,166,480	80,094	2,488	1,249,062
2005	1,701,611	98,226	26,085	1,825,922
2006	1,776,137	90,104	32,373	1,898,614

Source: Bosasso Port Authority, 2007

In Somaliland and Puntland, the private sector (driven by the export trade) and public sector support has improved, as these two regions have been relatively stable in recent years. However, in South Central Region the public sector was generally ineffective and inoperative due to high human resource turn over, political changes and insecurity leaving the donor/NGO community to lead support that has been directed largely at the private sector and district and community levels, which are more committed, politically neutral and where ownership for sustainability can be engendered.

There are many different operators in the livestock market who at one point or the other lay claim to the animal. Chart 3 in Annex 3 summarises the Somalia Livestock Value Chain. These operators include the guarantors of payment for the pastoralist, brokers, assistant brokers, petty traders and seasoned livestock traders. Other operators are service providers including herders, trekkers, transporters, boys who restrain animals at the market, those who offer overnight animal holding, watering and feeding services and the local council. Somali livestock producers need to sell animals in the market in order to purchase items that are crucial to their survival.

The animals sold by the pastoralists and trucked for shipping to various countries in the Arabian Peninsular or trekked and/or trucked to markets in Kenya, Djibouti or Ethiopia. Livestock also enter Somalia through the borders with Ethiopia and Kenya. Map 1 in Annex 3 shows livestock migration and seasonal patterns of movements in Somalia. Animals from South Central region are trekked up to Belet-Weyne (Hiran region) and then trucked up to Galkayo through the tarmac road. In Galkayo animals are unloaded and loaded again to new trucks and sent up to Bosaso in Puntland for export. Animals from Ethiopia, passing through Las'anod are also trucked. Any surplus from these markets is usually bought by major traders who truck the animals to the main towns in Somaliland and Puntland such as Bosaso, Galkaio, Burtinle, Garowe, Las'anod, Gardo, Badhan, and Buhoodle. It is important to note that the pastoralists in Somaliland and Puntland cross into Kenya and Ethiopia not only to trade in livestock but also in search of water, grazing and markets for other commodities.

The livestock export trade in Somalia generates employment for a large number of people within the local communities. It is estimated that 60% of the population derives its livelihoods from the export trade. Animals are usually exported to the neighbouring Arabian Peninsula countries such as Oman, Yemen, United Arab Emirates (UAE), Bahrain and Kuwait. Some animals (camels only) are also exported to Egypt and Libya in North Africa. There are four main livestock exporting companies in Puntland, namely Al-Najah, Soo Dareeri, Liban trading company and Al-Furkan. These companies are all based in Bosaso but have agents in the rural areas, other main towns and urban centres. The companies also have agents in other distant areas such as Somaliland, Ethiopia, Central and Southern Somalia. The numbers of animals exported usually fluctuate but show an increasing trend over the years.

Tables 2. 3: Exports of live animals from Bossasso and Berbera ports in 2007

Type of animal	Number exported		
	Bossasso	Berbera	Both ports
Sheep/goats	1,522,855	1,535,831	3,058 696
Cattle	89,190	87,621	176,811
Camel	685	10,341	11,026
Total	1,612,730	1,633,793	3,246,523

Source: FAO-Somalia, Nairobi, 2009.

A hindrance to efficient export relates to market infrastructure and its ancillaries. Following 18 years of civil war by early 2009, and the incomplete restoration of peace and stability in many parts of the country, the livestock marketing infrastructure is severely degraded. A great deal of donors and both private and public investment will be required before the physical market infrastructure is restored or in many cases established for the first time.

2.2 Development of the Livestock Sector (2002 - 2008)

Somalia used, and to some extent continues to depend very successfully on livestock and livestock product exports to meet the day-to-day needs of its people and to realize its broader development objectives. The country was, indeed, for many years one of the most active livestock exporters on the African continent. Before the advent of the civil war in 1990, there was considerable and often heavy investment by the public sector, many donors and a range of private sector interests in animal husbandry, animal health and disease control, water resources and rangeland development, with the aim of boosting livestock production. Investment also helped to facilitate and increase the export of livestock and meat to the country's traditional markets of the Arabian Peninsula, and hides and skins to the European and Asian markets. Domestic and export livestock marketing was a joint endeavour between the public and private sectors. Government perceived its role as providing animal health services including the inspection, vaccination, testing for Brucella, quarantine and certification of animals for export. The private sector was thus responsible for caring, nurturing and multiplying the national herds and flocks, as well as for the provision of the necessary marketing expertise and capital.

In meeting its social responsibilities the former government attempted to develop markets, holding grounds, quarantine stations, port handling facilities and veterinary laboratories and offices and provide the staff to operate them. To facilitate and enable the flow and delivery of healthy livestock to markets, there was initial development of fodder farms and stock route water points. A further government input was a framework of rules and regulations, but these did not meet the standards required by the increasingly sophisticated export markets.

The animal health care system, marketing and export services were in decline by 1989. The civil war has seen destruction of production and marketing infrastructure, a breakdown in service functions

and the loss of some of the national livestock wealth. Exports came to a halt. The situation still pertains in Mogadishu and Kismayo in early 2009, but by the end of 1991 the civil disturbances in the north were cooling down and exports through the northern port of Berbera began to increase. In the absence of government, rules and regulations were largely ignored or inoperable and the absence of veterinary services meant that standards of inspection, Brucella testing, vaccination and health certification were poor where they were not entirely lacking.

The ban placed on imports of Somali livestock by the KSA in 1998 due to suspected Rinderpest outbreak, resulted in predictable results including increased rejection of shipments, unfavourable prices and diversion of trade away from the premier market of Saudi Arabia to the less demanding ones of Yemen and elsewhere in the Gulf. Although this ban was lifted in 1999 a further ban was imposed in 2000 at the outbreak of RVF in Jizan, KSA and is still "officially" in effect. Prior to the ban, Somalia exported approximately 3.0 million animals per year in addition to animal products and hides and skins. The financial cost of the ban has been estimated at an annual US\$120 million. The ban was initially adhered to by all importing countries on the Arabian Peninsula but was subsequently lifted by the Sultanate of Oman and the United Arab Emirates. The UAE has an annual demand for 1.2–1.5 million cattle and small ruminants per year. Livestock are imported from Iran, Pakistan, India and Australia as well as from Somalia. Prices for Somali sheep and goats are reported to be in the usual range of US\$32 to US\$49 but prices may fall to as low as US\$10 when the market is oversupplied. Depending on size, cattle sell for US\$270 to US\$335. Yemen is reported to have imported 91,000 cattle and 612,554 sheep and goats in 2002. Fees and charges in Yemen are high, prices are volatile and payment is made in Yemeni Riyals which are usually exchanged for consumer goods of Yemeni origin. Livestock prices within the Somali ecosystem were considerably depressed in 2001 following the imposition of the second ban. According to data collected by FSAU average prices in the Somali markets were camels US\$85, cattle US\$70 and sheep and goats US\$15–20. Fortunately by 2003 prices had improved to US\$238 for camels, US\$180 for cattle and US\$20–30 for small stock.

Despite all the problems it has encountered, the Somali private sector has shown its strength and resilience in many types of economic activity and especially in legal, quasi-legal or overtly illegal livestock marketing and export of live animals and products of animal origin to areas outside the main traditional market and especially to some of the states of the Gulf Cooperation Council (GCC) and southwards to Kenya. An export abattoir, a joint venture between an Italian company and local businessmen in Burao in Somaliland, that is designed to export processed products by air, is an example of this resilience. In 2001 one abattoir in Mogadishu and another in Galcaio started to fly out sheep and goat carcasses to Dubai. A third abattoir in Galcaio started shipping in 2002. The abattoir in Burao and another in Belet-Wayne joined the business and start exporting chilled meat in late 2003 and early 2004 respectively.

The livestock trade and especially the export trade face three major challenges in future:

- competition from other livestock exporting countries for existing and new markets;
- compliance with livestock trade regulations and international code; and
- overcoming barriers to trade including bans on import of live animals and products of animal origin.

Somaliland and Puntland have developed livestock policies and veterinary codes through participatory approaches and are currently developing the supporting legal framework including rules, regulations and subsidiary legislation, whilst in the South Central Region, Draft Livestock Policy and Strategy Guidelines developed in 2008 have remained at a draft stage to-date. The documents reveal that the strategies are broadly similar, with recognition of the major role of the private sector and the need for administrations to provide the enabling environment and legal frameworks and the need for a public-private partnership.

There remains the need for consolidation of efforts to-date throughout the country and for further investment throughout the country, especially if the South Central Region administration can demonstrate continuity and stability and for which further coordinated donor support will be needed. In addition, the sector is yet to achieve its full potential of contributing to increased incomes and greater food security.

2.3 EC Livestock Sector Support (2002-2008)

2.3.1 EC Policies

Interventions were based on the Strategy for the Implementation of Special Aid to Somalia (SISAS) that included Rural Development and Food Security (RDFS). The EC sector strategy for Rural Development and Food Security aimed at poverty reduction by strengthening of household livelihoods in rural and peri-urban areas and sustainable access to water and sanitation. Within RDFS, EC interventions in the livestock sector involved specific projects with a total budget of over € 25 Million, including some 20 projects implemented over a 7 year period. Some of these projects are scheduled to end in 2009.

2.3.2 EC Interventions

The main areas of EC intervention in the livestock sector and individual project funding levels are summarised in Table 5 below, with more details of each project and their target beneficiaries and outstanding work to be done in Annex 7. The impact of these interventions is discussed after the table.

Tables 2. 4: Main EC Funded Interventions in Livestock Sector 2001-2009

Main sub-sector	Project	Period	Implementing Agency
Livestock Marketing	Somali Livestock Certification Project (SOLICEP)	2007- 2010	AU-IBAR.
	Support to Pastoral Livelihood Development	2007- June 2009	FAO with VSF Germany.
	Livestock Trade and Marketing Project (LTMP)	2004-2008	Terra Nuova/ ILRI
	Milk Marketing-Pastoral Dairy Development and Support to Pastoral Livelihood Development,	a)2006-4/2009 b)2006–6/2009	a)VETAID b)VSF Germany
Animal Health	Somali Animal Health Services Project (SAHSP I)	2005 to 2007	Terra Nuova
	Somali Animal Health Services Project (SAHSP II)	End 2009	Terra Nuova, UNA, COOPI, VSF and FAO
	Somali Ecosystem Rinderpest Eradication Coordination Unit (<i>SERECU</i>)	2007 to June 2010	AU-IBAR and Terra Nuova
HRD	Enhancement of Capacity for Somali Agricultural Livestock Institutions (ECSALI)	2006 - 9/2009	Terra Nuova
	Sheikh STVS Phases I*	2001-2004	Terra Nuova
	Sheikh STVS Phases II*	2005-2007	Terra Nuova
	Sheikh STVS Phases III	2008 - 9/ 2010	Terra Nuova
	STVS Bridging phases	2004 & 2005	Terra Nuova
Other	Somali Livestock Census–Pilot Project,	2008-2009	FAO

Notes * co-funded with Italy ** co-funded with USAID;*** Excludes €1.1 million parallel financing from Denmark for construction work at STVS - see Regions of Origin Phase III in Table 2 below Notes: Fodder production was covered as sub-components of the milk marketing and pastoral development projects

2.3.3 Other Donor Funded Projects

In addition to the 20 EC funded projects, there have been another 10 projects with an estimated total value of about €10 million funded by other donors, and implemented by FAO and/or INGOs, many of which compliment the EC projects as they also cover the main sub-sectors of animal health, marketing, fodder production and HRD. They are listed in Table 6 below.

Tables 2. 5: Other Donor Funded Development Projects in the livestock Sector 2002-2009

Project	Source	Impl Agency	End date	Main sub-sector focus and target area
Animal Health and Production				
Support to Privatisation Phase II	Switzerland/CARE	VSF Suisse	July 2009	Veterinary services, commun. involvement in Puntland
Enhanced Livelihoods in the Mendera Triangle (ELMT)	USAID	VSF Suisse	end 2009	Animal health capacity, privatisation, fodder production in Somalia/Kenya border areas
Improvement of Livelihood in Bay/Bakool Regions	GTZ (and EC co-fund)	GTZ		Participatory Integ. Community Development training and women in multi sector approach focused on agric/livestock
Veterinary Services	Italy	FAO		Strengthening of veterinary service delivery and water management by producers
Regions of Origin Phase III	Denmark	Terra Nuova & AU-IBAR	1/2009 – 12/2011	STVS construction (€1.1 million), and strengthening veterinary services in Somaliland and Puntland
Rapid Response Rehabilitation of Rural Livelihoods Project (RRRRLP)	World Bank	FAO	2008-2010	Fodder production and slaughterhouse rehabilitation (as livestock component with agricultural component)
Livestock Marketing				
Support to Meat Export Project I	LAS	UNDP/FAO and AODAD	2007-2008	Capacity building in meat process and QAS system
Rural Livelihoods Support in Shabelle Valley.	Norway	FAO	2008-6/2009	Livestock Policy for South Central and linking fodder production to milk production
Support to Marketing in Puntland	USAID	FAO	2009-2010	Slaughterhouse support in linkage to the RRRRLP
Meat Processing	Sweden	FAO		Meat handling and capacity building in meat processing in private/public sector institutions in Puntland
Livestock Development	Italy	FAO		Animal health and meat slaughter/processing/hygiene training and water management in South Central

Note: The above statistics excludes ECHO Emergency aid to livestock sector. Some projects cover two or more sub-sectors

2.4 Impact and Beneficiaries

2.4.1 Data Limitations

Data on the livestock sector in Somalia is poor at best and is mostly based on estimates and projections. In addition, the mission found that some of the agencies working in Somalia were reluctant to release any recent accurate figures to "consultants". What most organizations have (and hence have been reproduced in the Mid Term Evaluations (MTE) and Final Evaluations (FEM) or End of Project Reports (EPRs) tend to be mainly generalities. There is therefore inadequate data to verify indicators of achievement of EC projects and to enable a cost/benefit assessment to be carried out to substantiate impact. In addition, in some cases, it is still too early to assess impact. The MTRs and FEMs and the few monitoring missions that were carried out revealed that there was a general lack of credible or verifiable baseline data on which impact could be assessed and that for many projects it was too early to quantify impact. There is a clear need for monitoring and evaluation inputs to be integrated in the next programme and in each of the projects that will be implemented. The team carried out its own assessment of the impact of the main projects, details of which are presented in Annex 7 and summarised below.

2.4.2 Beneficiaries

The main target groups and beneficiaries covered a wide range of stakeholders throughout the country, including: pastoral and agro-pastoral livestock producers, livestock and meat traders and transporters, professional and trader associations in the three regions of Somalia including Somaliland and Puntland Chambers of Commerce and Industry, Somali Meat Traders Association and veterinary associations, the public sector including the line ministries and local municipal councils, and finally international and local NGOs and UN agencies.

Depending on the scope of the project the main target groups and beneficiaries have been either localized as is the case with milk, fodder and local slaughter facility development or wide spread to throughout the country as is the case with Rinderpest eradication, support to livestock marketing and slaughter infrastructure, LMIS and delivery of animal health services and inputs.

2.4.3 Impact

Unfortunately it is difficult to determine with certainty what results could be directly attributed to the EC funded projects. It has, however, been said that Somali traders are able to negotiate better terms with the Arabian peninsular traders immediately after the bans as they were able to point out that there were genuine efforts being made to address the disease situation and establish acceptable animal inspection and certification procedures. For the most part these efforts were spearheaded by EC funded projects including PACE, SAHSP I, SAHSP II, SERECU, LTMP and FAO-Someat. Based on the reports available it is noteworthy that veterinary authorities in importing countries appreciate the support given to the livestock sector to date as shown by the positive comments by the UAE, Yemen, Oman and KSA veterinary officials in formal functions. The authorities in these importing major countries are hopeful that, with continued support of development partners including EC, in due course Somalia will be in a position to export quality assured meat and live animals inspected and certified by credible entities that will most likely be private sector-based. The acceptance in February 2009 by large Somali livestock traders to use the Berbera and Bosasso quarantine stations to access the KSA markets supports this line of argument.

In total, these EC projects, some of which built upon previous projects to consolidate achievements, are assessed as having achieved an appreciable impact, except for milk and domestic slaughter and meat market development, which were significant. Only one project, namely that aimed at capacity building in the administration of South Central Region was not successful. The assessed impact, achievements and lessons learnt in EC Funded Projects in each main sub-sector is summarised below.

2.5 Impact and Achievements in EC Funded Projects

2.5.1 Animal and Fodder Production

Overall range deterioration was a major concern that needed to be addressed and fodder production opportunities be developed to boost both domestic production and livestock exports. The EC funded VSF Suisse and COOPI implemented fodder development projects have demonstrated that it is economically beneficial for fodder producers to produce fodder for their own use and for the market. These pilot projects are coming to an end in June 2009 should be expanded and linked to live animal trade and dairy development in a follow up intervention.

In Somaliland, five sites were established with an aggregate area of 16.5 ha for fodder/hay cultivation. Additionally, previously existing fodder production farms benefited from project inputs in the form of trainings and seeds supply. Altogether, the yearly fodder output from both sources produced an average of about 2000 truckloads (a truck load = a loaded 6 tons truck), a 43% increase in fodder per year. This was more than double the original anticipated output. Assuming that the cost of fodder ranges from 150- 450 USD per truck load (180 armloads estimated at 4 tons), then the increase in fodder was valued between 34,500 - 103,500 USD. The project directly targeted 2000 pastoral households living in Sool plateau (14,000 persons) and indirectly 15,000 persons who included mobile pastoral population from nearby rangelands. Considering the level of funding this is an impressive performance.

The EC funded project also accomplished the planned 53 erosion control structures spread across four target districts, which included stabilization of active gullies; construction of earth embankments for restoration of diverted flood into key grazing depressions; building and reseeding of half moon (crescent bunds) water catchments; contour stones; sand bunds and alignment of key roads vital to communication and market accessibilities. The final result was improved natural pasture regeneration in the rehabilitated lands that received good rains.

Constraints/lessons learnt: it is possible to commercialize fodder production but great care should be taken not to create competition between grain and fodder production as this may aggravate the grain scarcity. (ii) Community involvement at all level of project development and implementation is a sure way of injecting sustainability into the projects (iii) Range improvement is a major need but highly complex requiring a multi-sector and widespread government initiatives supported by animal census data and has to be carefully considered and supported on a case by case basis.

2.5.2 Livestock Marketing

Despite insecurity and political instability, the regions of Somalia are still able to export 3 million sheep and goats, 176,000 cattle and 11,000 camels per year see table 2.3. These exports earn the regions of Somalia (and part of Ethiopia) about 80% of their annual foreign exchange earnings. Sustaining these earning is vital for a stable and growing economy.

2.5.3 Export Development and Promotion

Achievements to-date includes improved quality assurance in export slaughterhouses and Somali export meat. Slaughterhouses are exporting quality assured meat to UAE which has opened doors to other markets. With the support of the EC funds, FAO Somalia has supported the SOMEAT member export slaughterhouses to lay the foundations for production of quality assured meat, laboratory support and adoption of traceability.

The Support to Somali Meat Export implemented by the FAO in partnership with VSF-Germany aimed at improving the livelihoods of the pastoral communities in northern and central Somalia through the introduction of quality Somali meat products, compliant with regional sanitary and food safety standards, into domestic and regional wholesale markets. The project represents a support to

Somali meat exports with the specific objective to introduce Somali meat traders to and be compliant with regional sanitary and food safety standards in domestic and regional whole sale markets. This project supported the formulation of policy and legal frameworks in regions of Somalia, facilitated the development and implementation of HACCP and establishment of in-house laboratories in export slaughterhouses in Puntland and Somaliland and supported the strengthening of SOMEAT. The export slaughterhouses, which are reputed to directly employ 2-400 persons and over 1000 persons indirectly, buy animals from all over Somalia and fodder from the neighbouring markets thereby benefiting a large number of Somalis. The numbers of carcasses exported from the participating slaughterhouses have varied between 340,409 (2005) through a peak of 718,903 (2006) and 377,395 (2008). While the numbers of carcasses being exported may not have changed much, the level of contamination and rejection at the terminal market in UAE have fallen by 30%.

The struggle by SOMEAT members to export quality assured meat, has not gone unnoticed by the authorities in the terminal market, as the municipality of Dubai has undertaken to send a formal veterinary inspection team to inspect the slaughter facilities and process at the invitation of SOMEAT. This has enhanced the confidence of the investors to improve the infrastructure and effluent disposal. The diversification to chilled and processed meat gives an added assurance that the rural populations will access some niche' market even if the ban on live animal export was to be enforced. The beneficiaries of the meat export trade are spread through out the three regions of Somali and parts of Ethiopia.

The slaughterhouses sell offals locally at discounted rates and are known to donate meat to feed disadvantaged members of the community around them. Hides and skins recovery and management have improved tremendously over the years to a point where returns from the sale of hides and skins are used to meet most of the operating costs of most slaughterhouses. This has encouraged Somali and Chinese investors to invest in leather processing and development facilities in Somaliland, thereby creating jobs and opportunity for increased earnings from export of value added products.

2.5.4 Acceptability of Somalia Livestock and Products

The overall impact of EC and other donor funded interventions in the livestock marketing and export chains over the last few years has been to improve compliance and acceptability of Somali livestock products. The **LTMP** project between 2004 and 2008 spearheaded the improvement and diversification of Somali livestock trade and marketing. The project facilitated the development of capacity (physical and human) within public (ministries and municipalities) and private (SLCCIA and CCIAP) sector organisations to promote trade transactions. The project also addressed a grading system in export quality livestock and developed a functional livestock marketing information system (LMIS) for disseminated marketing information for export quality livestock. While the EC funding ended in 2008, it required a follow up for the LMIS, further efforts to address outstanding constraints and to consolidate improvements made to date. This received 9 months funding from UNDP until April 2009, but enforcement of the regulations remains to be achieved. The project is currently benefiting traders in Somali and in regional markets who are able to access the SLCCIA website and traders and producers in Somaliland and Puntland who are able to access messages sent out on local vehicles and mobile networks (SMS). The number is bound to grow once the area of data collection is increased to cover most of Somalia and the products are increased to cover meat and hides and skins. Specific achievements of LTMP are shown in the table below.

Tables 2. 6: LTMP Achievements

<p>Four workshops with brokers implemented: two in Belet-weyne (for the Gasara cattle breed and small ruminants), one in Baidoa (for the Surco cattle breed) and one in Bardheere (export quality cattle) implemented. Workshops on the use of the Jowhar- Belet Weyn and Jowhar-Garissa trekking routes were held in Jowhar with ten and seven livestock traders respectively, whereas for the Baidoa-Garissa route the workshop was held in Baidoa with ten traders. Others for the Baidoa-Belet Weyn, Afgoye-Garissa and Bardheere- Garissa route held with a total of thirty traders (10 for each route) respectively in Baidoa, Afgooye and Bardheer.</p>
<p>Commercial attributes (grading standards) for cattle/small ruminants' breeds in one marketing chain (Somaliland for the Berbera chain) harmonised and agreed with stakeholders in participatory workshops.</p>
<p>Information on the grading system practiced along the Berbera chain and on relevant Middle East markets such as Yemen and Saudi Arabia passed to BBC for broadcasting through their weekly radio programme.</p>
<p>GPS/GIS training was implemented to 28 cattle drovers for the above mentioned routes</p>
<p>Model for the identification of CCPs along the trekking routes finalised in collaboration with the RVC and GIS expert mission to London carried out. Report with CCPs thematic maps completed</p>
<p>Traceability system developed. 1943 cattle belonging to 4 traders tagged with electronic identifiers and moved through the market value chain to the export standard slaughterhouse and the cost benefit analysis finalized</p>
<p>One loading ramp developed and 16 loading harness manufactured</p>
<p>LMIS, access to real time livestock market information has improved the bargaining power of the pastoralists. This is an important development and the system needs to be expanded to accommodate milk, meat, hides and skins to increase its reach and enhance chances of it becoming self sustaining.</p>

The development of credible and regionally acceptable veterinary services, input supply chain, animal health inspection and certification system and meat quality assurance system has gone a long way in enhancing Somalia's position as an exporter of wholesome livestock and livestock products. Such recognition would also open other markets in Africa and Asia that are suspicious of Somali livestock and livestock products. To what extent the EC has contributed to animal health and certification at the two quarantine stations Berbera and Bosaso is debatable as they have their own system supported by KSA traders. However, EC funded projects are currently testing a traceability system for both meat and live animals in preparation for more stringent export requirements from the importing countries. This is an essential activity that is yet to be completed and needs further support

SAHSP project, in collaboration with SERECU, a programme also funded by the EC, has implemented activities in Somalia that have enabled Somalia to be declared free of Rinderpest without vaccination. The dossier for accreditation of Rinderpest freedom will be presented to the OIE in May 2009. This is an important mile stone for Somalia as it will no longer be treated as pariah state harbouring the last Rinderpest infection but a potential trading partner. SOLICEP, an EC funded project, aims to establish an animal inspection and certification system for Somalia and Ethiopia, but is yet to make any impact as it has not been granted the go ahead to implement activities in Puntland and Somaliland. This project is essential and these activities need to be fast tracked.

2.5.5 Development of Policy and Legal Frameworks

The capacity of both the private institutions and public sector support has been improved, including developing a functional policy and legal framework in Somaliland and Puntland regions, although there is still a need for the regulations to be popularized and enforced. With the support of EC funded projects, the administrations in Puntland and Somaliland regions have developed plans that encourage public-private partnerships and policy and legal frameworks that are supportive of market

oriented livestock production and health. There is a need to further develop export market opportunities and product quality assurance processes that is now so essential in exporting meat.

2.5.6 Livestock Marketing Infrastructure and Improved Hides and Skins Recovery

Improved slaughter procedures have resulted in an unexpected positive impact in the form of increased recovery rate (by up to 30%) and quality of sheep and goat skins. These are important whose recovery from the local slaughterhouses needs to be improved. EC funded projects are currently testing a traceability system for both meat and live animals in preparation for more stringent export requirements from the importing countries.

The local slaughter facilities and meat markets fall far short of the regional standards and standards contained in the draft Somaliland and Puntland Meat Control Act, Public Health Policies. They also do not meet the state local occupational and environmental management standards. The EC funded Somali Meat Project has supported the local slaughter facilities with basic tools, protective clothing and training. EC has also funded UN Habitat to construct slaughterhouses in Garowe and Gabilley and meat markets in Burao, Borama and Hargeisa. These are important achievements that have gone along way in improving public health and improving working conditions of women and youth who are the majority in the sub-sector. The support should also extend to improved hides and skins recovery and traditional meat processing.

Lessons learnt:

- (i) These activities are essential to the protection of Somali livestock assets and market access and should be continued, especially as the facilities for livestock marketing are still at best rudimentary;
- (ii) it is possible to commercialize livestock and meat production but all interventions should not lose sight of the fact that livestock production in Somalia is about livelihoods not marketing;
- (iii) community involvement at all levels of project development and implementation is a sure way of injecting sustainability into the marketing projects and (iv) improvement of market infrastructure must be in line with community aspirations and needs.

2.5.7 Milk Marketing

The direct beneficiaries from two EC funded demonstration dairy development projects in Puntland and Somaliland included 8,200 pastoral milk producing families (49,200 direct beneficiaries) and 780 indirect beneficiaries including milk collectors, milk vendors, and municipalities. The projects proved that dairy development is an opportune intervention area in regions of Somalia. Other benefits realized from this project include:-

- Decrease by 30-50% of sour and increase of fresh milk reaching at these locations, due to the improvement of milk hygiene. Fresh milk costs at least 20% more than sour milk.
- Milk producers are making an average of 150,000 Somali shillings per day and the amount of milk being traded in the collecting centres has risen to 2.5 million Somali shillings daily.
- Introduction of different processed milk products (Ghee, Yogurt, skimmed milk, selective fermented susa, butter, Toffee/Sweets) in Garowe community approved the acceptance and marketability of these products. This is a great opportunity for the women groups
- Reduction in diarrhoea in children due to the hygienic practices adopted by the women milkers and milk vendors.

Youth and women groups are the main target of these income generating activities. Thus milk marketing support has empowered women and youth within its areas of operation and created opportunities for employment and wealth creation, while offering wholesome milk to consumers. In addition, fodder production and marketing is emerging as a source of income and employment while reducing potential conflict between fodder traders and pastoralists. The EC funded projects have demonstrated that it is possible to commercialize milk and meat production amongst stakeholders for whom the main emphasis is on livelihood enhancement. Community involvement at all levels of project development and implementation played a critical role in ensuring sustainability of these projects.

2.5.8 Impact of EC Funded Projects on Animal Health

The main achievements have been:

- (i) enhanced provision of animal health services and inputs and
- (ii) improved disease surveillance, control and diagnosis for which animal health laboratory infrastructure, equipment and reagents are in place in Puntland and Somaliland, but these still need to be operationalised and therefore the impact to-date has been minimal;
- (iii) NGOs and UN agencies have strengthened professional associations through training and “monetary consideration” to deliver services and provide inputs;
- (iv) prevention and control of economically important diseases through vaccinations and establishment of cold chains has been improved;
- (v) NGOs and UN Agencies have formed inter-clan teams to deliver quality services in all regions of Somalia and referral laboratory services (in the neighbouring countries) to backstop the field services have been utilized.

There is a need to continue supporting these important areas. All Somali pastoralists and agro pastoralists are direct or indirect beneficiaries of the animal health interventions.

The SAHSP projects provided support for the development of policy and regulatory frameworks for the livestock sector particularly in Somaliland and Puntland, although surveillance is better developed in Central and Southern Region than in Puntland and Somaliland Project Zones. They also supported laboratories, animal disease information system, and livestock policy development. Support to laboratories has been provided under PACE, SASHP I and II and the FAO Somalia Meat Project and yet at present there are no functional laboratories.

2.5.9 Animal Health Services

EC Funded projects including those implemented by Terra Nuova, FAO Somalia, , VSF Germany, VSF Suisse, COOPI and AU-IBAR (SERECU and SOLICEP) have supported various aspects of animal health including establishment of diagnostic and referral laboratories (these need to be operationalised) and cold chains, strengthened the regional veterinary associations and coordinating and funding annual and strategic livestock vaccinations. Funding for some animal health activities under SERECU and SOLICEP, were transferred to Terra Nuova, for implementation. These activities have had some positive impact including:-

- Rinderpest eradication on course despite the absence of functional central authority in Somalia and freedom from Rinderpest without vaccination is expected to be declared in May 2009.

- Rehabilitation of some of the laboratories and supply of basic equipment and reagents in Puntland and Somaliland – These need to be operationalised.
- NGOs and UN agencies have strengthened Professional associations through training and “monetary consideration” to deliver services and provide inputs
- Prevention and control of economically important diseases through vaccinations and establishment of cold chains
- NGOs and UN Agencies have formed inter-clan teams to deliver quality services in all regions of Somalia

2.5.10 Animal Health Inspection and Certification System

The Somali Livestock Certification Project (SOLICEP) launched in 2007 and due to end in March 2010 was established to lay down the essential framework for engaging the actors along the production and marketing chains to participate in the development and implementation of animal health inspection and certification system. While it is yet to be fully operational, when completed it is expected that 5 million people (55% of the Somali population), 200-250 private veterinary professionals and 1000-1500 livestock traders will benefit, either directly or indirectly through the implementation of the proposed inspection and certification activities. It is important that this important project is fast tracked for benefit of the Somali pastoral livestock and fodder producers and traders.

The development of credible and regionally acceptable veterinary services, input supply chain, animal health inspection and certification system and meat quality assurance system would go along way in enhancing Somalia’s position as an exporter of wholesome livestock and livestock products. Such recognition would also open other markets in Africa and Asia that are suspicious of Somali livestock and livestock products. However, trade between regions of Somalia and Middle East will continue with or without animal health inspection and certification and irrespective of occasional rejections of ship loads of livestock on health and certification grounds. Despite insecurity, political instability, poor marketing infrastructure and animal health service constraints, the regions of Somalia are still able to export 3 million sheep and goats, 176,000 cattle and 11,000 camels per year.

2.5.11 Training of CAHWs and INGO Support

Many herders buy drugs from petty traders or village stores and treat their animals themselves without consulting a veterinarian. As most of the pastoralists are illiterate, they are incapable of reading or understanding the instructions for administering medications and therefore likely to misuse the drugs. For more serious cases they require veterinary help. The PACE Somalia component established a network of Somali Veterinary Professionals (SVPs) all over Somalia. The SVPs were trained in livestock disease surveillance and control of key trans-boundary animal diseases. However, they have tended to move to urban areas due to the present conditions in rural areas. INGOs have trained many community animal health workers (CAHWs) to fill the gap of lack of trained veterinarians. In the process, COOPI and VSF Suisse have established veterinary teams consisting of animal health assistants (AHAs) and literate CAHWs to assist the communities as well as work with them during emergencies.

2.5.12 Vaccination Programmes

Major interventions of veterinary programmes have been implemented by various international organizations primarily with the help of the few veterinarians, and the CAHWs/veterinary teams.

- a. ICRC- implemented the first emergency livestock program in Somaliland during the critical years of 1992 – 1993. ICRC undertook a major vaccination and treatment

program throughout the country. It was a seven (7) months program that provided treatment and vaccination of 573551 animals of different species (sheep & goats, cattle, & camels).

- ii. Between 2005–2006- COOPI Internationale carried out a veterinary program in the regions of Sool, Sanaag, Togdheer and all Puntland areas. This program lasted for 14 months and a million animals of all categories of livestock received treatment against endo and ectoparasites and other generic diseases and 360773 of sheep and goats were vaccinated against pox. Approximately 18000 pastoral households benefited from this intervention. Additional vaccinations were carried out in 2007 and 2008 with the support of ECHO, in which approximately 1.0 million livestock were vaccinated in Central and Southern Somalia.
- iii. VSF-Suisse component of the program has established a private veterinary delivery services through a network of 8 pharmacies with 2 satellites. Each pharmacy is managed by a private veterinary professional, trained by the program that provides services to pastoralists through a network of 130 Nomadic Animal Health Assistants (NAHAs)/CAHWs. Average number of animals (all livestock species) treated annually by NAHAs supported by Private pharmacies are approximately 300,000. This project is still on-going.
- iv. Between 5th May and 20th October 2008, emergency livestock vaccination and treatment was carried out in the four regions of AWDAL, Sahil, Maroodi-Jeex and Togdheer of Somaliland by FAO. The animals in these areas were treated against helminthes, tick-borne diseases and other ectoparasite infestations as well as treatment of generic pneumonias and bacterial infections. A total of 284,883 goats and sheep were vaccinated against PPR; 38696 sick animals were treated against generic pneumonias; 455,543 animals were de-wormed and 373,129 animals were sprayed against ecto-parasite infestations. This intervention benefited about 5,267 households drawn from AWDAL, Sahil, Maroodi –jeex and Togdheer regions.

Some treatment and vaccination data by specific EC funded projects is as follows:

- Somali PACE Project: Vaccination of 50,013 cattle in Afmadow District Southern Somalia in November - December 2003
- SAHSP Phase I (with CASSO II Funds) in collaboration with COOPI and VSF-Suisse: Vaccination of 346,050 sheep and goats in Central and Southern Somalia against PPR (Middle Shabelle, Hiran, Galgadud, Bay and Bakool Regions).
- SAHSP II (With CASSO II Funds) vaccination of 147,187 sheep and goats in Sool and Sanaag Regions of Somaliland, Treatment of 47,317 sheep and goats in Sool and Sanaag Regions of Somaliland against ectoparasites, endoparasites, gastro-enteritis, wounds and abscesses

However, vaccinations returns only indicate the number of animals vaccinated and do not indicate the population size. It is necessary to vaccinate at least 80% of the population for the vaccination to be said to be effective. If, however, ring vaccination was the strategy adopted to vaccinate the sheep and goats in a target area then the benefits are localized and the claims are acceptable for that catchment area. However, the laboratories that could have been used to confirm the presence of disease before vaccination and effectiveness of the vaccination (through sero-conversion) are not functional at this time.

The majority of pastoralists have poor knowledge on proper usage of drugs; animals get overdosed through application of a mixture of drugs by the owner to ensure they are cured of the ailment. This is a problem that COOPI and VSF Suisse have been addressing by training a number of community animal health workers (CAHWs) and through pastoralists' field schools to create awareness on the importance of proper disease diagnosis followed by appropriate medication. In Odweiyne area, the pastoralists were requesting that CAHWs be trained in their communities to facilitate animal health

care delivery in their communities. Their request is based on the fact that government has not been able to deploy veterinarians or para vets to their place. Puntland currently experiences the same type of parasites, what was suspected PPR with shoats, sudden death of mature camels, usual endemic diseases such as Brucellosis, foot and mouth disease (FMD).

2.5.13 Laboratory Facilities

Prior to 1990, there were well structured and well equipped regional veterinary diagnostic laboratories in all regional capitals including Mogadishu, Bosasso, Hargeisa and others, moderately equipped and functional veterinary diagnostic laboratories in the second main towns of Kismayo, Jowhar, Galcayo, Burao and Borama that used to efficiently help to conduct basic diagnostic tests and facilitate sero-epidemiological surveillance of the major transboundary diseases. Unfortunately like other veterinary infrastructure, these laboratories were looted and destroyed during Somaliland past civil wars, crises, social conflicts and strifes (in 1988 and 1996).

Since the emergence of Somaliland administration in 1991, the Ministry of Livestock has been fully engaged in attempting to re-establish one central veterinary laboratory at Hargeisa and others at regional level, so as to revitalize veterinary services. These efforts were not realized before 2006. To date rehabilitation and re-equipment of one central veterinary diagnostic laboratory, in Hargeisa city, and one at Berbera quarantine were structurally and functionally completed with the support of joint efforts by the ministry, FAO Somalia, SAHSP (Terra Nuova) and finally by Al Jabril company (Saudi Arabian company). However, none are operational yet. And getting them operational should be a priority in a future EC funded programme. There are 3 (three) laboratories in Puntland situated in Bossaso (2) and Galkaio (1). These laboratories are not functioning optimally except for the Bossaso Quarantine Laboratory which is currently being managed by a Saudi Arabia company (Aljabril Company) and is fully functional. The laboratory run by the government, Port Veterinary Office (PVO) Laboratory, only conducts Brucella Tests on live animals destined for export. The operating laboratories were initially supported by the PACE Consortium; and subsequently the SAHSP Consortium (Terra Nuova, COOPI, FAO Somalia, VSF-G), FAO/VSF Germany Som Meat Project; VSF-Suisse and VSF-Belgium. Presently the TUG, with the support of development partners, is developing plans to rehabilitate the regional and central laboratories in South Central Somalia. There are also suggestions that these later regions may be better served through mobile clinics/laboratories to improve the public service penetration in to rural areas, but the practical implications and the cost of such a strategy is yet to be ascertained.

SAHSP has tried to deal with the issue of disease diagnosis from two angles. The first one is to ensure diseases threatening livestock industry are diagnosed immediately through teams sent out to the field to sample animals and send the material to STVS or neighbouring states for diagnosis. The second approach adopted is renovation of existing facilities and training personnel to man them. This recognises that: laboratories are an integral part of animal health delivery, that laboratory testing is essential in disease surveillance and control programme, that laboratory disease diagnosis is used in the determination of the existence or introduction of a disease and that importing countries are dependant of laboratory information to ascertain the quality of imported livestock or its product. This action was supported by the stepping up of investigations into transboundary diseases. These actions underscore the importance of operationalising the established laboratories in the three regions of Somalia.

The projects have also been instrumental in building capacity in the private sector organisations to improve animal health services and drug/vaccine supplies, but much still needs to be done to cover the whole country. The cost of vaccines and requirement for cold chain has been a handicap to operational budgets such that vaccination-campaigns have been dependant on short term ECHO funding. Unfortunately, the public and private sectors do not have the financial resources to take over such public good operations. In addition, technical support to the animal disease surveillance system has been expanded through training and use of Community Animal Health Workers and equipping of the government laboratory facilities for disease diagnosis. Nevertheless, the laboratory

services remain weak/non-functional. Future interventions should use a consolidation approach in which equipping of laboratories is carried out simultaneously with setting up of mechanisms for field diagnosis and collection of material for laboratory analysis.

2.5.14 ECHO Funded Activities

Before 2009, ECHO, through COOPI and VSF G, supported annual livestock vaccinations especially in South Central Region. Annually these INGOs, with funding from ECHO, have vaccinated or caused to be vaccinated an estimated 1.0 million livestock while another 400,000 to 500,000 have been treated. These interventions were effective as they improved the survival of livestock during drought and had impact in the target herds as shown below (Table 8). Notwithstanding the gains, these activities were in conflict with those funded by EC Somalia which supported the establishment and development of private veterinary services and input supply. This support was, therefore, changed to be only available if and when there is a declared animal disease outbreak. This new strategy, however, needs to be supported by better coordination and identification of a common system of declaring a disease emergency. This would better guide ECHO on when and where to intervene in cases of disease and/or climate emergencies.

Tables 2. 7: Disease Prevalence in Vaccinated flocks and herds in Gedo Region

Disease		% Prior to vaccination	% after vaccination
LSD		10	5
BQ		25 - 30	13 - 15
CCPP		60 - 85	25 - 40
Pox*		10	15
Pox	Goats	60	35
Pox	Sheep	30	17

Note:

**The rise is due to emergence of cow pox*

2.5.15 Human Resources Development

EC funded project including SAHSP, SERECU, animal health and pastoral dairy projects and the Meat Project implemented by FAO Somalia have trained various cadres of service providers along the livestock production and marketing chains. This work needs to be continued. The same EC projects, alongside other development partners and UN agencies, have funded in-house and external training of administrators, accountants, meat inspectors, laboratory and animal health technicians and veterinarians in the public and private sectors. The trained lay and professional personnel are a boost to the Somali livestock industry but ways must be found to determine how best to support the Ministries to retain the staff.

Training in veterinary skills has been undertaken at STVS, the only functioning veterinary training institution for middle level technicians in Somalia. The institute, unlike other regional institutions in East Africa, offers courses which are tailored towards livestock production and management for ASAL areas. The EC investment has been substantial with **STVS I, II and III funded by Italy and EC, STVS Phase III funded by the EC and a fourth support project funded by Denmark and linked to the current STVS Phase III**. Total investment by the end of 2011 will be about €6.6 million. STVS is currently training animal health technicians and meat inspectors. The first lot of trainees were absorbed by the export and domestic (municipal) slaughter facilities and in ministries and have been effective at their work. However, its full training capacity is still not fully utilised due to low student numbers as indicated in the table below:

Table 2.8 : Numbers of Students trained by STVS in 2007-2008

Year	Total No. Graduates	Source and Future employment Uptake
2007	16	13 from Somaliland -employed by MoL, 2 seconded to STVS and 1 to VETAID 1 from Puntland –private work 2 from Kenya –1 employed by VSF Suisse in Mandera, 1 seconded to STVS
2008	11	9 from Somaliland –employment by MoL in process, meanwhile divided into 2 groups to work with Vet. Associations/ preference from consultancy jobs 2 from Puntland –1 private work, 1 working with VSF Germany on Milk proj.

As a result of the low student intake, the school cannot cover its operating costs and is thus dependent on continued donor support. The low numbers is partly due to access constraints for students from the South Central Region (as shown in the table above, the students currently stem from Somaliland and Puntland only) and as measures introduced to expand numbers have not yet had time to take full effect. These include developing a wider portfolio of training courses, achieving accreditation status that will expand student base, attracting students from the Horn of Africa region and establishing a legal status (Trust) that will also facilitate increased income generation. The School could also generate income through marketing and hosting short courses and distance learning on identified needs, and laboratory diagnostic services. STVS has very good laboratory facilities, which could be opened up to offer referral diagnostic services to other organisations and animal health service providers at a fee. This would reduce the number of animal samples sent out of the country for confirmatory diagnosis.

STVS could also train laboratory technicians, administrators and finance personnel. To increase intake, the school intends to collaborate with projects such as SAHSP, FAO meat project, SOLICEP to organise and provide 15 days short courses for field and laboratory personnel. These will enable many Somali livestock professionals to upgrade their knowledge and skills.

The **ECSALI** project was a major capacity building exercise aimed to strengthen the public sector throughout the country. A full list of inputs and activities is presented in the table below. Whilst it had some achievements in relation to the development of various master plans in agriculture and in South Central Region in livestock, it was largely a failure in relation to government capacity building efforts.

Constraints/lessons learnt: The difference in approach between the ECSALI and the GTZ project was clear – the former was targeting the TFG which was not achievable let alone sustainable, while the latter supports the district based structures, which has proven to be widely accepted and more sustainable. While it is appreciated that the organizational structure of regional administrations are not fully realized, it is important the few staff that are there are genuinely engaged at all levels of project implementation including planning and monitoring and evaluation. Such engagement will enable the ministries to retain staff and acquire office equipment and consumables.

2.5.16 Pilot Livestock Census Project

The EC is joint funding (with USAID) a pilot project being implemented by FAO Somalia to test and validate livestock census methodologies most suited to the Somali production system and environment taking into account the volatile nature of the political, economic and social landscapes. The pilot project is in Johwar (South Central Region) and Odwein (Somaliland) is expected to be on the ground in March 2009 (for the dry season) and May 2009 (wet season) for testing and validation. The project will be implemented with the support of Somali nationals and with the support of local and regional authorities and will enable recommendations to be submitted for a full national census that may be included under the priority interventions for 10th EDF funding. There are good arguments for and against the livestock census considering the social, economic and political situation in Somalia today. The important issue is that both sides are in agreement that an indication of the size of the

livestock resource base would be beneficial their only differences are in the how and at what cost. The mission believes that these questions will be answered by June 2009 when the current exercise is completed and its results evaluated.

2.6 Lessons Learnt from EC Funded Projects

Some important lessons learnt were:

- i. The impacts of EC funded projects have been highly variable, but the lack of adequate data and analytical evaluation missions has generally made it difficult for such assessments to be made. This is made more difficult as there is no without project situation to enable true impact of EC projects to be seen. Thus in relation to increased exports of live animals what can truly be ascribed to the EC projects and what numbers could have traded informally with or without the projects?
- ii. Although several EC funded projects have achieved impact, many require further support to consolidate and achieve sustainability and therefore warrant priority in terms of follow up/extension in the immediate first phase of the 10th EDF (as projects and staff are in place). These include further support to livestock, meat and milk marketing, further development of livestock and meat market information systems, further support to the provision of animal health services by the private sector supported by the public sector, further HRD development and increased support to livestock production through rangeland rehabilitation and fodder production.
- iii. Future funding for public sector support should only be made when political situation allows it; a critical number of staff are in place and government budget priorities allow for on-going operation and maintenance costs. There was little or no impact in infrastructure development in the face of inadequate staff and lack of running/maintenance costs.
- iv. It would be better to support zonal organisations and veterinary/other professional associations (SOWELPA, CERELPA, PULPA, ULPA and SLPF) as the latter seem to be committed, politically neutral and would provide a trained pool of human resource in the private sector that can be hired by the public sector.
- v. Projects aimed at improving animal health delivery services and marketing, processing and trade have widespread benefits throughout the country as all producers/pastoralists can benefit from improved animal health/greater production, higher prices and greater volume of trade resulting from these projects. Similarly the benefits from training veterinarians and CAHWs in the private sector that supports pastoralists are widespread.

3 Problem Analysis

Remarkably, the livestock sector still functions and continues to be the most important economic activity in the country, despite the long term disruption caused by nearly 20 years of conflict, insecurity, lack of stable governance, recurrent drought and floods, private encroachment on traditional dry season grazing areas and lack of and/or dilapidation of government and private services and infrastructure.

3.1 Livestock Production

A SWOT analysis of livestock production in Somalia is presented below:-

Table 3. 1: SWOT Analysis of Livestock Production

Strengths	Weaknesses
<ul style="list-style-type: none"> • large natural pastures Pastoral rangelands readily available • large number of market oriented pastoralists • wide breed diversity for both large and small ruminants • domestic markets • support of regional and international NGOs and donors • high appreciation and cultural value of livestock by community • Great potential for high value exports • Breeds adapted to prevailing climatic conditions • Pockets of improved integrated fodder and livestock production in all three regions have demonstrated the potential for improving livestock production and productivity and commercializing production and marketing, but there has been little impact on range quality. 	<ul style="list-style-type: none"> • Inadequate of market facilities and poor extension facilities and services • little complete, accurate and up to date data, maps, or meteorological information • Poor transportation infrastructure to pastoral areas • lack of well structured government infrastructure for service delivery and coordination • poor of capital for investment in pastoral systems • limited expertise within public sector constraining provision of livestock extension services • genetic resources are not fully exploited • low institutional capacity and human resources in animal production leading to poor management of livestock and animal resources • traditional animal husbandry practices • quarantine facilities available but not used to maximum potential • need to identify local feedstuffs (grasses, weed and natural pasture) • poor and/or inadequate nutrition including water for animals and plants particularly in dry season • Poor distribution of feed recourse throughout the year in most parts of the country • structural and institutional weaknesses constraining support to improved livestock production and productivity. • poor or inadequate access to markets and market information • domestic price distortions, • lack of a regulatory infrastructure with limited enforcement when available
Opportunities	Threats
<ul style="list-style-type: none"> • Domestic, regional and export markets available • support from donors, NGOs and government • large opportunities for quality improvement of dual purpose crops for humans and livestock • strong export opportunities for development of feed/forage resources 	<ul style="list-style-type: none"> • pests and disease thrive in the hot environment • natural resources degradation (charcoal burning) leading to desertification • feedstuffs very limited in terms of quality and quantity ,particularly in dry season • new noxious weeds such as Prosopis sp

Opportunities	Threats
<ul style="list-style-type: none"> • development of understanding and systems for breeding/mating management • development of better livestock management technologies and systems • development of inventories and management technologies for livestock diseases • development of appropriate regulatory systems in support for livestock production 	<ul style="list-style-type: none"> (Mathenge) weed encroaching on pastures • damage to natural pasture (overgrazing) uncontrolled pasture enclosures and commercialization of charcoal production •

Some of the main constraints are discussed further below.

3.1.1 Feed Constraints and Rangeland Degradation

Feed is a scarce resource in most parts of Somalia for most parts of the year in most years. In some parts of the country feed is occasionally adequate in quantity but is almost always deficient in quality and for parts of the year low protein and energy coupled with high lignin and cellulose contents seriously limit livestock growth and production. In the drier pastoral areas the quality and amount (quantity) of forage available is almost always insufficient for the number of animals attempting to feed off it. In the mixed farming areas along dry river beds and flood plains natural pastures are being taken over for subsistence cropping and production of fodder. In this mixed production system, crop residues and by-products are important in the livestock diet but are usually low in nutrients and often wasted or used inefficiently due to inadequate knowledge and the capacity to process and conserve them. The type of land use and grazing pressure has greatly modified the original vegetation associations in all regions of Somalia.

The main factors contributing to the deteriorating rangeland condition, especially in the dry season are complex and summarised in Chart 2 in Annex 3. They include encroachment of dry season grazing areas by private land owners, the need for enhanced off-take to strategically respond to drought and hostilities, the collapse of central authority, weather extremes and the rising demand for livestock and livestock products met by increasing production, have all contributed to range deterioration in the three regions of Somalia. In Somaliland and Puntland, there is also a tendency for displaced persons and agro-pastoralists to enclose the best areas of land for subsistence farming or for production of fodder for sale or for keeping livestock within the enclosure. This practice is a potential source of conflict between migrating pastoralists and sedentary agro-pastoralists.

The main areas of fodder production are in the valleys south of Burao, in the valleys near Gardo and Garowe, and along the Dawa, Juba and Shabelle Rivers. Fodder produced in the northern dry river valleys is normally native grass is irrigated by natural floods and protected from grazing by thorn-bush enclosures. Fodder from the south can be native grass growing in semi-cultivated areas along the Shabelle River or the stalks of maize and sorghum stover. The stover is enriched by adding simsim heads. Fodder is usually harvested by hand using a small knife and stored while stacked. Both practices are wasteful. Most fodder that is harvested for sale is tied into armload size bundles. Fodder costs are highly variable depending upon the supply and demand. The price of a truckload of fodder varies between US\$150 and US\$450 in Bosaso and between US\$200 and US\$500 in Burao depending on the demand and the distance the fodder is transported.

Development partners have supported pockets of improved integrated fodder and livestock production in all three regions that demonstrate the potential for improving livestock production and productivity and commercializing production and marketing, but there has been little impact on range quality. Support to fodder production needs to be well thought out and focussed not to compete against grain production thus aggravating the already bad food situation. In addition, it is important that practical, cost effective and environmentally sustainable range rehabilitation options are

identified and promoted. Care should be taken to avoid compounding the already delicate and difficult situation.

3.1.2 Breeding Constraints

Prior to the collapse of the Somali state, various Somali research institutions were undertaking breed improvement and gene typing programmes to verify the breeds of livestock in Somalia and determine the best approaches in improving production and productivity. These programmes collapsed along with the state but are essential for the industry to meet the ever increasing demand for livestock and its products. Due to the high level of skilled man-power, laboratory and funding required to initiate and sustain such actions, this component, though important, can be deferred to a later date.

3.2 Animal Health

A SWOT analysis is presented in the table below for the animal health sub-sector summarising the main strengths, weaknesses, threats and opportunities.

Table 3. 2: SWOT Analysis of Animal Health in Somalia

Strengths	Weaknesses
<ul style="list-style-type: none"> • Pastoralists value livestock as a main source of livelihood. This means maximum effort is put into care of livestock. • Pastoralists have a wealth of knowledge on the health status of livestock. • Pastoralists are extremely good at detecting various ailments in livestock. Hence can carry out disease diagnosis • Pastoralists involved in livestock emergency projects implemented by NGOs and FAO are equipped with the ability to identify quality drugs and apply appropriate dosages, enabling them to administer appropriate drugs for the common diseases. • CAHWs/NAHAs are distributed widely in Somalia and provide decentralised animal health services at the grassroots. • The drug supply lines have improved in areas served by INGOs dealing with animal health. This facilitates access quality drugs. • STVS provides appropriate veterinary education targeting livestock production in the ASALs for young people. • A few laboratories in Puntland and Somaliland were renovated and equipped by INGOs, hence they are available whenever the governments facilitate their use. This will make it possible to confirm clinical cases locally and enhance control of transboundary diseases of importance in livestock trade. • There are relatively strong veterinary professional associations. 	<ul style="list-style-type: none"> • Inability of the governments to stock adequate vaccines and effect comprehensive vaccination campaigns for control of transboundary diseases. • Laboratory diagnosis is required for determination of the existence or introduction of a disease. Hence failure by the government to operationalise the equipped laboratories such as the ones in Hargeisa and Burao hinders disease surveillance. • Insufficient trained manpower and lack of the will and motivation to use the available resources particularly in Hargeisa laboratory. • Livestock emergency projects lasting less than 1 year conducted by INGOs do not provide adequate time for establishing sustainable systems partly due to frequent droughts. • Lack of a functional government in Central and South Somalia, insecurity and relatively weak drug supply lines have undermined the establishment of cold chain system for management of vaccines. • Absence of a uniform policy and related legal framework for control of migration of livestock and land use in the greater Somalia as well as fencing off of pastoral land by individual farmers interferes with grazing. • Livestock migration exposes animals to a myriad of infections especially during concentration at watering points. • Inability to respond to Early Warning Systems provided by FSAU exposes livestock to undue climatic stress.
Opportunities	Threats
<ul style="list-style-type: none"> • The existence of a ready market for Somali livestock should spur livestock care to ensure production of healthy animals. 	<ul style="list-style-type: none"> • Unfavourable weather conditions which affects production of adequate feed for animals and water availability resulting in weakening of the livestock

Opportunities	Threats
<ul style="list-style-type: none"> Improved disease surveillance and control through the extensive network of CAHWs. This is important recognising that disease control and eradication are the basic requirements for healthy herd. Training of more animal health care personnel and motivate existing veterinarians will enhance provision of quality services for the livestock sector. 	<ul style="list-style-type: none"> rendering them susceptible to many diseases. Resurgence of transboundary diseases that result in export bans. A large volume of livestock trade has suffered serious setbacks and repeated shocks due to a resurgence of key transboundary livestock diseases such as Rift Valley Fever, Brucellosis and Contagious Caprine Pleuropneumonia (CCPP).

Further analysis and discussions of some key constraints are presented below

3.2.1 Inadequate Animal Health Care Service Delivery

Diseases and parasites still inflict a heavy blow on the productivity of livestock all over Somalia. The main diseases from the pastoralist point of view are indicated in the Livestock Sector Analysis in Chapter 3 above along with the main transboundary livestock diseases that affect the export trade. The poor disease situation is due to an inadequate animal health care system. Disease diagnosis is still difficult to achieve for those lacking overt, pathognomonic clinical signs. Most of the disease diagnosis is carried out through clinical examination, often by non veterinarians or para-veterinarians, as most of the laboratory / veterinary facilities charged with simple disease diagnosis are still not functional, despite considerable donor support. Pastoralists traditionally use self testing approach in that herders buy drugs from petty traders or village stores and treat their animals themselves without consulting a veterinarian. Recognising the inability of the pastoralists to read or understand the instructions for administering medications, the chances of misuse of drugs and under dosing or overdosing is high. However, where professional animal health care is practised, the pastoralists tend to abandon self-testing and select a system which gives them better returns. For example, where COOPI and VSF Suisse have worked closely with the community, the pastoralist have realised their inadequacies and the difference it makes when a service is professionally delivered and quality drugs are used. These pastoralists go as far as soliciting services from Animal Health Technicians and CAHWs.

3.2.2 Trypanosomosis

It has been shown that there is heavy infestation of tsetse in the riverine areas as well as Juba valley where animal graze during dry season. This causes Trypanosomosis resulting in over 30% morbidity of cattle and death in some cases. Control of Trypanosomosis will ensure improvement in animal health in animals migrating into riverine areas and reduce the amount of money spent in procurement of drugs (e.g. verbenal, novidium, samorin). Even though the pastoralists are aware of the problem, they often end up treating the sick animals with fake cheap drugs or leave them unattended due to lack of funds for procuring appropriate drugs.

PATTEC (Pan African Trypanosomosis and Tsetse Eradication and Control) programme is being funded by the African Development Bank (AfDB) in a number of African Countries but regions of Somalia are not benefit. The current administrations should link up with AfDB to facilitate control of Trypanosomosis which is a real problem in the riverine areas and has a negative impact on animals concentrating in these areas in the dry season.

3.2.3 Non-Availability of Veterinary Professionals

Animal health delivery services have been either weak or non-existent in certain areas. This is due primarily to the non-availability of veterinary professionals and the inability of the governments to pay veterinary professionals salaries that they can depend on for their sustenance. Currently veterinarians, who often stay in the urban areas, are paid \$50 to \$100 per month. In addition, NAHAS who accompanied livestock owners as they grazed their animals no longer have access to drugs to

enable them to continue to treat animals. In any case this cadre of service providers and CAHWs do not have veterinarians to backstop them. The Sheikh Technical Veterinary School (STVS) is not optimally utilized due to a variety of reasons, including access difficulties for students in South Central Region and the few courses offered. It is important that STVS develops a wider range of courses to expand the student base and improve their potential earnings by providing services from their well equipped and manned laboratories. This would fill the current gap in confirmatory diagnosis services by using these laboratories, and graduates from STVS would provide the much needed personnel in animal health delivery services.

3.2.4 Inadequate Drugs, Vaccines and Associated Cold Chains

It has been demonstrated over time that vaccinated, healthy animals can stand stress better than unvaccinated ones. In the regions of Somalia, vaccination campaigns carried out by regional administrations have not been affected in Central and South Region. Even for Somaliland and Puntland the cost of vaccines and requirement for cold chain has been a handicap to their operational budgets. COOPI and VSF Suisse, who have been conducting most of the annual vaccination campaigns in South Central Region, have been dependant on short term ECHO funding which has not given the INGOs sufficient time to develop or interest local business people or the veterinary professional associations to take over such public good operations. Establishment of a sustainable mechanism to enable regular vaccination of livestock against the commonly encountered diseases such as CCPP, PPR among others would fill a much needed gap at this stage.

Linkages from the centre to the periphery is also weak in some areas and need further support so that disease surveillance is linked to the HQ (government) and continue to build on the local capacity disease surveillance, diagnosis, reporting and response especially in the South. Storage of vaccines in South Central Somalia is still a major problem. There is a need to strengthen the Somali professional groups to take complete charge of treatment, disease surveillance and diagnosis, vaccinations, maintaining the cold chain for vaccine distribution and drug supply lines and oversee discipline of professionals. Finally, there is a need for an active veterinary board or inspectorate to be put in place to curb influx of fake drugs into the market.

3.2.5 Inadequate Disease Surveillance and Diagnosis System

Despite spirited efforts by several EC funded projects, disease diagnosis remains weak. Laboratory facilities remain unutilized. This refers to laboratories such as the one in Hargeisa visited by the Programming Mission. Based on the quality of the presently available equipment and reagent for the CVL, the CVL is potentially capable of serving Somaliland and beyond if provided with experienced technical staff and motivated through proper remuneration, but it cannot undertake identification of viral diseases as this requires state of the art equipment that is currently not installed. To get the laboratories fully functional, there is need to: (i) train more laboratory technicians and provide refresher course for the current staff, (ii) improve availability of equipment for bacteriology, parasitology in Burco, Borama, Bosasso, Garowe and Berbera and all equipment for serology in Hargeisa; (iii) provide reagents for all sections in laboratories as the current stock of reagents has expired; (iv) institute a system for ensuring repairs, cleaning and installation of good water tanks; and (v) more importantly, a system should be put in place for encouraging field staff to stop relying wholly on clinical diagnosis and submit materials to the laboratories for confirmation of suspected infections. Mechanisms for field diagnosis and collection of material for laboratory analysis need to be improved.

3.3 Livestock Marketing, Trade and Diversification

Livestock marketing was, and still is, mainly a private sector affair with a variety of traders and middlemen exchanging livestock for cash and/or commodities. The Somali livestock trade has always been subject to rejections, unfavourable terms of trade and total bans by importers, with little or no means of redress. Such constraints have impacted negatively on household livelihoods and on the

economic staying capacity of the functioning zonal and regional administrations (particularly in Somaliland and Puntland that have been the major export market outlets). A SWOT analysis is presented in the table below for the livestock trade summarising the main strengths and weaknesses of this sub-sector.

Table 3.3 : SWOT Analysis of Somali Livestock Trade

Strengths	Weaknesses
<ul style="list-style-type: none"> • Strategic location with historical, cultural and religious linkage to traditional markets in the middle eastern markets • Significant export market-orientation producing homogenous quality of animals from good natural pastures • Port infrastructure deep harbours available in Berbera, Mogadishu, and Kismayo • Presence of strategically located export slaughterhouses • Clearly identifiable breeds of livestock e.g. Barbarawe sheep, Galla goats, North Somali Zebu and boran cattle – that can address a specific niche market (best for religious functions) 	<ul style="list-style-type: none"> • Sporadic droughts, shortage and disease outbreaks leading to fluctuations in supply and quality of livestock. • Inability to implement forward supply contracts due to absence of supply orders, letter of credits or financial transfers. • Limited livestock export certification procedures. • Over-dependence on a limited external market who's functioning is not well known. • Poor taxation regimes that are apparently ad hoc as traders are compelled to net every fiscal deficit in the country. • Competition from other livestock exporting countries for existing and new markets;
Opportunities	Threats
<ul style="list-style-type: none"> • Proximity to export markets • Branding livestock and meat as organic products and specifically for religious functions • Opportunity to develop livestock exports strategies; policy and regulations including animal welfare, suitable marketing strategy, export certification strategies and an expanded livestock market information system. • Opportunity for development of markets promotional materials and tools (i.e., videos) 	<ul style="list-style-type: none"> • Strong risk of environmental degradation • Intense competition from Australia, New Zealand, India and Pakistan • Rural urban migration that deprives the production system of suitable labour.

Further analysis and discussions of some key areas constraints are presented below

3.3.1 Livestock Marketing

It is important to bear in mind that the market situation for livestock and livestock products in the Horn of Africa and Middle East is rapidly changing. The countries of the Middle East are moving rapidly toward integration into world markets. The Kingdom of Saudi Arabia was admitted as a full member in the World Trade Organization (WTO) in 2005. The WTO recognizes sanitary and phytosanitary standards for livestock trade and foods that are set by the World Organization for Animal Health (OIE) and the Joint WHO-FAO Codex Alimentarius Commission. This situation clearly confirms the expectations that the trade requirements of the countries of the Middle East can only become more stringent in the short-term, even as access to alternative markets become more competitive due to raising levels of sanitary standards imposed by importing countries. With the support from SAHSP, SERECU, SOLICEP and FAO, the regional administrations need to be kept abreast with the rules (OIE-WTO) as they affect trade in livestock and livestock products between Somalia and Middle East.

3.3.2 Municipal Slaughterhouses

Municipal slaughterhouses / slabs need further help to discourage home and open field slaughter and ensure hygienic processing of meat through proper management as indicated in the table below for

five municipalities in Somaliland. Slaughterhouses/slabs located in the city centre need to be relocated outside, such as the one in Burao.

Table 3. 4: Slaughterhouse facilities in Somaliland

Slaughterhouse	Gabilley	Boroma	Hargeisa	Berbera	Burao
Ownership	Municipal	Municipal	Municipal	Municipal	Municipal
Management	Municipal	Municipal	Company	Municipal	Municipal
Slaughter /day					
▪ Shoats	120-140	150-250	700-1000	70-120	450-500
▪ Camels	0	4-6	35-40	3-5	24
▪ Cattle	5-7	3	40-50	0	0
Meat inspector Meat inspection services	No	No	Yes 1-Vet (Dr) 1-Paravet No meat inspection	Yes 1-Vet asst. No meat inspection	No
Employees no.					
▪ management	2	2	82	12	9
▪ Private	6	7	150	4	11
▪ Self(vendors)	45	50	few	43	65
Workdays/week	7	7	7	7	7
Work hours	5am-9am	4am-9am	3am-8am	2am-4am	11pm-7am

There is also a need to formulate policies to guide establishment of slaughterhouses and tanneries at national level and translate it to bylaws for enforcement of municipal level (Follow on to EC funded FAO implemented Somali Meat Project). The Somaliland and Puntland Meat Control and Inspection Acts have been presented to the regional governments for debate and approval. Further support is needed to translate the approved versions and create awareness and popularize them before they are rolled out for enforcement. Municipalities will need to be supported to develop regulations and by-laws that are in line with the provisions of these Acts.

3.3.3 Cross Border Trade with Ethiopian Animals

Unlike those Somali animals crossing into Kenya and Djibouti, those that cross and graze in Ethiopia or are bought in Ethiopia are contested. The Government of Ethiopia takes great issue at the idea that animals that are bought or have fed on Ethiopian pastures are being sold into international markets without passing through official Ethiopian marketing channels and therefore without generating any tax revenue for the state. The issue is all the greater because traders usually purchase livestock with in-kind goods that have been imported from the Gulf but whose import duties have not been paid to Ethiopia. Government interventions often lead to disruptive border closures and animal confiscations. The Somali-Kenya-Ethiopia cross-border trade is essential for regional food security, with the export of animals financing the importation of essential foodstuffs such as rice, wheat flour, cooking oil and pasta. Any decline or interruption in export of animals leads to dwindling of food supplies and a rise in the food prices.

3.3.4 Meat Exports

Initially the export of live animals dominated the trade, but with the 1999 ban by KSA and other traditional trading partners in the Middle East, the traders diversified and are now exporting chilled meat to UAE. With the collapse of the Somali state and its institutions, the private sector and private sector organisations have managed to grow impressively, particularly in the areas of export trade.

Table 3.5 : Meat carcass exports from various slaughterhouses in regions of Somalia

Slaughterhouse	2006	2007	2008	%
Burao, Somaliland	121,858	70,318 March-Dec	151,471	115
Galkayo, Puntland	n/a	31,639 Jun-Jul	77,992	146
Belet Weyne, Puntland	116,344	n/a	10,055	-91
Mogadisho (2x)	81,200	n/a	252,979	211

Source: FSAU In 2006 limited efforts were given for documentation.

Notes

The decrease in 2007 was attributed to the ban for chilled meat to Saudi Arabia.

A SWOT analysis is presented in the table below summarising strengths and weaknesses, opportunities and threats of the meat sector.

Table 3.6: Swot Analysis of Somali Meat Sector

Strengths
<ul style="list-style-type: none"> • Strategic location with historical cultural and religious linkages to traditional markets in the Middle Eastern markets. • The unique taste of the meat from naturally bred Somali animals is well appreciated in the UAE. • Clearly identifiable brand of small ruminant meat that is competitive product in terms of pricing. • Competitive pricing of Somali meat makes it most affordable to migrant population, hotels and restaurants' that aim at improving profit margins. • The livestock of Somalia are 100% naturally reared on pasture unlike Australian livestock, which are grain feed. • The exporters are knowledgeable about the health and safety requirement in the importing countries especially the UAE. • Enhance Somali livelihoods by selling locally all the meat by-products (head and offal's) and those carcasses from the export slaughterhouses that fail to meet the exacting quality for the export market. • Somalia has a large population reservoir of live animals, which are readily available for slaughter and export as chilled meat.
Weaknesses
<ul style="list-style-type: none"> • Inability to provide sufficient information that can overcome punitive restrictions' imposed due to suspicions of RVF in production systems from time to time; After the earlier bans on Somali meat and live animal exports due to Rift Valley Fever, by the Cooperation Council of Arab States of the Gulf (GCC) countries, the general perception is that Somali meat is not safe and therefore often sold as an differentiated product with lower pricing. • Somalia has a weak regulatory infrastructure as compared to other major competing countries. These include limited institutional infrastructure and inability to address a dented image of the country, lack of capacity to implement regulatory, supply chain and marketing issues • Uncertainty due to constant political problems in the region critically affects exports especially in the need to meet demand. • Stiff competition from other livestock exporting countries for existing and new markets; Somalia may not be able to match the aggressive promotional steps taken by rich countries like Australia without external support. • Lack of sufficient information on the revenue and cost structures of market actors engaged in the chilled meat export value chain.

Opportunities

- Somalia's close proximity, cultural and religious ties to the GCC market that has high GDP per Capita as well as a growing migrant population may increase the demand for Somali meat.
- Competitive pricing is a growth opportunity for Somali meat.
- As currently Somalia exports raw materials, there may be opportunities for adding value through processing before export

Threats

- Repeated outbreaks (real or perceived) of transboundary diseases and other health considerations within the horn of Africa are another major concern for exporters. The recent outbreak of RVF in north-eastern Kenya brought all exports to stand still.
- The continued political instability in the region especially the livestock producing areas of central and southern Somalia is one of the major threats for meat exports from Somalia.
- Increased focus and investments marketing and promotional activities by other major exporting countries is a real threat to Somaliland exports since the Somali traders do not have such an investment capacity.
- Changing trends in eating habits and health consciousness (like preferring white meat to red meat) may affect the future exports of red meat.
- The relative small size of the Somali export traders implies they cannot easily expand.

Further analysis and discussions of some key constraints are presented below.

3.3.5 International Quality Standards

One of the main constraints to livestock and livestock products trade in Puntland is the lack of a credible certification system for both internal and export consumers. This is due to a number of factors that hinder efficiency in the establishment of such a system:

- Quality livestock trade infrastructure (transport system, marshalling yards, quarantine facilities and inspection points) hardly exist in Puntland.
- Rules and regulations that would ensure high quality of animals are either absent or not enforced.
- The level of awareness among the livestock traders on quality requirements and regulations (diseases, grading, quarantine, health inspection, animal welfare) for international livestock trade is also low.
- In addition to the lack of a certification system, there are no support services (banking, insurance, and letters of credit) for livestock traders in Puntland.
- The situation is worsened by the existence of a multiple taxation system at different points along the livestock trading chain, with low or no delivery of vital services or any public investments to support the livestock trade.

The EC, through the "Support to Somali Meat Project" implemented by FAO Somalia and League of Arab States (LAS) funded "Support to Somali Meat Export" and implemented by FAO-Somalia, AOAD and UNDP have worked along side the private sector to ensure that the Somali meat industry meets the regional and international quality standards and that the regional governments adopt policies and laws that are supportive of quality assurance and traceability. The two projects end (LAS funded project ended in December 2008 while the EC funded one ends in June 2009) at a time when the quality assurance processes have not been fully domesticated by the export slaughterhouses and the policy and legal frameworks are still in their formative stages. Further support is warranted for this key sector of the livestock industry. By design SOLICEP is facilitating the development of animal health inspection and certification system acceptable to traditional and upcoming trading partners in the Middle East, Africa and Asia, but no results have yet been achieved. Improvements in quality

assurance processes should lead to the supply of better and more consistent quality in the export market and therefore better competitiveness and higher prices.

3.3.6 Trade Sensitive Diseases

Lack of accurate, timely and accessible information on trade-sensitive diseases such as Rift Valley Fever is an issue as information on trade sensitive diseases needs to be handled with care and should be availed in a timely manner to those who need it to make informed decisions. There has been tendency for officials in regional governments to be very sensitive whenever the issue of animal diseases is brought up – while the traditional trading partners in the Middle East are quick to slap bans based on rumours and suspicion. This has made it difficult to rationally discuss the issue. It would pay to involve all parties (regional Somali authorities, implementing partners and importing countries) in consultative meetings whenever there are real or perceived threats.

3.4 Human Resource Development (HRD)

A SWOT analysis is presented below summarising the strengths and weaknesses of the HRD sector. An additional SWOT analysis for the professional veterinary associations is presented further below.

Table 3. 7: SWOT Analysis of HRD

Strengths	Weaknesses
<ul style="list-style-type: none"> Appreciable efforts in addressing HRD in both private and public sector have been made by UN agencies and donor funded projects including EC, however further capacity building is needed in all regions of Somalia. Establishment of local training institutions such as Burao University, Aboud University and STVS has helped to create a pool of trained human resource to serve in both private and public sectors Trained animal health technicians and meat inspectors are locally trained and numbers trained can be increased on demand 	<ul style="list-style-type: none"> The collapse of the central government in Somalia led to a rapid deterioration in provision of services including training by the public sector. The violence and the collapse of the education system led to an exodus of experienced and skilled human resources. There is a scarcity of veterinarians, animal health and laboratory technicians, meat and occupational health inspectors, administrators and accountants The failure of efforts by development partners to build capacity in the South Central government due to high staff turnover and instability, The public sector and the export slaughterhouses may not be able to sustain the current intake of STVS graduates without external support It will take long time to build a responsive and capable public sector and that Somalia meanwhile needs to progress despite the inadequacy of the public sector. The full training capacity of local institutions not fully utilized due to the prevailing hard economic situation
Opportunities	Threats
<ul style="list-style-type: none"> Capacity building sub-components including in technical and non-technical areas and target both the public sector and private sector, should be incorporated in all development partner including EC funded projects, The regional and national veterinary associations are ideal entry points, Exploit the good will created by the establishment of TUG to further support to South Central region public sector. 	<ul style="list-style-type: none"> The public sector is unable to fund training or train its staff The public sector is unable to retain qualified and experienced staff. Physical facilities including office space and office furniture and computers are limiting in certain areas The Central South region does not attain appreciable stability

Opportunities	Threats
<ul style="list-style-type: none"> Increase student numbers at the STVS and other local training institutions by collaborating with projects such as SAHSP, FAO meat project, SOLICEP to organise and provide short courses for field and laboratory personnel. 	

Some of the key constraints are discussed further below.

3.4.1 Inadequate Trained Human Resources

The violence and the collapse of the education system in 1990 led to an exodus of experienced and skilled human resources. The livestock sector did not fair any better as there is a scarcity of veterinarians, animal health and laboratory technicians, meat and occupational health inspectors, administrators and accountants. The following table of available statistics on veterinary human resources in the SAHSP project area illustrates the balance between personnel with degrees, diplomas and CAHWs.

Table 3. 8: Veterinary Human Resource in Somalia (2008)

Project Zone	Veterinarians	Vet Diploma *	Vet/Animal Assistants**	Animal Production	Veterinary Auxiliaries
Southern Somalia	16	-	51	5	415
Central Somalia	21	-	53	3	113
Puntland	5	2	16	-	4
Somaliland	36	-	48	4	206
Mogadishu	13	-	27	6	1
TOTAL	91	2	195	18	739

Source: *Derived from the SVP databases and records available within SAHSP.*

Notes:

*3 yr vet course after Sec Education ** 2yr vet training after Sec Education

EC funded projects have made great strides in addressing this pressing need, but further capacity building is needed. It is noteworthy that capacity building was always preceded by a training needs analysis. This should remain as an integral part of all future EC funded programmes. However, it is accepted that it will take long time to build a responsive and capable public sector and that Somalia for a while needs to progress despite the inadequacy of the public sector. But despite the skeleton nature of staffing, it is important that some limited resources are focused on involvement of the public sector in activities that support the private sector, as well as including it in planning, monitoring and evaluation as a move to increase its role in the future. The public sector should be trained over time to take on greater coordinating and supervision roles without being obstructive. At present, in view of the nascent nature of the public sector it is also important to directly support organizational development of the zonal, regional and national veterinary associations. The EC funded programme should continue therefore to fund capacity building efforts aimed at the private sector and supporting public sector roles as: (i) the public sector is unable to fund training or train its staff, (ii) the public sector is unable to retain qualified and experienced staff and (iii) physical facilities including office space and office furniture and computers are limiting in certain areas. It is also suggested that some flexibility should be incorporated in a future programme that could support greater public sector capacity building, should continuity, financial capacity and stability return to the public sector.

3.4.2 STVS

Following STVS I, II and III, a fourth support project funded by Denmark and linked to the current EC funded STVS Phase III is being implemented. Total investment by the end of 2011 will be about €6.6 million. At present, however, the STVS is underutilised as student numbers are relatively low, fee incomes are below operating costs and the institute is not financially sustainable and thus dependent on donor support at this stage. The main reasons for this are (i) access difficulties for students from South Central Region (ii) the narrow focus; thus it seems the system has resisted the opening up of the institution to take on self sponsored students and expanding the number of courses being offered (iii) some of the measures taken recently have yet to have a significant impact and (iv) the public sector has limited resources to employ new trainees. The issue is given that STVS has received substantial investment since 2001; is still receiving at least 2.0 million Euros (to 2010) from the EC and has received further funding from the Danish Government it is difficult to justify further funding from the limited EDF 10 allocation. In view of this, the institution can only be supported to set up a histopathology laboratory from the 10th EDF funds targeting the livestock sector. The benefactors and management of STVS are therefore encouraged to seek for alternative sources within and without EC to meet the cost of running it.

3.5 Inadequate Data on Livestock Sector and Impact of EC Funded Projects

3.5.1 Livestock Data

There is a dearth of actual and reliable data on livestock numbers and the animal health situation throughout the country. Figures, numbers and statistics on Somalia, with the possible exception of remote sensing data, are estimates of varying reliability. To base planning on such figures or to use them to argue decisions constitutes a risk to the programme. Evaluation reports are characterised by generalities and this has not been helped by a lack of cooperation on the part of some NGOs to provide data to the Programming Mission. All livestock data quoted for Somalia is based on a census that was undertaken during Siad Barre's era, and thus is outdated. In addition to the census itself or livestock estimates projected from population dynamics over time are urgently required. This could follow the pilot census currently being carried out and could provide an essential understanding of the dynamics of the livestock resource base, which is at risk until more is known on up to-date numbers and distribution, herd size and offtake and numbers of Ethiopian livestock passing through Somalia. With such information, it would be possible to assess the true potential for livestock exports on a sustainable basis. This would greatly benefit planning and implementation throughout the livestock sector and therefore benefit the whole sector, as well as identification of which aspects of livestock sector require urgent attention for planning future donor funded interventions.

3.5.2 Assessing Impact of EC Funded Projects

The MTEs and FEM's undertaken to date identified the lack of baseline data to allow determination of what results could be directly attributed to the projects, thereby making decisions on future interventions relatively difficult. Impact assessment is complex in the Somalia environment due to significant factors beyond a specific project's sphere of influence (e.g. bans from importing countries, circumnavigation around veterinary certification procedures), the lack of government monitoring systems and as much of the development is being undertaken by the private sector. A significant upgrade in M & E inputs is considered essential in any future EC funded livestock programme. In addition the MTEs tended to only look at fine tuning of the on-going project under review rather than identifying the need for further support after the end of project. Such proposals need to be presented before completion, rather than at the end of project evaluation stage, as otherwise due to the time required to develop a follow-on project, bridging funds may have to be provided to prevent project suspension and loss of trained staff.

3.6 Policy and Institutional Set-Up

3.6.1 Public and Private Sector Institutions

The present situation is that the public sector structures are not fully formed. Regional administrations are not able to recruit and retain qualified and experienced staff as they do not have adequate financial and physical resources – this has resulted in a very high staff turn over. In addition, security is still an issue in parts of Puntland and South Central Region. Despite the skeleton nature of the staffing it is important that the regional administration staff feel that their positions and roles are appreciated and that they are not taken for granted. This can be achieved by the staff being guided into a coordinating role. Training needs identification need to be followed by identification of officers to be trained (those who will benefit the system most after being trained) rather than patronage.

In contrast, private sector institutions are relatively well developed with private exporting companies tied to importing countries in the Middle East and with fairly well developed Livestock Professional Associations. After years of dedicated financial and technical support from EC funded projects, the regional associations have established themselves to a level where they are now able to participate in delivery of animal health services and inputs.. These associations have done well to occupy the void left after the degeneration of central authority in Somalia in 1991. A SWOT analysis of these associations is presented below.

Table 3. 9: SWOT Analysis of Livestock Professional Associations in Somalia

Strengths	Weaknesses
<ul style="list-style-type: none"> • Livestock professionals are trained in animal health care. • The association have operated in the area since the collapse of the Somalia government in 1991. • The associations are recognised by the government and pastoralists as custodians of veterinary profession. • NGOs running livestock activities in Somalia involve livestock professions in their activities. 	<ul style="list-style-type: none"> • The majority of the livestock professionals are advanced in age. • The knowledge and practice of veterinary medicine for the majority of livestock professionals has gone rusty. • Inadequate resources at their exposure to facilitate extension veterinary services to the pastoralists. • Continuing education is not offered to the members. • Dependency on NGOs to provide employment and pay for government employed professionals in Central & South Somalia.
Opportunities	Threats
<ul style="list-style-type: none"> • Partnership with NGOs have enabled some of the professionals upgrade their skills. • Opportunity to shape the ministry of Livestock for Central and South Somalia 	<ul style="list-style-type: none"> • High attrition rate amongst the members. • Failure of the governments to enforce policies and regulations streamlining operations of the livestock sector.

Public/private participation and partnerships in implementing livestock sector interventions are necessary for effective livestock development. For the foreseeable future, private sector involvement, innovation and entrepreneurship will remain the dominant feature of any approach, whilst fostering a public-private partnership, and that partnering should be with local institutions rather than central administrations. However there is still a key role for the latter in the regulatory and supervisory functions and whilst the organizational structures of regional governments are not fully realized, it is important that the few trained staff that are there are genuinely engaged at all levels of project implementation, including planning and monitoring and evaluation.

3.6.2 Livestock Policies and Strategies

Somalia has been without a functioning central government for 18 years. There are consequently no countrywide sector policies and well defined strategies or regulatory frameworks at a national level. Each of the three regional administrations has developed their own livestock policies and strategies, although the policy in South Central Region is in the form of guidelines at a draft stage at present. With the support of EC funded projects, Somaliland and Puntland have developed livestock policies and veterinary codes through participatory approaches and are currently developing the supporting legal framework including rules, regulations and subsidiary legislation (Puntland Veterinary Code, 2003; Puntland Livestock Development Master Plan, 2004; Puntland Livestock Policy, 2006; Somaliland Livestock Policy, 2007-2017; Puntland Animal Welfare Code 2008). The Livestock Policies of the two regions have clauses that support the:-

- improvement and conservation of the indigenous livestock genetic pool and improvement of livestock production and productivity
- delivery of animal health services including veterinary services and meat inspection to increase production, improve public health and meet import regulations of importing countries;
- access to local, regional and international markets for the livestock producers;
- strengthening of public-private partnerships in the livestock sector,
- security of pastoral access to land and water,
- regulation of veterinary pharmaceuticals,
- regeneration of commercial milk production,
- development of legal frameworks to support and enforce the stated policies.

In the South Central Region, Draft Livestock Policy and Strategy Guidelines were developed in 2008 with donor support, but have remained at a draft stage, though it is understood that priority will be given to finalising the policies and evolving legal and policy frameworks. These will be supported by an effective institutional framework, to act as a catalyst to improving livestock production, health and marketing in the South Central Region. The draft document reveals that the strategy guidelines are largely similar to those in the two other regions, especially in relation to supporting the private sector in a public-private partnership.

While the policy and legal frameworks have been developed, the follow on steps have faltered in Puntland and South Central Region as the drafts have not been presented to parliament and/or cabinet for approval. Even after approval and translation into local language awareness creation and enforcement will be major huddles. There are costs associated with implementation of provisions of policies and the supporting legal framework – these costs have not been taken into account and may thus serve to delay or halt the process altogether. The draft policies and legal framework have used English/European templates while Somalia is slowly gravitating towards the Sharia Law – it is important to work out whether the process should continue or wait and see which direction the system takes.

3.6.3 Coordination

Chart 3 in Annex 3 depicts the main donors and implementing agencies. The main donors in livestock development projects are: EU (main donor), World Bank, the governments of Italy, USA, Denmark, Sweden, Germany, Norway, Switzerland, plus various UN agencies (including FAO/UNDP/UN-

Habitat/ILO) and other organisations such as the League of Arab States. The main implementing agencies are: FAO (the main agency involved), GTZ and AU-IBAR, International NGOs including Terra Nuova, COOPI, VSF Suisse, VSF Germany, VETAID, Oxfam, CARE and UNA, and local NGOs. In addition, ECHO, the humanitarian/emergency arm of the EC provides emergency relief to the livestock sector.

At present there is no central national coordination or a monitoring body that can evaluate projects independently. The main donors, although not all, do coordinate and exchange information about projects through a strong network in Nairobi, the Somali Coordination Secretariat. There is considerable linkage between the various development projects and with emergency relief projects, but some overlapping at operational level occurs and there is some inconsistency of implementation approach. Thus some projects aim at district level, whilst others aim at Ministry level in a regional administration, while some projects address livestock sector issues at national level e.g. SAHSP I and SAHSP II, or regional level projects e.g. PACE and SERECU.

The LWG under the SSS currently provides a useful forum for exchange of ideas and information between project managers and the main donors in Nairobi. At present FAO, through the FSAU in Nairobi, provides regular information on weather and the humanitarian situation, plus some selected data on livestock in Somalia, while EC-SOU (task managers) coordinates EC projects on livestock, rural development and relief aid.

The EU is the largest donor in the sector EC funded projects have generally built on each other while creating synergy and avoiding duplication of efforts. SAHSP implements the Somali components of SERECU, so both are synergistic. It is important to note that through SAHSP and SERECU, Somalia is likely to be recognized free of Rinderpest by the OIE in May 2010- thereafter, it will be of critical importance to further consolidate the gains through continued intensive vigilance for Rinderpest, alongside addressing prevalent priority trade sensitive diseases. SOLICEP is trying to increase competence on animal health certification, as therefore a rather specialized area in veterinary services. However, in relation to the veterinary diagnostic laboratories, better coordination would have ensured that adequate personnel are trained, the laboratories are provided only with essential equipment and reagents and that effective collection and delivery of field samples occurs.

In the past, ECHO, based on data, information and advice received from VSF Germany and COOPI, adopted annual vaccinations as a strategy of responding to animal disease outbreaks. This strategy was, however, in conflict with the privatization of animal health services and input provision, funded by the EC Somalia. To address this conflict, consultative meetings were held between EC Somalia and ECHO, where it was agreed that ECHO would only intervene in cases of animal disease emergencies that are jointly declared. It is important to point out that declarations of disease outbreaks are sensitive in Somalia and thus it would pay to involve the regional authorities and TUG before going public.

There is no single coordinating body covering all donors with executive responsibility for planning interventions, or undertaking external M & E duties. Currently some donors do not engage directly with the LWG and tend to come forward with already prepared interventions without much prior consultation. Coordination is normally undertaken by central government, but clearly this is not possible at this stage with the present regional administrative structures. This has led to channelling of funds directly through the implementing agencies.

To-date, therefore, the "government" of Somalia is not a key participant in this coordination. However, there will be a case for forming a new body at a later stage when national unity and stability returns, which is located in Somalia with government in the chair and should comprise representatives of government ministries of livestock, private sector organisations such as SLPF (representing veterinary professionals) and the Chambers of Commerce, major donors, UN agencies, NGOs and relief agencies. Such a body should oversee the sector to ensure a common purpose, no project duplication or overlapping, to planning new interventions and to monitor and evaluate

progress and impact. In addition, it should coordinate with relief agencies so that emergency aid provided to the livestock sector does not overlap or conflict with development aid projects. There should be a unified strategy and “authority or body” that can be relied upon by both development partners and implementing agencies to determine when there are animal disease emergencies.

3.6.4 Implementation Modalities

The mission was not able to make valid judgements on the relative efficiency and effectiveness of the various INGOs and UN agencies used in implementation due to the short nature of the study and lack of access to meet stakeholders and beneficiaries in the field. In general, however, they seem to have done a remarkable and commendable job under the relatively difficult circumstances found in Somalia. There is an issue of sub-contracting by FAO to INGOs and strategic alliance between AU-IBAR and Terra Nuova, which adds an additional layer of overhead costs. The costs of “management” of the various layers of “implementers” identified are different. However, FAO Somalia sub-contracting procedures are procedurally efficient as FAO Somalia performs a thorough capability assessment before admitting any INGO and local NGOs into its partners’ list. The selected NGOs have also to perform as per indicators provided in an agreement to remain on the list. It is important that EC SOU determines the true cost of delivery of services in the special environment that characterizes Somalia, and especially where the services are delivered by other parties other than those contracted.

Direct contracting by the EC to INGOs would seem to be the most efficient model at this stage, as transferring funds from one organization to another only serves to increase the overhead costs without adding value and complicates tracking results in M & E and during the final audit. This can further be improved if EC SOU selects a lead INGO per area/region to manage prioritisation and funding of projects for the NGOs in the livestock sector in the area. Contracting a number of INGOs separately will also foster competition between INGOs for resources. To date there is evidence of some organisations and INGOs securing either too many contracts, or large contracts, which exceed their capacity to implement them. It is suggested that the EC-SOU undertake a thorough review of the stated implementation capacity of each of the potential recipients.

AU-IBAR and other AU units including COMESA and IGAD are eligible for direct funding by EC and are currently implementing regional projects that include Somalia. IGAD, with EC funding, is implementing a region-wide livestock policy development initiative and range improvement while revitalizing its regional livestock market information system. COMESA, on the other hand has received funding from USAID to develop regional SPS standards for livestock and livestock products. These two organizations can play key role in addressing the cross border human and livestock movement issues and the associated grazing and trade and regional animal disease control and harmonized regional animal health inspection and certification.

4 EC Somali Livestock Programme for the Period 2009 - 2013

4.1 Overall EC Policies

The overall objective for the 10th EDF in 2009-2013 is economic development and food security. The policies are laid out in the Joint Needs Assessment (JNA) for Somalia and a Joint Strategy Paper (JSP), was prepared by Denmark, EC, Finland, France, Italy, Sweden, UK and Norway in which the overall objective is poverty reduction and consolidation of peace through sustainable and equitable growth.

For the livestock programme, the overall purpose is reduction of food insecurity and promotion of private sector-led economic development. The programme would have two main result areas (i) improved institutional policy and regulatory framework and sustainable natural resource management and (ii) establishment of an enabling environment for private sector led growth and development. The proposed priority programmes comply with these overall purposes and result areas as presented in section 5.5 below.

4.2 General Criteria for Design of the Programme Priorities

The 10th EDF funded interventions cover the next seven years (five years from 2009 to 2013 in which all contracts should be made, plus two further years to 2015 to complete implementation). Many potential interventions have been identified in the problem analysis and by beneficiaries, local councils, ministries in the regional governments and implementing agencies met by the study team in February and subsequently discussed at the Consultative Workshop held in Nairobi on March 10th 2009. Some of the interventions e.g. a national livestock census, improved security, education and health, reconstruction and rehabilitation of road networks and livestock facilities at the ports, are relatively major requiring substantial investments that are beyond the available funding under the 10th EDF for livestock and for which multi-donor support will be needed.

A shorter more realistic list of priority interventions that matches the likely funding available under the 10th EDF was formulated by the Mission with institutional capacity building and personnel training a crucial part of each of the programme areas. Prioritisation was based on overall EC policies in the 10th EDF, the guiding principles contained in the JNA of 2006 and discussions with stakeholders and implementing agencies met during the course of the study and at the consultative workshop on the most pragmatic, appropriate and priority interventions. The JNA principles include an assessment of the relative costs and benefits (but only on a broad basis as the limitations of this criterion in Somalia at present are noted elsewhere in this report) and beneficiaries involved, provision of capacity building support that will lay the foundation for a longer term development should security and governance improve in the future, the probability of the beneficiaries continuing with the action after the project (sustainability), promotion of market and product diversification to sustain or grow exports and product quality, support to small scale production systems giving good socio-economic returns, promotion of proper and safe use of veterinary drugs and improvement in public hygiene standards at slaughter facilities and natural resource management, all with a focus on competent and supportive public and private institutions.

These guidelines suggest a priority towards consolidation of existing projects concerned with private sector or supportive public sector roles that build upon successful interventions with wide benefits throughout the sector. Interventions not included at this stage are control of rangeland grazing intensity and water, which are difficult to implement and may represent a major source of conflict (but studies to determine sustainable interventions under the prevailing socio-economic conditions is included in the priority interventions), larger infrastructure investments and major government capacity building programmes due to funding limitations, and interventions for which expected benefits and number of beneficiaries are relatively restricted or sustainability is in doubt.

The main criteria adopted in design of the programme are summarized as follows:-

- Adherence to EC overall policies in the 10th EDF,
- Address identified needs of the various sectors of the community
- Identify a number of focus areas that give the highest estimated impact in terms of benefits and number of beneficiaries;
- Projects that build on successful activities and allows consolidation of existing or previous EC funded interventions,
- Focus on private sector led economic development together with promotion of the public sector that promotes private sector development in a public-private partnership.
- Capacity building is needed throughout the programme including:
 - Human resource development - including in-house, STVS and regional training
 - Building the capacity of the ministries to retain staff to implement policies and enforce the legal frameworks
 - Physical infrastructure - offices and storage area for the cold chain, LMIS database equipment and computers and office furniture
- In terms of wider public sector support, the administrative regions of Somalia are in dire need of trained and experienced human resource. Unfortunately the public sector is finding it difficult to retain even the few staff that they recruit. However within the funds allocated to capacity building under each component, an allowance could be made for flexibility, should regional administrations become more stable and be able to pay and retain their staff at a later stage and hence justify further targeted donor funded capacity building interventions in the public sector.
- Support the zonal, regional and national veterinary associations to deliver animal health services and inputs, municipalities to develop livestock marketing infrastructure including markets and slaughterhouses that will be managed by the private sector, the development of HACCP at export slaughter facilities and animal health inspection and certification services at points of export.
- Maintain flexibility in the programme in terms of location as security and governance may improve during the programme period, for example for funding public sector at administrative regional level,
- Implementation through AU agencies (AU-IBAR, COMESA and IGAD), UN agencies and INGOs, with the Somali Government playing the important role of coordination, as governments do not have adequate organizational and human resource capacity to undertake most tasks. In addition Somalia is not a signatory to the Cotonou Agreement that would have allowed EC funds to be channelled through "government".

The main interventions proposed are aimed at consolidation of existing interventions rather than provision of support to regional administration infrastructures that demand funding beyond the 10th EDF availability and require multi-donor support. They are grouped in a manner that would create synergy and the perceived priority is on the basis of strategic importance to the national economy and broad estimates of beneficiaries and expected impact. An example is the support to animal health inspection and certification that supports the marketing sub-sector.

4.3 Details of Priority Programme Areas

Three main programme areas are proposed, along with a co-funded census and studies of population dynamics that supports the sector as a whole. The main interventions within each programme area are outlined below. Capacity building in the private sector personnel and public sector staff where it provides an enabling environment for the private sector (policies and regulatory frameworks) forms an integral part of each programme area.

Component 1: Support to marketing of livestock and livestock products including meat and hides and skins in domestic, regional and international markets.

- i. **Improve livestock market facilities.** All livestock markets in the visited towns (Hargeisa, Togwajale, Gabilley, Borama, Berbera, Sheikh and Burao) are owned and managed by the local councils. The markets were generally open spaces without basic facilities or utilities. These structures need to be developed not only to serve the livestock sector but to protect them from encroachment, which is now rampant in Puntland and Somaliland. It will be necessary to liaise with the FAO implemented WB funded RRRRSLP to avoid overlap or duplication.
- ii. **Improve services at Berbera and Bosaso holding grounds and marshalling areas** by collaborating with animal health and animal health and inspection sub-components provide adequate number of professionals to undertake disease diagnosis, quarantine, inspection and certification. These actions could be designed as follow up to EC funded Terra Nuova implemented LTMP, and SAHSP and AU-IBAR implemented SOLICEP and SERECU projects. The projects should take this opportunity to involve the public and private sectors including the ministries and chamber of commerce in decision making and future investments in this sub-sector.
- iii. **Improve local slaughterhouses.** The slaughter facilities are either owned by private companies, as in the case of Maandek Company slaughter house in Hargeisa, or by the municipalities who either contract them to the private sector as in the case of Gabilley (and as is planned for Borama, Garowe and Bosasso); or operate them. About 90-95%, of the meat traders and butchers in the main slaughter facilities and meat markets in Somaliland are women. It is sound investment to look favourably at supporting the meat vendor associations such as Nafaqo in Hargeisa and Gabilley (Follow on the EC Somalia funded FAO Meat project and EC funded UN Habitat implemented slaughterhouse construction project). It is important to note that the WB RRRRLP project is constructing model slaughter facilities in Borama and Bosaso, while UN Habitat constructed slaughter facilities in Garowe and Gabilley – there are many other municipalities to support.
- iv. **Formulate policies to guide establishment of slaughterhouses and tanneries** at national level and translate it to bylaws for enforcement of municipal level (Follow on to EC funded FAO implemented Somali Meat Project). The Somaliland and Puntland Meat Control and Inspection Acts have been presented to the regional authorities for debate and approval. Further support is needed to translate the approved versions and create awareness and popularize them before they are rolled out for enforcement. Municipalities will need to be supported to develop regulations and by-laws that are in line with the provisions of these Acts.
- v. **Improve Meat Industry Standards.** Improve the quality of meat and support services, including enhancing capacity to develop and enforce appropriate products and process standards and acts of parliament and regulation pertaining to livestock trade; and further develop and enforce export product standards. Encourage observance of meat hygiene code and raise public awareness on its importance, (follow up to EC funded FAO implemented Somali Meat Project). The veterinary authorities in Dubai and Sharja Municipalities have given

the Somali meat export slaughterhouses a window of opportunity to put their houses in order before they are expected to conform to international standards. The project should take this opportunity to involve the public sector including the ministries, as well as the Chambers of Commerce in decision making in this sub-sector.

- vi. **Promote Meat Exports and Review Diversification Opportunities;** in addition to standards to ensure market acceptance, promote new market opportunities through market investigation studies, development of brands and review of opportunities for value addition through processing using the ample supply of raw livestock material. The latter would create employment; stimulate technological innovation, product diversification, etc. So far meat is exported raw and milk is only improved through better hygiene, not much in terms of value addition and product diversification.
- vii. **Improve Hides and Skins Recovery,** plus leather development. Hides and skins from temporary slaughter facilities are often not recovered while an estimated 70% are recovered from improved slaughter facilities. There are several traders in Berbera, Borama, Burao and Hargeisa who are buying raw hides for salting or drying. The cured hides and skins are then either tied in bundles and exported or are treated in local tanneries such as the Batun tannery in Hargeisa before being sold as wet blue leather (semi-processed). The current slaughterhouse designs do not have hides and skins recovery facilities. The situation is compounded by workers in slaughterhouses, flayers and handlers, who do not value hides and skins. The poor handling of hides and skins, by these workers often serves to lower the quality even further. The WB funded RRRRLP currently being implemented by FAO Somalia is piloting two slaughter facilities with hides and skins recovery units in Bosaso, Puntland and Borama, Somaliland. The EC intervention should consider complementary activities and study a range of synergies with this project.
- viii. **Strengthen Market Information System** Expand the coverage and information distribution channels and ensure sustainability of the LMIS operated by the Chambers of Commerce (follow up to EC funded LMTR Project and UNDP funded LMIS project). Terra Nuova developed a workable model of information gathering and dissemination in partnership with the Somaliland Chamber of Commerce and the Ministry of Commerce and Industry. The UNDP is funding the Somali Chamber of Commerce to maintain the system while Terra Nuova is providing technical support. The system should be expanded to increase the number of days a week on which information is collected and to include chilled and processed meat and qualities, hides and skins and processed leather. The Chamber of Commerce should be involved in decision making. A framework should be developed linking the LMIS with market intelligence in export markets as a strategy for smoothing supply of animals and meat in timely and adequate volumes.
- ix. **Institutionalise HACCP and Traceability Systems.** The initiated HACCP and traceability systems should be institutionalized. The traceability system was to be tested for both live animals and meat to enable the project develop (but not implement) a practical system that would only be implemented if it was a condition for trading in livestock and livestock products. At this point it is not. It may be possible to attract other sources of EC funds that specialise in this aspect. This and actual costs involved would need to be determined at project preparation stage.

Component 2: Support to pastoral and peri-urban dairy and fodder development and marketing and identification of practical and sustainable interventions in range development

- i. **Milk Marketing** The main intervention is to support expansion and improvements to milk marketing and would involve expansion and increase of collection points (as demonstrated in the EC funded dairy development projects) in both pastoral areas and in peri-urban areas in

South Central, Puntland and Somaliland and would focus on women's groups. Peri-urban milk production needs to be greatly increased to meet the ever increasing demand of the growing Somali cities and towns. In South Central Region, especially around the Mogadishu urban area, there is considerable scope for utilisation of irrigation and crop by-product residues to produce fodder for milk for urban areas as a means of economic and diversified development in the irrigation areas in the South region.

- ii. **Fodder Development.** To meet the increased animal feed demand for the pastoral and peri-urban dairies and to supply the livestock markets this intervention would support feed production. These actions propose the application of new technologies needed to reduce losses at each step and improve the quality and quantity of conserved forages available for livestock. These include the crop residue improvement in the inter-riverine areas in South Central Region and in the flood plains in Somaliland and Puntland. There is potential to link the large Mogadishu fodder and milk market in conjunction with irrigation developments in the South where fodder could be a cash crop to sell to peri-urban milk producers and peri-urban small ruminant development to supply meat for local consumption. There are pockets of integrated fodder, crop residue improvement and livestock improvement implemented by NGOs with EC funding in all three regions of Somalia and that have demonstrated potential for improving livestock production and productivity and for producing fodder and commercializing its production and marketing. Building on this, further support to fodder production and conservation in the flood plains for hay production to improve animal condition at markets is proposed. There are many sites along the flood plains throughout Somalia that can be used to pilot commercial fodder production. Such commercialization will relieve pressure off the rangelands and reduce chances of conflict as fodder traders are currently harvesting hay from open rangelands without regard to traditional grazing patterns and the needs of pastoralists. Since poor nutrition is a perennial problem, there is need to establish mechanisms for fodder and conservation including baling and silage making. Baling would not only serve to conserve fodder, but it would also make it easier to store and transport. Silage making in the flood plains is potentially an important economic venture to support both domestic and export markets. It will be important to recognise that whilst it is possible to commercialize fodder production, some pertinent issues must be borne in mind including: i) the activity must involve the community from the outset and must ensure that the affected communities understand and agree with the project objectives and expected outputs; and (ii) care should be taken not to create competition between grain and fodder production as this may aggravate the grain scarcity. Community involvement at all level of project development and implementation will be essential for sustainability.
- iii. **Identification of practical and sustainable interventions in range development.** Control on grazing intensity and water is difficult to implement and is a major source of conflict, and thus should only be addressed should the available funding be increased. Such external assistance should work to create an enabling environment leaving the choices to the producers. Thus to mitigate widespread range deterioration, it is proposed, should the level of funding be increased, to support the identification of practical and sustainable interventions in range development and areas under the prevailing socio-economic and political realities. In addition, creating awareness of some of the water harvesting and range rehabilitation approaches would be included. Very limited and carefully considered initiatives based on the Burao district fencing experience will be tested. Under this project, a live fence was erected around an estimated 20x30 km dry season grazing area owned by the public sector after exhaustive community dialogue so as to permit rest-rotational grazing of these areas (also provided water supplies when necessary). To enhance community ownership the beneficiary community nominated "from among them members to police the fencing". The exercise in Burao was estimated to cost 100,000 USD per year using community labour (under cash or food for work). Sustainability would be ensured by a fee per head for the grazing system set by the user owners.

Component 3: Support to the delivery of animal health services including animal health inspection and certification

- i. **Strengthen the Somali professional groups** to take complete charge of treatment, disease surveillance and diagnosis, vaccinations, maintaining the cold chain for vaccine distribution and drug supply lines and oversee discipline of professionals.
- ii. **Support surveillance and disease diagnosis services**, including operationalisation of existing laboratories and facilitating development of a mechanism for collecting field materials from diseased and suspect animals for analysis in the laboratories. It is imperative that the support given to the regional governments to establish laboratories is well coordinated to avoid duplication of efforts and provision of equipment that may never be used.
- iii. **Strengthen vaccination services.** Vaccination is a public good; hence the public sector should be encouraged to take lead. Priority in vaccination would be for the following: (i) Camels: Hemorrhagic Septicaemia; (ii) Cattle: Lumpy Skin Disease, Blanthrax and CBPP and (iii) Shoats: PPR, CCPP, S&G Pox, Enterotoxaemia. The Somali administrations should be encouraged and facilitated to play a major role in vaccination campaigns as part of disease surveillance.
- iv. **Tsetse control.** A community managed system such as baiting and trapping should be considered for tsetse control along the rivers. During dry seasons, there is a tendency for animals to concentrate in riverine areas, where the animals often contract Trypanosomosis. Interventions aimed at providing trypanocidal drugs at a subsidized rate, should be channelled through the private sector animal health service providers and input distributors being supported by EC and other donor funded projects. It is unfortunate, but recognised that Somalia cannot participate in PATTEC (Pan African Tsetse and Trypanosomiasis Eradication and Control) and thus needs some form of support in controlling Tsetse and Trypanosomosis.
- v. **Veterinary drugs control.** An active veterinary board or inspectorate should be put in place to the curb influx of fake drugs into the market
- vi. **Human resource development:** Sustainability of activities currently being implemented by donor funded projects including EC funded projects depends greatly on there being trained and experienced manpower in the public and private sectors to take on the tasks once the projects come to an end. It is recommended that EC funded projects support both in-house and external training in administration, finance and technical areas. Where practical and cost effective the training programmes can be offered through STVS
- vii. **Harmonise strategies and draft policies and the associated legal framework.** The EC funded projects that are supporting the establishment and operations of veterinary laboratories including FAO Somalia, Terra Nuova, SAHSP, SERECU and SOLICEP need to have a common implementation strategy especially in ensuring that the draft livestock policies and the associated legal framework being supported for enactment through cabinet and parliament and pilot enforcement at field level are not in conflict.
- viii. **Support to animal health inspection and certification.** There are technical limitations in the export inspection processes in the Somali ports and in the supporting animal health delivery and input supply systems. There also are legitimate worries behind the disease concerns raised by the traditional importers such as the Saudis and potential importers such as Jordan and, even if some of them seem wrongly placed on Somali shoulders. Many Somalis and the experts who work with them doubt that the Saudi bans were prompted wholly by health or other technical concerns and interest groups would like to control supply channels at the source. The Saudis also close their eyes to the fact that the same sheep and

goats refused entry to their ports are being sold to Egypt and trans-shipped and /or Yemenis and then walked into the Kingdom, transferring substantial profits from Somali traders to Egyptian and Yemeni ones who are better connected in Saudi. Nonetheless, to access even those markets and to retain the markets that Somalis already have in the Emirates and Oman, Somali ports will have to provide better assurances that diseased animals are not being exported. The question is how Somalis can assure that livestock meet World Animal Health Organization (OIE) and regional Sanitary and Phyto-sanitary (SPS) standards when none of the Somali administrative systems has a strong public veterinary system. The projects that will be funded under the 10th EDF in animal health, production and marketing, need to collaborate to play their designated roles in order to support regions of Somalia to be retain their live animal and meat export market share. Some actions that build towards this are outlined below:-

- ix. **Support the development of public animal health inspection and certification structures.** Animal health inspection and certification services are a public good but the state of development of the public sector is wanting and needs technical and human resource support from implementing partners and the Somali private veterinarians. This action will be implemented in close collaboration with the animal health and input provision, meat quality assurance, hides and skins management and LMIS actions.
- x. **Promote public-private partnerships in animal health certification for trade.** Provide training in animal health and inspection procedures and protocols to public and private veterinarians in the three regions of Somalia. Efforts will be made to ensure that the public and private sectors appreciate that they need each other and that they have roles to play in the protecting their market share in the Middle East markets.
- xi. **Promotion of Strong Linkages between Somalia and importing countries** It is important that the traditional livestock importing countries in the Middle East are informed about the efforts by the regions of Somalia to meet the live animal and meat quality assurance standards. This will be a continuous effort at creating bridges with veterinary authorities in the Middle East and potential partners.

4.4 Monitoring and Evaluation

It is proposed that other EC funds are provided in this key area for external and internal Programme and Project monitoring and evaluation, including:

- (i) internal project inputs to undertake baseline studies to allow subsequent impact assessment and
- (ii) external inputs for specific Impact Studies to be undertaken of selected projects including detailed farm level assessments to enable farm level and project level impact to be quantitatively assessed, and
- (iii) external inputs to monitor progress and impact of the overall programme.

4.5 EC Interventions for the First Phase Period 2009 - 2010

The main focus areas in the proposed programme proposed above would nearly all commence in the first phase 2009-2010, and build into the next phase, subject to satisfactory mid-term evaluations (MTE), from 2011-2013 and beyond for two years where necessary. However, the Census would be initiated and completed in Phase I and the STVS support would commence in Phase II after completion of the present EC funded Phase III.

4.6 Compatibility of Priorities with the Strategic Approach and General Principles of EC Assistance

The priority programme areas are compatible with the overall strategic approach and general principles of EC assistance to Somalia. In particular they match the overall purpose of the 10th EDF, namely reduction in food insecurity reduced and promotion of private sector-led economic development and the main result areas contained in the EC strategies, as shown in the following table.

Table 4. 1: Compliance of Priority Programmes with EC Strategies - Main Results

Priority Programme Area	EC Strategy Results
1. Environmentally sustainable livestock and livestock products and marketing practices, value addition and services provision enhanced	<ul style="list-style-type: none"> improved institutional policy and regulatory framework and establishment of an enabling environment for private sector led growth and development and establishment of an enabling environment for private sector led growth and development and sustainable natural resource management
2. Internationally recognized and cost-effective systems of animal health surveillance, inspection and certification system, and public and private veterinary services delivery system established and operational	<ul style="list-style-type: none"> improved institutional policy and regulatory framework and establishment of an enabling environment for private sector led growth and development
3. Livestock sector institutions established/strengthened and sector policies, laws and regulations developed	<ul style="list-style-type: none"> improved institutional policy and regulatory framework and sustainable natural resource management and the establishment of an enabling environment for private sector led growth and development

4.7 Implementation

A summary of the main programme areas, their implementation period under the 10th EDF, an indication of possible costs *based on tentative allocation of available funds* at this stage and the main stakeholders and beneficiaries is presented below.

Table 4. 2: Summary of Priority Programme Areas, Implementation Timing, Indicative Costs and Main Stakeholders/Beneficiaries Targeted

Priority Programme Area	Implementation period	Indic Cost € million	Stakeholders/Beneficiaries
1. Support to development and production environmentally sustainable livestock and livestock products and marketing practices, value addition and services provision	2009-2013	5.5	<ul style="list-style-type: none"> Communities, pastoralists, traders and public sector including district and municipal level authorities Women's group, youth pastoralists and peri-urban farmers Municipal slaughterhouses and meat markets, live animal, meat exporters Chambers of Commerce, exporters and traders, hides and skins traders, pastoralists

Priority Programme Area	Implementation period	Indic Cost € million	Stakeholders/Beneficiaries
2. Support to establishment of internationally recognized and cost-effective systems of animal health surveillance, inspection and certification system, and public and private veterinary services delivery system established and operational	2009-2013	5.0	<ul style="list-style-type: none"> Professional veterinary associations, public sector laboratories and staff, pastoralists, exporters and traders and municipal level authorities
3. Strengthen/establish livestock sector institutions and develop appropriate sector policies, laws and regulations	2010-2013	2.0	<ul style="list-style-type: none"> Public and private sector institutions, Beneficiaries of services and inputs including pastoralists and all actors along the livestock and meat marketing chains Development partners and implementing agencies including UN agencies, INGOs and local NGOs
4. Monitoring and Evaluation*	2009-2013	0.0	<ul style="list-style-type: none"> Public sector and professional associations, development and implementation partners
Sub total EC funding	2009-2013	12.5	
Expected Partner contribution	2009-2013	1.25	
Total Funding	2009-2013	13.75	

*Covered by other funds within the EC

Total Costs and Overall Funding Allocations to Livestock Sector

The priority programme areas, excluding M & E costs, amount to approximately €13.75 million, comprising of €12.5 million from EC and 10% (€ 1.25) partner contributions. This relates to the tentative EDF 10 allocations to the livestock sector of €12.5 million as shown in the following table by phase and by economic development and food security categories.

Table 4. 3 : Tentative EDF 10 Allocations Somalia: Economic Development and Food Security

Phases	Allocations
Phase I: 2009-2010: € 30 million	Food Security: € 4 million Economic development: € 26 million including livestock: € 6 million
Phase II: 2011-2013: € 25 million	Food Security: € 6 million Economic Development: € 19 million including livestock: € 6.5 million
Total (2009 -13): € 55 million	Livestock (2009-2013) : € 12.5 million

In view of the importance of the livestock sector to individual household livelihoods and the national economy and its contribution to the level of cereal imports and resultant reduction in the level of food aid, the total allocation of 10th EDF funds to livestock has major strategic and survival implications. It is important that the allocation made to the livestock sector be reviewed upwards. The allocation between agriculture, irrigation and livestock will need careful consideration for which the three programming missions in these three sectors currently being carried out will form the basis for making the final decision on the amount of funds to be allocated to each sector. If it were decided to

raise funding to the livestock programme, most of the interventions could be expanded e.g. by selection of further target areas for milk production and marketing projects, the coverage of support to animal health system could be widened and more livestock market and domestic slaughter facilities could be identified for support and improvement. In addition those important areas excluded such as tackling rangeland degradation, supporting integrated multi-sector area development projects, supporting poultry and honey production, supporting the public sector to effectively provide services and participate in regional and international negotiations or greater capacity building within the public sector could be added. The basis for the cost allocations between the programme areas is the strategic importance to the national economy, a broad estimation of the benefits, beneficiaries and expected impacts and a broad assessment of cost requirements based on past project cost levels. Actual costs will need to be determined at the project preparation stage along with expected benefits to each project.

4.8 Modalities

At present, due to the inability of the EU to channel funds through government (due to the absence of any signatory to the Cotonou Agreement that is required for the EC to provide funds), the EC will have to continue to contract to UN agencies, other international, including regional, organisations such as AU-IBAR, IGAD and COMESA, or INGOs (singly or a consortium of INGOs). In general INGOs and the UN agencies have built up a remarkable level of experience in implementing projects in what is a relatively difficult environment to implement development projects using trained Somali managers and technicians in the field. In the proposed programme it is important that they build or establish viable Somali private public sector partnerships and that they involve the regional administrations at all levels of projects including planning, implementation and monitoring and evaluation.

Direct contracting to the implementing agency would seem to be the most efficient model at this stage as transferring funds from one organization to another only serves to increase the overhead costs. Contracting a single INGO for a relatively small-medium simple project is preferable to a large project implemented by consortiums due to capacity limitations. The distribution of contracts among several INGOs and organisations so as to inject some element of competition may improve efficiency. In addition, regional organisations such as AU-IBAR, IGAD and COMESA that can attract EC funds, and are eligible for funding including those from EC-Somalia and ECHO should also be included as potential partners. An analysis of COMESA and IGAD is attached as Annex 9.

4.9 Logical Framework and Indicators for Proposed Programme

INTERVENTION LOGIC	OBJ. VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
Overall Programme Goal: Reduction of food insecurity and promotion of private sector-led economic development in partnership with government			
Purpose: To improve the performance of the Somali livestock sector through: <ol style="list-style-type: none"> 1. improved institutional policy and regulatory framework and sustainable natural resource management 2. establishment of an enabling environment for private sector led growth and 	Livestock production and productivity improved, enhanced delivery of health care and increased value/numbers of livestock and livestock products including meat, milk and hides and skins	- Surveys and export statistics	<ul style="list-style-type: none"> - Conflict/insecurity does not significantly restrict implementation - Importing countries do not issue new trade bans - Effective public-private sector partnership
Result Areas			
Result 1 Environmentally sustainable livestock and livestock products and marketing practices, value addition and services provision enhanced	<ul style="list-style-type: none"> - Options, and the associated costs, of estimating livestock populations documented by October 2009 - Milk production increased by 20% annually, - Milk collected, processing and marketed increased by 30% annually - Fodder production and marketing increased by 40% annually - draft dairy and land tenure policies developed and presented to the authorities for discussion, amendments, changes and approval by the fifth year - Grazing systems understood through continuous community mobilization and involvement including policing, awareness - Diseases/conditions caused by poor hygiene and occupational health halved in five years, - At least four domestic livestock and meat markets 	<ul style="list-style-type: none"> - Internal project reports internal and external M and E reports - Export statistics, - Internal project reports, internal and external M and E reports 	<ul style="list-style-type: none"> - Women's groups allowed to form and operate and youth can be interested - Communities fully involved in range trials, and no conflicts on land utilisation occur - Municipal authorities and live animal and meat exporters and SOMEAT cooperate, government regulations enforced

INTERVENTION LOGIC	OBJ. VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
	<ul style="list-style-type: none"> and slaughter facilities constructed/ rehabilitated per region in five years, - live animal and quality assured meat exports increased by 10% annually, - hides and skins recovery improved by 50% annually, - recovery of edible offals increased by 50% annually, - 50% increase in volume of inspected meat and animals exported annually, - At least 70% of the actors in the live animal and meat marketing chains are women and youth in five years 		
<p>Result 2 Internationally recognized and cost-effective systems of animal health surveillance, inspection and certification system, and public and private veterinary services delivery system established and operational</p>	<ul style="list-style-type: none"> - Fully functional zonal veterinary associations with operational disease surveillance teams established in each of the zones by year 5 - Each zone has functional mobile or fixed diagnostic laboratory by year 5 - The number of active service providers (private and public sectors) increases by 10% annually - Improved animal health coverage and penetration results in an increase of 30% and 65% in the number of animals treated and/or vaccinated annually - The conflicts/contradictions in the developed draft policies and legal frameworks are discussed and corrected by year 2 - The meat and animal inspection and certification system is approved and initiated in regions of Somalia by year 1 	<ul style="list-style-type: none"> - Internal project reports internal and external M and E reports 	<ul style="list-style-type: none"> - Public sector support and services function and private veterinary organisations participate Other countries in Horn of Africa and EC projects assist in expanding student numbers at STVS

INTERVENTION LOGIC	OBJ. VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>Result 3 Livestock sector institutions established / strengthened and sector policies, laws and regulations developed</p>	<ul style="list-style-type: none"> - Existing zonal livestock institutions strengthened to be effective and fully functional by year 5. - Establishment of effective and fully functional zonal livestock institutions by year 3 to fill existing gaps. - No. of partnerships and networks (with MOU's) with key stakeholders of the zonal livestock institutions with evidence of positive results, by year 5. - Gazetted notices of the required sector policies are available at the countries highest legal office by year 2. - Gazetted legal notices of all acts supporting the sector policies for effective and efficient policy implementation available at the country's highest legal office by year 3. - Gazetted annual supplementary notices of acts supporting the sector policies and acts available at the highest legal office. - Sector regulatory framework fully developed, documented and operational by year 4. 	<ul style="list-style-type: none"> - Legal notices. - Documentation of regulatory framework at Sector level. - Internal and external Monitoring and Evaluation reports. 	<ul style="list-style-type: none"> - Assumptions
Activities	Inputs	Costs	
<p>Result 1</p> <ul style="list-style-type: none"> • Support to livestock marketing facilities and services • Support to domestic and export meat trade • Support to the development of the dairy sector • Support to livestock products value addition • Support to public-private partnerships in livestock marketing and trade 	<p>Increased number of well equipped milk collection and marketing centres Women's groups support Expertise in clean milk production, processing and packaging and awareness creation efforts Expertise on fodder production and conservation and awareness creation efforts Fencing, food for work inputs Training inputs Construction /rehabilitation of livestock markets, local</p>	<p>€5.5 million</p>	

Activities	Inputs	Costs	
	slaughter facilities and meat markets Support to government to enforce standards and statutes Improvements to hides and skin facilities Improvement to traditional meat processing spearheaded by women; Improved offal recovery and utilization Local NGO to promote offal consumption - awareness creation/promotion Expertise in meat marketing and processing Support to SOMEAT LMIS expertise HACCP and Traceability expertise Trade and taxation negotiations under the auspices of IGAD (in collaboration with EAC and COMESA)		
Result 2 <ul style="list-style-type: none"> • Support to Surveillance, Control, and risk management of livestock diseases • Support to public-private partnerships in disease control 	Essential laboratory equipment, reagents and operational costs Vaccine equipment and solar fridges Housing for cold chain and offices Support to policy and strategy harmonisation Contracts to the Vet. Associations Training inputs Technical assistance – administration, finance and technical areas	€5.0 million	
Result 3 <ul style="list-style-type: none"> • Support to development of livestock sector and animal health policies and strategies • Support to capacity building for the livestock sector 	Training and organization development expertise Support to livestock policies and strategies and regulations on drugs and establishment of value addition activities Training inputs and provision of working tools and equipment Support to SOMEAT Technical assistance – administration, finance and	€2.0 million	

Activities	Inputs	Costs	
	technical areas		

4.10 Justification, Target Beneficiaries, Benefits and Sustainability by Priority Programme Areas

4.10.1 Overall Programme Justification

The Mission appreciates that figures, numbers and statistics on Somalia, with the possible exception of remote sensing data, are estimates of varying reliability and that to base planning on such figures or to use them to argue decisions constitutes a risk to all the proposed interventions. With this in mind the justification for providing continued support to the livestock sector include:-

- In 2007 it was estimated that 65% of Somalis were directly engaged in livestock production and another large segment was employed in ancillary activities. It is estimated that some 5.6 million people (70% of the population) are rural of which about 55% are pastoralists and agropastoralists, 24% are crop farmers and 1% are fishermen. The remaining 2.4 million (30% of the population) lives in urban areas and creates a ready market for milk and milk products.
- Based on estimated offtake rates 33% (2.31m) of the sheep and goats are slaughtered for home use, 17% (1.19m) are consumed in urban and per-urban areas. The milk, for both home consumption and sale, and livestock slaughtered for home consumption and sale provide about 60% of calorie intake by the people in rural and urban areas. It is therefore important that milk production and marketing and improvement of local livestock marketing infrastructure including domestic slaughterhouses and meat markets are supported. In addition to contributing to local economies, such actions will improve the quality of milk and meat thus safeguarding human health and also improve offals and hides and skins recovery from the model slaughterhouses. The improved production and management of offal and hides and skins will expand sources of income due to the players in the livestock production and marketing chains.
- The export of 3.0 and 0.5 million live animal and carcasses (50% of the offtake) accounts for an estimated 80% of exports in normal years but exports have been periodically interrupted by bans imposed by importing countries mainly on the grounds of preventable and controllable livestock diseases. Thus, livestock sector, and especially the live animal and meat exports, is under threat from economically and socially important animal diseases such as Rift Valley Fever, Brucellosis, Foot and Mouth Disease and emerging diseases.
- It is important that the regions of Somalia are supported to establish functional disease surveillance, treatment and control systems to address the economically and socially important diseases that can affect human health and / or interfere with regional and international trade. Effective disease diagnosis and surveillance supported by timely vaccination and treatment contains disease and enhances productivity of livestock. This has been demonstrated by COOPI and VSF Suisse (2007/2008) in Somalia through vaccination of 1,961,067 animals against common diseases and treatment of 846,567 culminating in improved production and productivity as evidenced by increase in fertility and milk production and improvement in growth rate. All these factors reduced the time taken by livestock to reach market size despite the sub-optimal rains experienced in 2008.
- It is equally important that meat quality assurance and traceability and animal health inspection and certification systems that meet the regional and international standards are established while the public sector develops supportive policy and legal frameworks.
- The processing and export of livestock, which earned about 120 million USD in 1997 and 250 million USD in 2007, accounts for at least 60% Gross Domestic Product (GDP) and provides the main source of Somali livelihoods including the much needed wealth and job creation for youth and women at points of production and processing. The development and growth of

livestock market infrastructure especially in secondary and terminal markets in municipalities will go along way to supporting this key productive sector. In addition, it is important that the nascent livestock and meat information systems are harmonized and supported to inform the pastoral livestock producers and traders at the primary and secondary markets.

- A symbiotic relationship exists between livestock production and the environment, and the social and economic well-being of the Somali population is thus greatly affected by environmental and meteorological conditions. Intensification and expansion of livestock production can be achieved by promotion of fodder production, where socially and environmentally acceptable and sustainable, and improving the exploitation of the range on a sustainable basis. It is, however, critical that by design such action is preceded by the identification of practical and sustainable range improvement / rehabilitation interventions that are acceptable to beneficiary communities. It is imperative that the selection of target areas takes into account the prevailing socio-economic and political realities.
- The benefits of improved food security, employment and economic development and a reduction in the vulnerability of the rural and peri-urban poor are in line with the EC's overall policies to assist Somalia.
- The support provided to the public and private sectors to date has laid some foundations for future growth of the public sector and expansion of the private sector. Coordinated support is required to consolidate these gains while creating a pool of trained human resource in the private sector by funding their training and outsourcing their services
- The livestock sector remains one of the biggest employers in Somalia and thus can gainfully engage youth who are drifting from the rural to urban areas. The programme purposefully focuses on women and youth, as they play, and can continue to play, a major role in the sector especially in milk and livestock marketing and operations at slaughterhouse and meat markets, with expected significant benefits at rural household level, and to help stem the drift of young people out of the sector.
- To inject elements of sustainability, the proposed programmes would focus on consolidating and building on the gains made by the existing interventions and capacity building in both private and public sectors. Adopting this strategy will ensure that the benefits to the proposed programme investments are relatively high, the number of target beneficiaries considerable and widespread throughout the rural areas.
- Without this support, the economy and food security situation is likely to deteriorate even further with significant consequences on the economy, employment and the level of food aid and emergency assistance that the country will require.

Component 1: Support to marketing of livestock and livestock products including meat and hides and skins in domestic, regional and international markets.

Justification. The local slaughter facilities and meat markets fall far short of the regional standards and standards contained in the draft Somaliland and Puntland Meat Control Act, Public Health Policies. They also do not meet the state local occupational and environmental management standards. The EC funded Somali meat project has supported the local slaughter facilities with basic tools, protective clothing and training. EC has also funded UN Habitat to construct slaughterhouses in Garowe and Gabilley and rehabilitate meat markets in Burao, Borama and Hargeisa. These are important achievements that have gone along way to improving public health and improving working conditions of women and youth. However, there is scope for further facilities to be rehabilitated and improved.

Threats to the participation of the Somali livestock and livestock products in international markets are due to changing regulatory environment aimed at assuring food safety and limiting the spread of

livestock diseases. This key area proposes to strengthen/consolidate capacities of Somali institutions (private and public) to adhere to regional and international food safety standards and ensure increasingly higher standards of public health for exported meat.

Establishment of harmonized framework for internationally recognized standards that apply for livestock trade and marketing, and strengthening institutions participating in the livestock production and trade has been initiated by the EC funded LTMP project that terminated at the end of 2008, as well as by SAHSP, SOLICEP, FAO Somalia Meat and the LAS I Project projects, but their achievements to date need to be built on and institutionalized. Emphasis should now be in linking the fragmented efforts so far and to provide a suitable institutional capacity for enforcement to ensure sustainability beyond projects. EC funded projects are currently testing traceability systems for both meat and live animals in preparation for more stringent export requirements from the importing countries. This is an essential activity that is yet to be completed and needs further support

It is important that the various public and private sector actors in the livestock sector appreciate the various requirements and controls for processing and export of meat products and multilevel certification for international acceptance. This dictates that the public and private sectors act in the interest of the general good rather than chasing individual interest at the risk of jeopardising the market. The EC funded FAO Somalia Meat project has supported the establishment and growth of SOMEAT to champion the interests of Somali meat traders. This activity needs to be continued as SOMEAT is still at its development stages.

Somalia needs to increase its market share in the traditional export destinations and gain access to alternative potential markets. This can be achieved through expanding and diversifying opportunities in livestock commodity trading through market research in export markets and review of processing opportunities to add value to the present export of raw materials, aggressive marketing of fresh and processed meat and developing recognisable brands.

Information is an essential element to making informed decisions. Lack of Livestock Market Information System (LMIS) is one of the greatest constraints to effective and timely marketing of live animals and chilled meat. This was demonstrated by the EC funded Terra Nuova initiated and UNDP supported LMIS, where access to real time livestock market information down the marketing chain to village level via slips carried by lorry drivers has improved the bargaining power of the pastoralists. The system developed with EC and UNDP support should be expanded to increase the number of days a week on which information is collected and to include chilled and processed meat and qualities, hides and skins and processed leather and strengthened for sustainability. The Chamber of Commerce should be involved in decision making and in future growth of the system. A framework should be developed to link the LMIS with market intelligence in export markets as a strategy for smoothing supply of animals and meat in timely and adequate volumes. The system does not duplicate the FSAU data collection system, which is restricted to food and livestock prices only, without giving quality, and it distributes its data electronically thereby limiting the number of recipients, especially at village level.

Improved slaughter procedures have resulted in an unexpected positive impact in the form of increased recovery rate (by up to 30%) and quality of sheep and goat skins. These are important additional income generating opportunities whose recovery from the local slaughterhouses needs to be improved. In addition, there is huge scope for utilisation of offals. Assuming that the stomachs and intestines weigh an estimated 3.5 kg per and heads 0.75 kg per animal, this translates to approximately 1.1-1.75 million kgs of offals and 225-375,000kgs of heads from export slaughterhouses and 2.7-7.8 million kgs of offals. Traditionally the Somalis do not eat offals and so most of these products end up being thrown away in the midst of hunger and malnutrition. A model project on improving the use of offals would be instituted.

Target Beneficiaries: Wide cross section of Somali livestock stakeholders, policy makers in the public sector, private sector organisations, livestock traders, livestock service providers) and

ultimately pastoralists. In the livestock market chain there are many stakeholder providing a variety of functions including guaranteeing payment, trading, brokerage, selling, over-night holding services, herding, trekking and transportation that would benefit from improve information services, hides and skin processors and traders. Also slaughter house operators (municipal owners and privately contracted managers), exporters spread through out the three regions of Somali and parts of Ethiopia, and meat consumers in terms of improved hygiene. Meat processing has been dominated by women. The men slaughter mainly camels and cattle but the small stock seems to be primarily a women affair.

Benefits: Improved hygiene and occupational health, constructed/rehabilitated livestock and meat markets and slaughter facilities, live animal and quality assured meat exports increased by 10% annually. With a total value of over € 200 million, this is equivalent to €20 million per year. Hides and skins recovery improved by 50%, recovery of edible offals increased by 50%. The process of approval of the meat and animal inspection and certification system would be initiated in importing countries and a 50% increase in volume of inspected meat and animals exported. These benefits would significantly improve earnings of the various players including pastoralists and along the marketing chains, and thereby contribute to reduction of food insecurity, especially in the poorer rural pastoralist households and communities, as well as generating more government incomes from export taxes etc.

In addition, working toward the enhancement of knowledge of meat safety and improving practices for the safe production of meat products for both export and domestic markets, will contribute to an increased level of local public health protection and social development. Loss of markets through standards and certifications not being enforced could be substantial. The diversification to chilled and processed meat gives an added assurance that the rural populations will access some niche market even if a ban on live animal export was to be enforced.

Improved slaughter procedures have also resulted in an unexpected positive impact in the form of increased recovery rate (by up to 30%) and quality of sheep and goat skins. These are important co-products whose recovery from the local slaughterhouses and subsequent management needs to be improved. Information systems will improve the functioning of the whole livestock chain especially the pastoral livestock producers who tend to benefit the least from the existing "market information systems" and for whom there is an urgent need to address this information gap.

Sustainability: the commercial benefits of maintaining or increasing the huge live animal trade and the huge meat export presents a major incentive, plus stakeholder involvement and capacity building in relevant technical and management skills should ensure sustainability.

Component 2 Support to pastoral and peri-urban dairy and fodder development and identification of practical and sustainable interventions in range development

Justification, Somalis traditionally consume substantial amounts of fresh milk. The urban population distribution provides the peri-urban and rural camel, goat and cow milk producers with an almost captive market. In the North of the country camel milk production and trade is mostly a women occupation with the return consignment being household goods. There are several formal and informal camel milk outlets and while the quality of the products offered therein is suspect there are many consumers. The VETAID and VSF Germany implemented EC funded projects supporting the handling and semi processing of milk to improve the earnings of producers and traders while offering customers better quality product which, to a large extent, reduces ill health associated with consumption of contaminated milk in children under 5 years, provide a sound basis for further expansion. The VETAID scheme covers only 4 out of a potential 50 villages and therefore the demand is high for an expanded project. Funding for this project will end in June 2009 when only about a third of the activities will have been initiated or completed. There is therefore a strong case for follow up to the EC funded Pastoral Dairy Development Project and to extend it to peri-urban producers to meet the increasing urban demand for clean fresh milk (as a linkage to irrigation developments in the South).

The main intervention is to support expansion and improvements to milk marketing would involve expansion and increase of collection points in both pastoral areas and in peri-urban areas in South Central Region, Puntland and Somaliland and would focus on women's groups. Peri-urban milk production needs to be greatly increased to meet the ever increasing demand of the growing Somali cities and towns. In South Central Region, especially around the Mogadishu urban area, there is considerable scope for utilisation of irrigation and crop by-product residues to produce fodder for milk for urban areas as a means of economic and diversified development in the irrigation areas in the South region.

The main proposed fodder production interventions are aimed at supporting peri-urban producers in fodder and improved crop residue utilisation for both milk production and where sheep and goats are fed on fodder and crop residues. Fodder production, for own use and for sale in the local market, creates local employment and injects liquidity into the production areas while engaging youth gainfully. In addition commercial production of fodder will ease pressure on the need to harvest fodder from the range which not only hasten range deterioration but also is a recipe for conflict between "illegal" fodder harvesters and pastoralists. It is therefore critical that this activity is carefully expanded without creating conflict between fodder and grain production, especially in areas where the value of fodder per unit area is higher than that from grain.

Target Beneficiaries: in selected areas pastoralist milk producers (mainly camel owners in North) and peri-urban meat and milk producers around urban centres (sheep and goats and more cows in South), milk collectors and milk vendors (principally women's groups and youth), and municipalities. For the range identification inputs, pastoralists, peri-urban producers and community leaders in selected areas, however the interventions would have the potential for a more widespread benefit for a larger number of beneficiaries as the intervention demonstrations are replicated and the benefits spread out later after the interventions have been completed.

Benefits: Benefits realized from the existing EC funded milk marketing projects include:-

- Decrease by 30-50% of sour and increase of fresh milk reaching the markets due to the improvement of milk hygiene. Fresh milk costs at least 20% more than sour milk.
- Milk producers are making an average of 150,000 Somali shillings per day and the amount of milk being traded in the collecting centres has risen to 2.5 million Somali shillings daily.
- Introduction of different processed milk products (Ghee, Yogurt, skimmed milk, selective fermented susu, butter, Toffee/Sweets) in Garowe community approved the acceptance and marketability of these products. This is a great opportunity for the women groups.

Benefits to the EC funded fodder production plots were a 43% increase in annual fodder output, more than double the original anticipated output. With an average of about 2000 truckloads (6 tons/load), the increase in fodder was valued between USD 34,500 - 103,500.

For the proposed interventions, milk production, processing and marketing is expected to increase by 30% and fodder production and marketing by 40% in selected areas leading to increased income generation, which goes directly towards household income and livelihood enhancement. For the range intervention, the potential benefits could be considerable throughout the country if suitable practical and sustainable techniques are identified that improve the dry season range grazing and the resultant productivity of the grazing animals and result in improved incomes to the pastoralists, as well as reduce rangeland degradation.

Sustainability: The clear financial benefits of selling better quality milk, satisfied consumers who demand cleaner fresher milk have already been demonstrated. This, plus a participatory approach through highly motivated women's groups and capacity building in technical and entrepreneurial skills of the women and youth and peri-urban farmers should ensure continued functioning of these

projects. For the rangeland improvements, sustainability of is the main aim of the intervention at this stage. It is to be hoped that involvement of pastoralists using the dry season grazing in a participatory approach, a focus on capacity building amongst pastoralists and community leaders, as well as peri-urban farmers, and the clear benefits of improved productivity of the range and the value of incremental livestock production, should ensure that target beneficiaries will continue these interventions after project completion.

Component 3 Support to the delivery of animal health services including animal health inspection and certification

Justification. Poor animal health service delivery and provision of quality inputs remain some of the biggest challenges to the animal resource base and livestock export-based Somali economy. This is more so because the three regions are yet to agree on common unified animal disease surveillance and control since the collapse of the central authority in 1991. Much remains to be done to get the animal health services in both the private and public sectors up to a level that meets producer's needs. However, due to funding limitations, this key area does not include general strengthening of government veterinary services, especially in South Central Region and as other donors, e.g. Denmark (Regions of Origin Phase III Project described in Annex 7 section w) are supporting veterinary infrastructure in Puntland and Somaliland (regional offices and cold chains). It concentrates on operationalising the laboratories financed by the EC under SAHSP, SOLICEP, SERECU and FAO Somalia. It also emphasizes the provision of follow up support to the private veterinary associations to provide drugs and vaccines through SAHSP interventions funded by EC and to improve veterinary drug control through establishment of an active veterinary board or inspectorate to curb influx of fake drugs into the market. In addition a community-based baiting and trapping system for tsetse control along the rivers or provide trypanocidal drugs at a subsidized rate through established private sector outlets is suggested as during dry seasons, there is a tendency for animals to concentrate in riverine areas, where the animals often contract Trypanosomosis resulting in over 30% morbidity of cattle and death in some cases.

Target Beneficiaries: Wide cross section of Somali livestock stakeholders including pastoralists, policy makers in the public sector, private sector organisations, livestock traders and exporters and animal health service providers (professional veterinary associations).

Benefits: Estimation of incremental economic benefits to animal health service delivery interventions and improved quality of disease diagnosis is notoriously difficult with livestock diseases and the many factors involved, and therefore the OVI is expressed in terms of activities to be completed such as a 30% increase in the number of animals treated; and a 65% increase in vaccinations, plus improved organization structure and ability of the veterinary associations to implement activities, plus harmonized and rationalized livestock policies and legal frameworks. The benefits of improved disease surveillance and diagnosis and improved availability of drugs and vaccines are widespread throughout the livestock sector in terms of improved productivity and reduced mortalities, as well as in supporting the export trade. Losses through increased diseases and potential loss of export markets caused by a decline in animal health services would be substantial for the economy and the livelihoods of large numbers of pastoralists.

Sustainability: By focussing on strengthening private drug and vaccine supplies and the organisations involved to become financially viable, and by engaging supporting public sector veterinary services, as well as policy makers and planners, plus the necessary training, sustainability should be ensured.

4.10.2 HRD for the Livestock Sector Contained in Other Programme Interventions

Justification. Training in both the private sector and supporting public sector is identified as necessary for service delivery in the livestock sector to be sustainable. Training lay persons and professionals in existing and recently completed EC funded projects has given significant benefits to

service providers along the livestock production and marketing chains. The trained lay and professional personnel in the private sector are a boost to the Somali livestock industry but ways must be found to determine how best to support the ministries to retain the staff. The administrative regions of Somalia need to develop their human resources and institutions that ought to now go beyond mere capacity building to an ability to provide supportive and regulatory services. Thus following an initial training needs assessment, capacity building interventions aimed at the supportive public sector would provide the essential basis of continuing progress towards an efficient livestock sector.

Target Beneficiaries: Staff in the public and private sector organisations targeted by the priority programme interventions, staff in EC funded projects, secondary school leavers in the Horn of Africa region and other students trained at STVS and indirectly the whole livestock industry and stakeholders.

Benefits: The benefits in terms of providing future veterinary trained personnel for a growing public and private sector, as well as those required to sustain other EC funded interventions, are broad and national in perspective. It is also envisaged that STVS would broaden its curricula and attract students from other sub-sectors within the livestock sector such as in marketing and milk/fodder development to provide a wider capacity building contribution.

Sustainability: A key issue is that STVS is still dependent on donor support to cover the operating costs. Support would be conditional on the institute becoming self sustaining. STVS would need to demonstrate progress with the various measures being adopted to raise student numbers and incomes during the next few years.

4.10.3 Support to Livestock Census and Studies of Dynamics

Justification. The pressure to supply more animals from a resource base that cannot be verified is putting livelihoods of livestock producers and traders at risk. A census is long overdue, especially in relation to the major political and natural disasters that have hit the industry during the last 18 years. It would greatly assist the industry as a whole to determine actual livestock numbers, offtake and distribution, thereby facilitating on-going interventions, planning future interventions and monitoring progress in all sub-sectors of the livestock industry, as well as improving overall natural resource management. For the proposed 10th EDF Programme, the high cost of a census in relation to funds available and the needs of other sub-sectors identified suggest that co-financing should be explored.

Target Beneficiaries. The whole livestock industry and its stakeholders, as well as donors and other development partners and implementing agencies.

Benefits. The benefits would be significant throughout the industry and for the nation as a whole.

4.10.4 Monitoring and Evaluation

Justification The MTEs and FEM's undertaken to date identified the lack of baseline data to allow impact to be assessed and quantified thereby making decisions on the future relatively difficult. In addition the MTEs tended to only look at fine tuning of the on-going project under review rather than identifying the need for further support after the end of project. Such proposals have to be presented before completion at the MTE stage rather than at the end of project evaluation stage. It is proposed that funds are provided in this key area for internal and external programme and project monitoring and evaluation to allow baseline studies to be carried out which will allow subsequent impact assessment and for specific impact studies to be undertaken of selected projects. This would include detailed farm level assessments to enable farm level and project level impact to be quantitatively assessed.

Beneficiaries: the development partners and governments and the livestock sector as a whole.

Benefits: all stakeholders would have a better understanding of programmes, projects, impact and sustainability.

5 Economic and Financial Feasibility of Proposed Interventions

The nature of the situation in Somalia and the lack of reliable quantifiable data do not lend itself to financial or economic analysis, but rather a largely technical analysis. Even in the absence of these conditions it would still be difficult to measure the economic impact of technical assistance and capacity building programmes in the livestock sector in Somalia due to the many factors contributing to economic outcomes and programme impact. This view is one that is also expressed in a recent World Bank appraisal report² for their rural development project, including a livestock component. However despite this, the dire need of the population, and the clear contribution that the livestock sector can make to alleviate their plight, makes it possible to argue that a number of significant positive economic outcomes can be expected from the proposed programme. The following analysis is presented in accordance with the EC evaluation format.

5.1 Relevance

The livestock programme is relevant as it takes into consideration the following, as discussed below:

- Local needs and constraints in the main target groups of beneficiaries
- Local absorption and implementation capacities.
- Participation, partnership and ownership of relevant stakeholders, in particular regional administrations and local authorities, communities and economic operators.
- Complementarities and coherence with other interventions.

The proposed programme areas and priority interventions take into account the needs, constraints and potentialities of the main target groups (pastoralists, agro-pastoralists, peri-urban producers and low income households generally), as well as traders, service providers, processors and exporters in the livestock chains, consumers of livestock products (through improved standards and hygiene), both at home and abroad, and public and private sector institutions. It is based on the Mission's field trip to Somaliland, previous experience of the team members, information collected and discussions with stakeholders and implementing agencies, the latter providing useful insights into conditions in the unvisited areas. However, as it was not possible to visit and meet target beneficiaries at grass roots level throughout the country, it is recognised that this is a top down approach in which not all the proposals may fully respond to the needs of the target beneficiaries.

Taking into account constraints in the public sector, the interventions will endeavour to involve the public sector at all times to promote a move to increasing their participation in EC funded interventions when conditions and stability improves. In addition, the needs of women and youth, who have been placed under considerable pressures in recent years, but who play an important role in the livestock sector and who present a more direct path to boosting household incomes and livelihoods, will be targeted where appropriate, especially in milk and meat marketing.

The programme follows on from several major EC funded projects that have developed local capacities in a wide range of stakeholders in both private and public sectors and who are considered to have the necessary absorption capacity for the proposed priority interventions. The proposals also take into account the implementation capacities of both the Somali players and the implementing agencies (UN agencies, international organisations and INGOs who have developed a unique capacity

² Appraisal of Rapid Response Rehabilitation of Rural Livelihoods Project (RRRLP), August 2008, World Bank

under the difficult situations found in the country. The danger of over-dependence on these implementing agencies is discussed below under sustainability.

Some interventions largely focus on private sector led improvements that can develop without major public sector support. The programme promotes partnerships between government and the private sector, which is a widely accepted policy in the three administrative regions. It continues the efforts to strengthen the professional associations (in animal health service delivery and provision of drugs and vaccines) and the various Chambers of Commerce (especially in establishing and sustaining export trade standards and trade promotion activities, as well as further improving the LMIS).

Participation, partnership and ownership of relevant stakeholders, in particular the regional administrations (Somaliland, Puntland, South Central Region) and local authorities, communities, economic operators has characterised EC interventions to date and would continue to be emphasised in the proposed programme. Ownership is focused at several levels as appropriate: (i) in the private sector supported by an enabling environment from the public sector as in drug/vaccine distribution,(ii) on district authorities or municipal authorities for certain infrastructure items, (ii) on communities e.g. in the milk production interventions including a focus on women's groups and (iv) public sector at regional level when dealing with the provision and enforcement of regulations in marketing and animal health, as well as in operationalising the veterinary diagnostic laboratories previously supported by the EC.

The interventions have a synergy with the other programme areas, e.g. animal health inspection and certification in support of marketing, and have complementarities and coherence with on-going EC funded projects, and with other donor funded projects, e.g. the WB funded RRRRLP Project, the LAS funded Meat Export Project, ECHO funded support to pastoralists and the Denmark funded Regions of Origin Phase III Project in Puntland and Somaliland supporting veterinary facilities and HRD in the form of support to STVS.

5.2 Efficiency

The cost of implementing projects using INGOs and UN agencies in Somalia under the present conditions of insecurity is relatively high due to the need for staff to undertake regular flights in and out of the country using EC emergency flights (which are funded separately by the EC), maintaining an additional office in Nairobi and the relatively high cost of logistical services in Somalia such hire of scarce vehicles and accommodation (or secure accommodation facilities have to be established for security reasons and as there is a general shortage of secure conventional hotels etc). However, the benefits are generally high due to the fact that most interventions would have a widespread impact throughout the sector and that they mainly build on past interventions with a focus on consolidation, rehabilitation (or operationalisation) of facilities and inputs that have been funded under various recently completed or on-going EC funded projects. In addition, they do not focus on the establishment of new major infrastructures or major capacity building inputs in the public sector. The proposed programme is therefore expected to give value for money overall, as well as strategically important benefits on the economy as a whole and on a large share of the population, particularly in poorer rural areas.

Benefits and beneficiaries for each programme area are estimated where possible in Chapter 4.10 above and OVIs are summarised in the programme log frame presented in Chapter 4.9. In the case of further support to STVS, a longer term view is adopted rather than a decision based on present numbers and comparison with training overseas, but in which conditions in the form of an exit strategy are proposed to promote the achievement of financial viability and clarify ownership responsibility.

Coordination and collaboration between other agencies is already relatively strong through the LWG, FSAU and the EC-SOU and should continue, although in the long term a future national government

should take over this role. Coordination with relief inputs to the livestock sector needs to be maintained to avoid conflicts with development efforts.

5.3 Effectiveness

The interventions are designed to achieve the purpose of the JSP and EC policies in the 10th EDF and focus mainly on provision of an enabling environment for the private sector, or communities themselves, including women's groups, and district level authorities that are more committed and less influenced by political changes. The programme results are considered realistic and attainable even with the difficult environment in much of Somalia, partly due to the resilience of the private sector (as the interventions largely focus on private sector led improvements that can develop without major public sector support) and the experience and performance of the UN agencies and INGOs that have been implementing projects over the last decade. However, there are some important risks and assumptions, namely a worsening of conflict and insecurity that may significantly restrict implementation, importing countries may issue new trade bans and an assumption that an effective public-private sector partnership will be established.

5.4 Impact

The anticipated target beneficiaries, benefits (and broad economic benefits) and potential sustainability of these key intervention areas are discussed in Chapter 4.10 above. ***It is not been possible with the lack of accurate appropriate and complete data, the limited resources available and short time allocated to this study to be able to calculate a cost/benefit analysis for each intervention. It is suggested that the cost and benefit estimation be undertaken at project preparation stage.*** In addition, due to the lack of an effective monitoring system at present, the programme should improve programme and project M & E inputs, especially in terms of collecting base-line data, use of external independent evaluators and conducting specific impact surveys, to allow impact to be assessed in future.

Overall, however, the programme's benefit/cost ratio is expected to be relatively high as the main focus is on consolidating and sustaining previous donor investments in the sector and the value of the benefits is expected to be relatively large due to the high value of the total export trade in live animals and meat, the numbers of livestock involved and the importance of the livestock industry to the country. Sustaining this vital sector of the Somalia economy that also supports the vulnerable rural population is considered crucial to avoiding further food insecurity, increasing poverty and dependence on food aid. A wide spectrum of target beneficiaries throughout the country would be impacted including pastoralists, agro-pastoralists and peri-urban farmers, animal health service providers, the livestock and meat marketing traders, private sector institutions and government in a supportive and regulatory role.

5.5 Sustainability

Lack of sustainability, especially financial, is a risk due to the prevailing conditions in the country and general shortage of funds both in the private and public sectors, as exemplified by the need to follow on certain projects that had over-optimistic sustainability targets in one project cycle, e.g. in the case of STVS, the difficulties in retaining public sector staff, difficulties experienced by veterinary associations to budget and maintain vaccine cold chains and drug supplies. This can lead to dependence on donor support (e.g. with STVS and private sector vaccine supplies to subsidise operational costs from either EC or ECHO funds) and on UN agencies and INGOs to implement the interventions. However, emphasising ownership with the various institutions and beneficiaries, fostering support from emerging regional and local institutions including for which involvement of regional administrations in all steps of planning and M & E, should assist in achievement of sustainability. Thus it is important to include the skeleton government staff that may eventually emerge as key stakeholders at both national and institutional level should peaceful conditions and

stability be established. Previous donor support to sector policies and strategies in the three regions should also assist in maintaining sustainability.

6 Cross Cutting Issues

6.1 Gender and Youth in the Livestock Sector

Table 6. 1: SWOT Analysis of Women and Youth in the Somalia Livestock Sector

Strengths	Weaknesses
<ul style="list-style-type: none"> • Women are heavily involved in marketing of shoats and livestock products. • Women can rear, own and sell poultry without any interference from their husbands • Youth in the pastoral areas are exposed and endowed with knowledge in livestock management. • There are strong women organisations which advocate for women rights and can be used in the development of sustainable income generating women projects 	<ul style="list-style-type: none"> • Women rarely participate in pastoralists' field schools. • Women and children do not have a say on how funds generated from the sale of cattle and camels are spent. • Lack of transport for ferrying shoats, milk or meat to distant markets which could offer better prices. • Lack of capital and/or knowledge and experience for value addition for livestock products. • Relatively high level of illiteracy amongst pastoral children. • Involvement of youth in charcoal burning. • High level of unemployment amongst the youth residing in rural areas.
Opportunities	Threats
<ul style="list-style-type: none"> • Women are actively involved in the slaughter of shoats and traditional processing of meat for marketing. If capital and better methodologies are introduced for traditional preparation of meat, this is amenable for export • INGOs including VSF Suisse, VETAID and VSF G are on the ground assisting women on safe handling and sale of milk. This can be enhanced. • Poultry production and marketing are remain largely unexploited – the youth and women are well placed to exploit any opportunities in this subsector 	<ul style="list-style-type: none"> • High level of illiteracy amongst the youth and women. • Somali traditions which relegate women to the background and for all practical purposes suppress their opinions.

Women. Somali is a primarily a patriarchal society. Hence everything seems to gravitate around the men. Women and the youth uphold the pastoral system of life. There are, however, changes in the way the pastoralism is conducted. There is a degree of restriction of movement due to clan differences and changes in land use. In some places land has been fenced for use by financially endowed individuals and also for crop production or dairy farming. Hence a form of settlement is emerging. The contribution of women is rarely appreciated nor do women themselves recognize their contribution. This situation could be improved if women were purposefully assisted and facilitated to participate and articulate their views in the evolving policies and the supporting legal frameworks. A few groups have been helped, with EC project assistance, to embrace development in a manner that has been beneficial to their families, as it is income of the woman that makes the difference in the family. Hence it is vital to strengthen women groups if household food sufficiency is to be improved.

The civil war and subsequent conflicts have put an extra strain on women, in terms of an increase in gender based violence and the loss of male bread winners in the family to the conflict. Women have been able to break with traditional social structures in order to cater for emergency care and social recovery. Women are greatly involved in the rearing of livestock and treating sick animals and are key players in milk and meat processing and marketing. However, they lack of exposure to agri-business

(especially value addition) and lack of knowledge for modern medicines. Women would be the major stakeholder and beneficiary of the key interventions concerned with the support to expansion and improvements to milk marketing and in promoting value addition for meat e.g. *Mucsa* prepared by women.

Only 5% of pastoral children have access to education and these are usually the boy child, hence the need to uphold education for the girl child. It is necessary to examine the type of education offered and introduce some incentives to encourage schooling among pastoralist children. Access to social services has remained difficult in the rural areas. Women walk long distances to access water and/or medical services. Most of their time is spent on searching for water. Access to donkeys would ease the burden of fetching water.

Youth and Pastoralism. Most of the development and implementing partners and communities see the pastoral system as a system in crisis. Historically this started off at the time of the civil war due to the impact of the war on the way of life and values of Somali people. Youth are involved in livestock rearing, but have become engaged in charcoal production. In addition, the majority of pastoral children have not had access to formal education and skills development and in the Central and South Region youth have joined some of the militia. Youth should be engaged in a manner which makes livestock rearing viable. The main contributing factors which diverted the attention of the youth from pastoralism are:-

- a. Access to TV, radio and other means of communication portraying alternative lifestyles including displays of wealth.
- b. Widespread accessibility of guns in rural areas creating insecurity as clans fought against one another for land and access to resources. In the process, unstable environment emerged encouraging the youth to seek for alternative easier sources of income. Subsequently, the youth got involved in piracy, robbery and erection of illegal check points manned, as income generating activities.
- c. Near collapse of the education system with the closure of schools, colleges and universities leaving most of the youth idle without a future.
- d. Loss of large numbers of animals due to drought, floods and out breaks of otherwise controllable animal diseases.
- e. Livestock export bans reducing the profitability of the livestock and rendering many pastoral communities poorer.
- f. Initial concentration of most of the emergency and development projects in urban areas without taking into consideration the plight of the pastoralists. This made many youth flock to urban areas with a hope of securing jobs.

Youths use the knowledge imparted on them by the older generation. They feel the need for proper training in livestock management to enhance their acquired skills and to assist them to transition from traditional pastoralism to commercial livestock production - a business in its own right. The youth whose parents have dropped out of pastoralism for whatever reason have turned to producing and selling charcoal for a living. When asked whether they could consider alternative income generating activities, the youth were prepared to engage in other incoming generating activities as long as they are equipped with appropriate skills to enable them to fit into the other alternatives. It is imperative that the youth and other community members are sensitized on the dangers of destroying trees and alternative activities are identified and established.

The main conclusions arising are that: (i) women and youth should be targeted by EC funded projects especially those that are located in peri urban and urban areas where youth are relocating on leaving

the rural areas, and (ii) women and youth should also be encouraged to seek employment in EC projects

6.2 Environment and Natural Resource Management

Although there is substantial indigenous knowledge on natural resources, growing populations, climate change and in some cases intensification of rural production systems, have put additional pressure on the use of limited natural resources such as land and water. Management skills need to evolve to contribute to sustainable use of the available resources. Overgrazing and uncontrolled charcoal production, among others, are examples of poor natural resource management that lead to serious land degradation and soil erosion, resulting in negative impacts on water catchments. The problem of water is likely to become much more serious in the future as water scarcity increases, and must therefore be given attention.

The collapse of central authority, weather extremes and the rising demand for livestock and livestock products met by increasing production, have all contributed to range deterioration in the three regions of Somalia. In addition, the increasing urbanisation of pastoral communities displaced as a result of conflicts has had a negative impact on the fragile Somali environment including the depletion of scarce trees and overgrazing of livestock in some areas. Activities in the programme should minimise further environmental degradation, but tackling the wider problem to develop higher carrying capacities requires first of all the identification of practical techniques for improving dry season grazing (included in the second programme intervention) before a coordinated national programme can be mounted, as well as improved security conditions, and which will require funding beyond that available in the 10th EDF.

6.3 Linkage to Water

Water is the key to access to pasture. In the Gu rainy season and Deyr rains, animals especially camels get their basic water needs from the surface water or from the vegetation itself, hence no problems occur during this period as the herds and flocks spread throughout the pasture. In dry seasons, herds and flocks are forced back to drink regularly at home wells and other water sources belonging to the family. This pattern of water use in the Somali traditional pastoralist society leads to a fairly distributed pattern of grazing with areas far from the wells grazed during the wet seasons, and animals gradually come back on the ungrazed areas close to the wells as the dry season advances and animals had to be watered every few days.

Water is therefore the key resource behind livestock production. Development of water harvesting for fodder production and water catchments for animal and human use should be strengthened through rehabilitation and protection of traditional watering sites, strategic establishment of *Barkard's* (water reservoirs for rainwater catchments) and digging of boreholes along stock routes would add to the benefits of fodder availability and range improvement. Livestock production and health projects for Somaliland, Puntland and South Central Region should wherever feasible be linked to a water projects being funded separately.

6.4 Multi-Sector Approach through Integrated Area Development Projects

The integrated multi-sector participatory community based projects being funded by the German Government through the GTZ, the EC funded projects implemented by COOPI in the South and the multi-sector World Bank funded RRRSPLP, which emphasise ownership, probably best meet pastoralists and farmers needs, as well as ensuring sustainability. However, project costs are generally high in relation to the number of beneficiaries in localised project areas (as compared to animal health and marketing support projects that have a national coverage), hence such projects have not been included at this stage in the proposed programme. However, they do form part of the overall EC policies, and this area is still recognized as a potential key area should more funds become available.

6.5 Emergency/Disaster Preparedness and Recovery from Disaster

Enhanced capacity of communities and institutions for preparedness and response for livestock related emergencies is needed (follow up to SAHSP and SOLICEP projects). This includes strengthening grassroots' mechanisms for early warning systems for diseases, drought and floods. In addition, a mechanism to ensure that control of economically important diseases has top priority and that funds for vaccines, mobilizing vaccinators and the supporting cold chains can be accessed in a timely manner. Thus a mechanism should be established of sensing, reporting and declaring disease, drought, flooding and other types of emergencies and should liaise with ECHO, OCHA and other emergency organizations. In addition, the public and private sectors in regions of Somalia should be involved in responding to declared emergencies. It is proposed to include an activity aimed at enhancing emergency response capacity of the public and private sectors.

Analysis by ICRC demonstrates that recovery of livestock population following a disaster is a slow process. Recovery period from a 50% loss for cattle owners is 10 years; for small stock owners it is 3 years, while it takes camel owners 12 years to get back to their original herd size or rehabilitate pastoralists who have fallen out of the system. In addition, it is difficult for pastoralists to regain their previous migratory patterns in search of food due to inter-clan hostilities, privatization of land and fencing off of flood plains for fodder and grain production. Awareness of this extended recovery period should be taken into account in both relief and development interventions.

6.6 HIV/AIDS

HIV/AIDS prevalence rates remain low but statistics in this field are poor and the level of collective and individual denial high. Emerging new evidence suggests that Somalia may have a concentrated epidemic in urban areas and cross border regions and in IDPs.

6.7 Priority Programme Coverage of Cross Cutting Issues

The programme includes a focus on women, as they play a major role in the sector with expected significant benefits at rural household level, and youth, to help stem the drift of young people out of the sector. It also addresses the problem of rangeland degradation through supporting the identification of practical interventions at this stage. Tackling the whole problem requires coordinated government approach and major inputs and funding, which is not possible with the EDF 10 funds available. Similarly, it also does not include a multi-sector approach linking livestock much more closely with water utilisation, as well as with agriculture, in an integrated approach due to localised benefits and relatively high costs compared to other priority interventions. It does however address the issue of disaster preparedness, but not the longer recovery periods after an emergency, though it should be recognised in this activity.

7 Recommendations and Way Forward

The study team has recommended a programme of priority intervention areas that match the likely funding available under the 10th EDF, although there is considerable flexibility and scope for more interventions should more funding materialise, whether from the EC or from other donors.. Following agreement on the priority programme and overall funding levels, project identification, design, costing and evaluation through packaging of the various interventions into a number of distinct projects will be the next step.

7.1 General Recommendations

1. It is recommended that the achievements of previous and on-going EC funded interventions are verified by an independent assessor/evaluator to: (i) determine what has truly been accomplished as opposed to what was designed to be accomplished and (ii) develop baseline values that can be used in planning future EC funded interventions.
2. It is recommended that EC funded efforts to developing policies in different Somali regions are harmonized and outputs rationalized. The first steps towards this would be the revision and improvement of available draft policies, by mapping them by region, identification of gaps in each of the versions and addressing them through harmonisation and rationalization. Such harmonized draft policy (domesticated to each of the three regions of Somalia) should include all the related ones e.g. land tenure, investment policy, water, fodder management, marketing, gender and youth. Simultaneously, limited funding should be set aside specifically to support the enactment processes through cabinet and parliament and pilot enforcement at field level.
3. It is recommended to institutionalize M & E inputs to support the livestock programme including the provision of a more active M & E system at programme and project level, including ensuring that baseline studies are carried out at project commencement and that specific impact studies of selected projects are undertaken by independent (preferably EC recruited) agents.
4. It is recommended that communities, the private and the public sectors be involved in project development, implementation, monitoring and evaluation to ensure sustainability of the projects.

7.2 Livestock Marketing

7.2.1 Live Animals Trade Sub-Sector

- It is recommended that municipalities be supported to establish livestock markets with very basic infrastructure (loading rumps, holding/inspection pens, auction yard, watering points, shades for traders and overnight pens) that will be managed by trader associations. These markets can serve as important points of sampling animals and mapping diseases before effecting appropriate control/preventive measures.
- It is recommended that the traceability system initiated by previous EC funded projects be fine tuned and be prepared for the time when it will be a requirement for trade. Use of hazard analysis critical control points (HACCP) in animal health inspection and certification and thus traceability systems, could be developed and used to improve the administration of the marketing value chain and delivery of services. This is important as the concept of farm to fork is gaining ground world wide, and while it has not been added to the list of requirements to be met by importing countries, it is just a question of time. Developing, testing and domesticating a credible

traceability system takes time and resources, and more so in Somalia where the public sector institutions are still in their formative stages.

7.2.2 Local Meat Sub-Sector

- It is recommended that the some funds are channelled towards supporting domestic meat industry including the construction of slaughter facilities and meat markets with provisions for hides and skins and offal recovery areas and traditional meat processing and to improve the quality of meat consumed in urban areas and recovery of offals and hides and skins. To avoid any conflicts in future, such facilities will be owned by the municipality and managed by the meat trader associations. The production of clean meat and improved recovery of hides and skins has an impressive multiplier effect as it benefits the pastoral livestock producers in the catchment area, live animal and meat traders, traditional meat processors and hides and skins traders and processors.
- It is recommended that some model project on improving the recovery and use of offals be instituted. The export and domestic slaughter facilities are estimated to slaughter 1.8-2.5 million sheep and goats annually. Assuming that the stomachs and intestines weigh an estimated 3.5 kg per and heads 0.75 kg per animal, this translates to approximately 1.1-1.75 million kgs of offals and 225-375,000kgs of heads from export slaughterhouses and 2.7-7.8 million kgs of offals. Traditionally the Somalis do not eat offals and so most of these products end up being thrown away in the midst of hunger and malnutrition.
- It is recommended that administration, finance and technical personnel working in the slaughter facilities receive appropriate training in (in-house and at the STVS) and outside Somalia, where appropriate in order to enhance the management of the constructed / rehabilitated infrastructure.

7.2.3 Export Meat Sub-Sector

- It is recommended that the training that is being provided for training of all cadres of actors in the meat marketing chain and the establishment and operations of in-house laboratories, be continued on refresher basis and to ensure that all new entrants are trained.
- It is recommended that opportunities be reviewed to expand markets and diversify products by processing to add value to what are raw material exports at present.
- It is recommended that the initiated HACCP and traceability systems are domesticated and institutionalized alongside animal health inspection and certification and meat inspection and certification. The EC funded meat project has already initiated the development of HACCP and meat traceability systems in the export slaughter facilities.
- It is recommended that the existing LMIS project be expanded to cater for meat, milk, honey and hides and skins and be domiciled in the region's chamber of commerce and industry as it addresses market needs. Those implementing the system need to work closely with FSAU, which collects, collates, analyses and disseminates data and information on livestock, water, crops and livelihoods.

7.3 Pastoral and Peri-Urban Dairy Development and Fodder Production and Identification of Practical and Sustainable Interventions in Range Development

7.3.1 Fodder Production

- It is recommended that improved animal production be prioritized through semi-commercialization of fodder production, conservation and marketing, especially in areas that serve stock routes and livestock markets. Such action should be closely coordinated with

communities in the target areas and public sector (ministries at the time responsible for water and irrigation, livestock and pastoral development) to reduce conflict and to ensure gender equity in distribution of benefits. To the extent possible and practical, only local grass and fodder seeds should be bulked for distribution.

- It is recommended that caution be exercised when promoting fodder production in areas traditionally used for grain production including along the Shabelle and Juba flood plain, especially now that fodder value per unit area in some parts of Somalia is greater than that of grain. It is essential that the citing of water catchments be supportive of fodder production and/or range improvement.

7.3.2 Milk Production Processing and Marketing

- It is recommended that the pastoral milk production, hygiene, processing and marketing programme be scaled up to involve more urban settlements and thus more pastoral milk producers, transporters and traders. The project should also diversify products being availed to the market to include products such as ghee and cheese to be prepared in times of plenty. The target group is purposefully women and youth groups.
- It is recommended that the dairy development programme links or collaborates with the range improvement and fodder production projects to improve access to quality feed throughout the year to boost and/or sustain milk production.

7.4 Animal Health Services Delivery Including Animal Health Inspection and Certification

- It is recommended that the Somaliland and Puntland authorities be encouraged and facilitated to play a major role in vaccination campaigns at all levels of disease surveillance, treatment and control (planning to evaluation) including the selection of field teams and the establishment of vaccination systems and control the influx of fake drugs. While the private sector veterinarians have made commendable strides in being able to implement disease surveillance and vaccination activities, the public sector needs to be supported to “coordinate and supervise” their activities and those of the INGOs or UN agencies. In areas with limited or no penetration by the ministries then the implementing INGOs and NGOs should collaborate with municipalities and other local authorities.
- It is thus recommended that support be given to operationalise the equipped veterinary laboratories already established under EC funded projects as the laboratories that were EC funded under various projects were found not to be functional for a variety of reasons including an acute shortage of trained staff, inability to retain recruited staff, failure to train relevant field staff on the importance of confirmatory diagnosis, lack of transport and inability to routinely receive samples. These laboratories can play a very crucial role in disease surveillance, diagnosis, control and prevention. Once these satellite laboratories are operational it is recommended that special efforts be made to establish a referral central diagnostic laboratory to handle trans-boundary diseases impacting negatively on livestock trade.
- It is recommended that support for service delivery and input provision be channelled through the umbrella and regional professional associations.
- It is recommended that a system should be considered for tsetse control along the Juba and Shabelle river valleys and wooded areas in the flood plains or provide trypanocidal drugs at a subsidized rate, provided that such action does not adversely affect private sector suppliers of quality trypanocidals. Control of Trypanosomiasis will ensure improvement in animal health in animals migrating into riverine areas and reduce the amount of money spent in procurement of drugs (e.g. veriben, novidium, samorin).

- It is recommended to support the development of public animal health inspection and certification system. Animal health inspection and certification services are a public good but the state of development of the public sector is wanting and needs technical and human resource support from implementing partners and the Somali private veterinarians. This action should be implemented in close collaboration with the animal health and input provision, meat quality assurance, hides and skins management and LMIS actions.
- It is recommended to train the private sector to play its role in animal health and inspection procedures and protocols to public and private veterinarians in the three regions of Somalia and that efforts should be made to ensure that the public and private sectors appreciate that they need each other and that they have roles to play in the protecting their market share in the Middle East markets.
- It is recommended that system is promoted to importing countries through informing them about the efforts by the regions of Somalia to meet the meat quality assurance and live animal inspection and certification challenges.
- It is recommended that the animal health inspection and certification project being implemented by SOLICEP be revised to better address the issues that have made it difficult to operate in regions of Somalia and Ethiopia including the cross border movement of animal for trade and grazing and animal health inspection and certification at the already developed quarantine stations in Berbera and Bosasso. SOLICEP should consider linking up with the EC funded IGAD regional livestock policy initiative (IGAD LPI) and the USAID funded COMESA implemented regional livestock trade project in addressing the issues. Such refocusing needs to genuinely and openly involve public and private sector actors in regions of Somalia and Ethiopia.
- It is recommended that the implementing agencies involve the regional authorities before and when releasing any animal disease information to avoid acrimony and unnecessary conflicts as the regional administrations are very sensitive to the release of what they consider to be trade sensitive disease information without their "knowledge and consent".

7.5 Human Resources Development

It is recommended that the implementing partners involve both private and public sectors in all interventions in the livestock sector and that capacity building (physical and human resources) be made an integral part of each of the programme areas and interventions as appropriate. It is imperative that capacity building include giving Somalis positions of responsibility in projects being implemented. It is also recommended that operational support to STVS be continued for three years, but on a declining basis in order to ensure financial sustainability, with a clear exit strategy so that the institution puts in place measures to generate more income while attracting funding from other development partners. The issue of ownership also needs to be addressed.

7.6 Cross Cutting Issues

It is recommended that EC funded projects purposefully include a focus on women and youth, as they play a major role in the sector with expected significant benefits at rural household level. Such targeting may also help to stem the drift of young people out of the pastoral livestock sector into urban areas. While not a core activity under the 10th EDF funded activities, creation of awareness on the risks and importance of HIV AIDS, is an essential social and professional obligation. All actors in Somalia need to participate in efforts to create awareness and stemming the spread of the infection to both urban and rural pastoral communities.

Annex 1: Terms of Reference

BACKGROUND INFORMATION

Beneficiary Country Somalia

Contracting Authority Delegation of the European Commission to Kenya, Somali Operations Unit (EC-SOU)

Relevant Country Background

Somalia is a country of 637,540 square kilometres, situated within the Horn of Africa and populated by an estimated 7.7 million people (1.5 million in Mogadishu). About 70% of the population lives in the rural areas, of which 55% are pastoralists and agro-pastoralists, 24% are crop farmers and 1% are fishermen. Somalia's landmass is dominated by arid and semi-arid rangeland, with an annual average rainfall of 100-200 mm, for which pastoralism is the most appropriate form of land use.

Somalia has been without a functioning central Government since the collapse of the Siad Barre regime in 1991, which ushered in 17 years of conflict between rival clans and factions. The resulting conflict and insecurity has contributed to the worsening of productive capacity and people's livelihoods. This has led to increase in the poverty level and food insecurity especially in rural areas thus aggravating uncontrolled urbanisation as vulnerable people migrate to cities in search of income and alternative livelihoods. Remittances from relatives living abroad (estimated at US \$ 1 billion p.a.) have become the main source of support for many families and the largest component of the economy.

The Livestock Sector

There is little information on Somalia's livestock herd distribution and composition from recent years. However, it is estimated that Somalia possesses about 3.3% of the African continent's livestock, including 50% of the continent's camel population and 10% of sheep and goats. Livestock is the most important productive and export sector of Somalia. The Somali livestock industry is mainly based on a nomadic pastoral production system which is closely linked to commercial and export oriented marketing structures³. Approximately 2 to 3 million animals are exported each year, creating about 60% of

Somalia's job opportunities and generating about 40% of Somalia's GDP and 80% of its foreign currency earnings (excluding remittances). Taxation of livestock trade and export is also one of the major sources of income for the local administrations in Puntland and Somaliland.

The livestock sector is, however, faced by several challenges. The collapse of the military regime in Somalia in 1991 led to lack of rule of law and destruction of public institutions that supported the livestock sector. This resulted in poor standards of delivery of services with the subsequent resurgence of major epizootic diseases that triggered the imposition of repeated trade bans by Saudi Arabia and other importing countries in the Gulf Region. The actual occurrence or suspicions of Trans-boundary animal diseases, namely Rinderpest (RP), Rift Valley Fever (RVF) and Peste des Petits Ruminants (PPR), and the limited capacity of veterinary authorities to demonstrate the absence of these diseases still remain the key limitations towards a more dynamic export oriented livestock industry.

In addition to trans-boundary animal diseases and subsequent trade bans, the Somalia livestock sector has been seriously threatened by repetitive droughts and floods, degradation of the

³ *Annual livestock export earnings are estimated at 150 to 200 million USD*

environment and encroachment of key natural resources, movement restrictions, absence of sector policies, weak specialized public and private services and related institutions, dearth of specialized human resources, and the absence of processing capacity to transform and add value to products of animal origin. In Somaliland and Puntland, public sector institutions established in 1991 and 1998 respectively remain weak due to lack of adequately trained manpower and poor budgetary support to implement activities. Federal institutions envisaged with the establishment of the Transitional Federal Government of Somalia in 2004 are ineffective due to rampant insecurity in Central and Southern Somalia.

Another key limitation in the livestock sector is the paucity of credible and updated information on the livestock density and production parameters. This seriously impairs monitoring and evaluation of sector interventions and formulation of appropriate strategies and policies.

European Commission Food Security and Rural Development (FSRD) Policy and Program in Somalia

EC Food Security and Rural Development (FSRD) policy in Somalia

For the period 2002-2007, EC-funded interventions in Somalia have been guided by the Strategy for the Implementation of Special Aid to Somalia (SISAS) including rural development and food security. The EC sector strategy for Rural Development and Food Security has focused on poverty reduction, strengthening of household livelihoods in rural and peri-urban areas and sustainable access to water and sanitation. This includes intensification and diversification of smallholder agriculture and livestock production, market diversification and marketing improvement, increase of purchasing power to stop further depletion of assets and improve resilience to future shocks, improved capacity of rural communities to manage development activities and facilitate reintegration, improved access to rural services (including water and sanitation), sustainable natural resources management, strengthened emergency preparedness and prevention, and enhancement of the technical capacity of line administrations and other relevant institutions.

Towards achieving the EC rural development and food security sector policy in SISAS, the EC interventions in Somalia in the livestock sector, were mainly through specific projects, worth Euro 20.12 Million, over a period of 5 years, and aimed at improving the marketing and trade system in order to increase domestic and export earnings and employment opportunities. In 1999, the revised EC livestock sector strategy for Somalia initiated a system oriented approach focusing on: (i) promotion of private veterinary services; (ii) eradication of Rinderpest; (iii) establishment of animal disease surveillance systems; and (iv) diversification of livestock and livestock products, value addition, marketing and trade. The joint EC, World Bank and FAO (2004) Somali Livestock Sector Strategy (SLSS) further confirmed animal production, animal health and disease control, human resources capacity building and institutional strengthening as the technical pillars of the Somali livestock industry.

More recently, assistance has been provided towards the re-establishment of transparent public and private institutions, at different administrative levels. The support to the public sector was necessary in order to initiate the development of a recognised animal health certification system, strengthen reporting to the World Organization for Animal Health (OIE) on animal health related information and establish relationships with neighbouring countries and trading partners. Public institutions were also supported towards designing sectoral policies and strategies that are equitable, gender sensitive and environmentally sound, developing and enforcing laws, rules and regulations, monitoring and coordinating livestock development related interventions and designing training programs for human resource development. Equally important has been the strengthening and expansion of animal health services delivery, with a key component supplied by the private sector in providing relevant services along the production chain, from producers to consumers, and to enhance public health and safe trade in livestock commodities. Private institutions were supported to foster coordination and partnership with the public sector and self regulate the provision of support services in livestock trade, marketing and processing.

Future EC FSRD programme

In 2006, a Joint Needs Assessment (JNA) was instrumental in identifying Somali-owned sector objectives, policies, strategies and programmes and in the design of a Reconstruction and Development Programme (RDP) funded by the EC and executed by WB/UNDP. In line with both JNA and RDP, a Joint Strategy Paper (JSP) for 2008-2013 has been prepared jointly by the EC, some Member States (Denmark, Finland, France, Italy, Sweden and the UK) and Norway and approved in June 2008. The JSP was prepared through extensive consultations with Somali stakeholders. One of the priority pillars is 'Poverty reduction and the consolidation of peace through sustainable and equitable economic growth'. In this pillar, interventions to support broad-based growth to generate employment and income and to increase livelihood assets will be supported. Broader poverty-reducing economic growth factors such as investment in infrastructure, transport, power and communications will need to be addressed to underpin the medium and longer term development agenda. The key to equitable economic growth will be to support and expand the already vibrant Somali private sector, increase productive capacity and increase employment opportunities. At the same time, livelihoods of the poorest strata of the population require additional 'support in order to reduce food insecurity and prevent them from falling into destitution as a result of external shocks.

Based on the JSP 2008-2013, a National Indication Programme (NIP) has been designed. It retains "Economic Development and Food Security" as the third Focal Sector. The specific objective for the sector is to reduce food insecurity and to promote private sector-led economic development through an improved institutional and regulatory framework and sustainable natural resource management.

- Support to the establishment/ strengthening of institutions and development of policies, laws and regulations as well as provision of information systems to support economic growth and employment creation.
- Promotion of an enabling environment for investment and Public-Private-Partnership (PPP) and strengthen livelihoods.

This focal sector is based on two strategic options:

Within the livestock sector, a program that would contribute to these strategic options, including support to policy, legal and institutional frameworks, a livestock population information system and the development of the livestock industry would be required. The program would need to adopt a holistic approach that ensures synergy among mutually reinforcing interventions.

PURPOSE AND EXPECTED RESULTS

Overall Objective

The overall objective of the program for which this contract will be part of is: Food insecurity reduced and private sector-led economic development promoted through an improved institutional and regulatory framework and sustainable natural resource management.

Purpose

The purpose of this study is to *design a livestock program for Somalia for 2009 - 2013*. The program should contribute to the overall objective of reducing food insecurity and promoting private sector-led economic development, through an improved institutional and regulatory framework and sustainable natural resource management, and will be used in the decision-making process in the Delegation of European Commission in the Republic of Kenya, Somali Operations Unit (EC-SOU).

Results to be achieved by the Consultant

The consultant will provide a *report of livestock sector analysis, existing problems, needs and gaps, and design of a livestock program for Somalia for 2009 - 2013* for support by EC Somali Operations Unit, including the criteria for prioritization of the identified program areas.

ASSUMPTIONS & RISKS

Assumptions

The Assumptions of this consultancy include accessibility of the study areas, especially Somalia, availability of required experts, and favourable climatic and security conditions during the study.

Risks

Some of the risks that should be taken into consideration during execution of this consultancy include physical (inaccessibility of the study area), environmental (prolonged adverse climatic conditions such as drought, floods etc), political (civil insecurity) and social (unwillingness of some stakeholders to participate in the study).

The Consultants shall carefully consider issues of access into Somalia as they are responsible for their own security. Security advisories can be regularly obtained at ngosecurity@africaonline.co.ke and ngosecurity2@africaonline.co.ke

SCOPE OF THE WORK

General

Project Description

The working language of this consultancy will be English.

The identification study responds to the requirements of the Economic Development and Food Security focal sector, livestock program. The list of issues to be addressed is not intended to be exhaustive. The consultants are required to use their professional judgement and experience to review all relevant factors and to bring these to the attention of the European Commission.

Sector and problems analysis, and identification of future interventions

The consultancy will undertake the following analysis:

Sector analysis: This will specifically address the main characteristics and features of the livestock sector in Somalia pertaining at the time of the study; the development of the Somali livestock sector at the regional and national levels in the period 2002 - 2008, with particular emphasis on the role played by EC support; the main target groups, beneficiaries, stakeholders; the institutional environment within the sector and how it impacts on the target groups; and the various actors and initiatives, both donor funded and locally supported and including the Somali Support Secretariat (SSS) Livestock Working Group (LWG), that contributed to the co-ordination and implementation of livestock sector activities since 2002.

- **Problem analysis:** This analysis will identify main constraints that currently limit optimal development of the livestock sector and the problems that hamper the enhancement of the livelihood outcomes of the target population groups, ensuring prioritisation of these problems. The analysis will focus on policy and institutional setup, Livestock production systems, Livestock health and livestock trade, marketing, value adding and diversification.

Other aspects that need to be analysed include an assessment of human and physical resource capacities with particular focus on requirements for capacity building, and sustainability of the natural resources base in Somalia. The impacts of previous EC and other donor supported interventions on these aspects of the livestock sector should be highlighted with a focus on lessons learnt and the way forward to build on opportunities for productive engagement while avoiding already identified constraints.

- **Future EC livestock program:** Based on the findings of the sector and problem analysis, a program for the livestock sector for Somalia will be presented. The presentation will include: The overall livestock program design; program areas that need to be targeted for EC support for 2009 - 2013; rationale for prioritising the program areas; expected benefits of the interventions and, broad overview of time frame, actors and expected costs involved for the program, and implementation modality for the program.
- **EC interventions to be approved during the period 2009 - 2010:** Based on the program areas identified for the period 2009 - 2013, the consultant should identify interventions for the first phase (2009 - 2010), which will build into the next phase of the program (2011 -2013).

Economic and financial feasibility of proposed interventions

The analysis shall consider the *"Financial and Economic Analysis of Development Projects"* guidelines of the Commission and in particular the following criteria:

- **Relevance** - The proposed livestock programme shall be relevant i.e. take into consideration the following aspects:
 - Needs, constraints, potentialities of the main target groups (pastoralists, low-income households, livestock traders, service providers, consumers of livestock products and public and private sector institutions).
 - Local absorption and implementation capacities.
 - Participation, partnership and ownership of relevant stakeholders, in particular federal (Somaliland, Puntland, Central and Southern Somalia) and local authorities, communities, economic operators, etc.
 - Complementarities and coherence with other interventions.
- **Efficiency** - Resources shall efficiently and cost-effectively be converted into output, outcome and impact. The Consultant shall take into consideration:
 - Cost and value for money i.e. interventions should be justified compared to the benefits or to other alternative options.
 - Development of local capacities;
 - Establishing a cost-effective and flexible monitoring system.
 - Define SMART indicators.
 - Ensure collaboration with other agencies and other stakeholders.
- **Effectiveness** - Proposed programme should contribute to achieve the purpose of the JSP. The aspects to be taken into consideration will be to:

- Establish realistic and attainable outputs and outcomes.
- Define realistic assumptions and risks.
- Establish flexible institutional and financial arrangements to adjust quickly to changing conditions.
- Define clear responsibilities and roles between the various stakeholders.
- **Sustainability** - Proposed programme shall be sustainable. Therefore the following aspects should be considered:
 - Ownership of objectives and achievements by relevant institutions or target beneficiaries.
 - Policy support and institutional capacity (Is there any support from emerging national or local institutions?).
 - Financial sustainability (are there the conditions to perpetuate the interventions?).

Cross-cutting issues

The mission shall consider the following cross-cutting issues: Conflict prevention, Gender, Environment and emergency/disaster preparedness, and HIV/AIDS.

Geographical Area Covered

Somalia (Somaliland, Puntland, Central and Southern Somalia)

Specific Activities

The study shall include four phases: Inception (Nairobi), Field mission (Somalia), Identification (Nairobi) and Finalization (Headquarters of the Consultants). The consultants shall first conduct a thorough assessment of relevant documentation and contact all relevant donors and the representative of main implementing agencies based in Nairobi. The Consultants shall then contact the relevant authorities, Non-State Actors (NSA), private sector representatives, local communities in the study area. Findings and proposals shall be discussed and broadly agreed in stakeholders' meetings in Somaliland, Puntland, Central and Southern Somalia and in Nairobi. The consultants shall consult EC- SOU in all the phases of the Study.

The Consultants shall consult and collaborate with the Ministries of livestock in Somaliland, Puntland and Central/South Somalia in the execution of the Study, where the security situation will permit.

At the inception phase, the consultants will prepare a detailed work plan, which will include the following elements:

- Literature review/fact finding/data collection/surveys;
- Consultation meetings or a workshop with the different stakeholders in Nairobi and Somalia, to ensure the required information and expected results are attained; and
- Preparation of the draft and final reports

The consultants will make the following presentations of their work in PowerPoint:

- Presentation of Aide Memoire to the LWG indicating the preliminary findings after field work.
- One presentation of Aide Memoire to SOU and ECHO, of the preliminary findings of field with comments from LWG included.
- One presentation of the findings to a workshop for key stakeholders at the end of the study, before presentation of the final report.

The consultants may propose alternative approaches of collecting information and development of the final report.

Project Management and monitoring

The responsibility for the management and monitoring of the study will rest with the EC Somalia Operations Unit (EC- SOU) - Nairobi.

LOGISTICS AND TIMING

Location and Logistics

The desk research will be carried out in Nairobi. Field trips will be made in Somalia, where specific locations will be determined on the basis of the prevailing security situation. Whilst travelling within Somalia, the consultants will be responsible for their own logistical and security arrangements.

Commencement Date and Period of Execution

The intended start date is 1 December 2008 and the performance period of the contract shall not exceed the period of 180 calendar days. However the actual start date and duration of the assignment will be stated in Articles 21 and 22 of the Special Conditions of the Service Contract.

An indicative planning is proposed to cover among others the following actions; but the consultant will confirm/amend it in the inception report.

Activity	Category I	Category II	Dates
Desk Phase - Inception Preparation and presentation	5 days	5 days	December 2008
Field Mission and Identification -visiting to stakeholders in the livestock sector, identification of livestock program	25 days	25 days	December 2008 - mid February 2009
Finalization Phase - comments and final report preparation/ presentation	10 days	10 days	Late February 2009
TOTAL	40 days	40 days	

REQUIREMENTS

Personnel

The consultant must specify the qualifications and experience of the specialists to be assigned to the study. For each expert proposed, curriculum vitae, of no more than three (3) pages detailing the relevant experience should be provided to the EC-SOU.

Key experts

Two experts will be required. The experts provided will have the following qualifications:

Category I: Team Leader - Sector Development Expert (40 man-days):

- University degree in livestock or rural development;
- At least 15 years of professional experience in developing countries;
- Good knowledge of livestock production systems in arid and semi-arid countries;
- Demonstrated experience in strategy and programme development;
- A good understanding of natural resources management and environment;
- Fluent in English, both reading and writing;
- Working experience in the Horn of Africa and specifically Somali Ecosystem.

Category II: - Production and Marketing Systems Analyst (40 man-days):

- University degree in agricultural/livestock economics, agribusiness or economics;
- At least 10 years of professional experience in developing countries
- Demonstrated experience in commercial livestock production, value addition, international livestock trade and meat marketing, preferably in Eastern Africa and the Middle East;
- Experience in applied PCM and participatory approaches;
- Fluent in English in both reading and writing;
- Working experience in Somalia and/or Middle East

Other experts

The Consultant may propose additional experts deemed necessary for the execution of the Study. However CVs for experts other than the key experts above will not be examined prior to the signature of the contract. They should not be included in the tenders.

Performance of the contract (and therefore payment) is based on working days only. The Consultant will only be paid for days actually worked and the basis of the daily fee rate contained in the budget breakdown (Annex V). Tenders must annex the "Estimated number of working days" worksheet contained in the spreadsheet for Annex V, their Organisation and Methodology (Annex III) to demonstrate the correspondence between proposed methodology and expert inputs. Note that civil

servants and other staff of the public administrations of the beneficiary country cannot be recruited as experts.

REPORTS

Reports shall be submitted in English to the EC, as follows:

- **Work plan:**

As part of the offer, the consultant will provide a detailed work plan and budget, outlining the proposed methodology and time schedule.

- **Inception report:**

3 days after start date of the consultancy, and outlining the proposed methodology and updated time schedule (6 copies, max. 5 pages).

- **End of Mission Aide Memoire:**

In line with the agreed upon work plan, a synopsis of (i) sector analysis, (ii) problems analysis, and (iii) proposed interventions for the livestock sector will be prepared in writing (6 copies, max 20 pages) and presented to the EC delegation - Somali Operations and ECHO.

A presentation of the Aide Memoire will be made to the EC (Somali Operations Unit), ECHO and SSS livestock working group (LWG).

- **Draft final report:**

The report should include (i) sector analysis, (ii) problems analysis, and (iii) proposed priority areas for the medium term (2009 - 2013) and short term (2009 - 2010). The report should follow the structure of the final report, and taking into consideration any comments made by the EC Kenya Delegation, Somali Operations Unit, ECHO and the LWG/SSS on the Aide Memoire (6 copies, maximum 40 pages).

- **Final report:**

Ten days after the receipt of the comments from the EC, the consultant will be expected to deliver the final amended report (6 copies, maximum 40 pages).

Six (6) hardcopy and one (1) electronic version (CD), in MS Word and PDF format will be submitted for each of the reports.

ANNEXES

Documents and Sources of Information

There many sources of information and studies on Somalia and the EC Strategy for Somalia. A non-exhaustive list is below.

1. EC Documents

- The EC Strategy for Somalia (SISAS) available from <http://www.delken.ec.europa.eu>, and relevant sector strategies (EC, FAO, WB, SACB and local administrations);
- EC Joint Strategy Paper for Somalia

- EU Strategy for Africa: Towards a Euro-African pact to accelerate Africa's development (Com(2005)489)
- The EC "Project Cycle Management guidelines" (March 2004 Manual) available from http://www.europa.eu.int/comm/europeaid/reports/index_en.htm:
- The "Practical Guide to contract procedures for EC external actions", see http://ec.europa.eu/europeaid/work/procedures/implementation/practical_guide/index_en.htm;
- The European 'Commission visibility guidelines available from http://www.ec.europa.eu/europeaid/work/visibility/index_en.htm;
- Somalia Country Environmental Profile on www.delken.ec.europa.eu
- A number of studies are available at the website of the EC Delegation to Kenya (www.delken.ec.europa.eu). The most relevant are:
 - Toward a livestock Sector Strategy;
 - Identification of a Livelihood Strategy and Programme to Address Underlying Causes of Food Insecurity in Somalia

2. Other sources of Information

- Food Security: <http://www.fsausomali.org>
- WORLD BANK -SOMALIA - Publications on economy, gender, social structure, Agriculture, rural development, etc. at www.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/SOMALIA_EXT/
- Livestock Strategy: http://siteresources.worldbank.org/SOMALIAEXTN/Resources/so_LS_final_rpt.pdf

Indicative Reporting Format⁴

Maximum length excluding annexes/appendices: 40 pages.

The following text should appear on the inside of the cover:

This report is financed by the European Commission. However, the findings -are those of the consultants and the report does not necessarily reflect the opinion of the European Commission.

⁴ *The indicative format is not mandatory. It is a guide to facilitate the work of the consultant*

Table of Contents

Abbreviations and Glossary of Terms

1. Executive Summary

2. Background

- Physical features
- Economic analysis
- Human and Social analysis

3. Sector Analysis

- Main characteristics and features of the livestock sector
- Development of the livestock sector (2002 - 2008)
- EC livestock sector support - Areas of interventions, Main target groups, beneficiaries, impact of the interventions
- Other donor-funded initiatives in the livestock sector in Somalia.

4. Problem Analysis

- Policy and institutional set-up
- Livestock production
- Livestock marketing, trade and diversification
- Animal health

5. EC Somali livestock program for the period 2009 - 2013

- Priority areas for the livestock sector
- Rationale for the sector priorities
- Compatibility of priorities with the strategic approach and general principles of EC assistance.
- Implementation modality: Time frame, relevant stakeholders and actors, and estimated costs, Monitoring and Evaluation
- Expected impact and potential sustainability of the interventions
- Logical framework for the livestock program

6. EC interventions for the period 2009 - 2010

- Priority areas for the livestock sector for 2009 - 2010
- Rationale for the sector priorities
- Compatibility of priorities with the strategic approach and general principles of EC assistance.
- Implementation modality: Time frame, relevant stakeholders and actors, and estimated costs, Monitoring and Evaluation
- Expected impact and potential sustainability of the interventions

7. Economic and financial feasibility of proposed interventions

- Relevance -Relevance of the proposed programmes and actions to the needs of the beneficiaries
- Efficiency - Resources shall efficiently and cost-effectively be converted into output, outcome and impact.
- Effectiveness - Proposed interventions should contribute to achieve the purpose of the JSP.
- Sustainability - Proposed interventions shall be sustainable.

8. Logical Framework and Indicators

9. Recommendations and way forward

10. Annexes

- Terms of Reference
- Composition of the Mission (CV summarised and limited to 1 page)
- Maps of Somalia and the Programme area
- Itinerary and Schedule of the Mission
- List of persons/organisations consulted
- Literature and documentation consulted
- Other technical, economic and statistical annexes of relevance.

Livestock sector projects funded by EC in Somalia EDF Contracts

NGO	CONTRACT	TITLE	IMPLEMENT	REGION
FAO	369-UNO-L05-03	Consultancy to Guide the Design of a Somali Livestock Strategy	20-Sep-03 to 19-Feb-04 5 months	Countrywide
Terra Nuova	448-NGO-LI04-04	Establishment of a Somali Regional Technical Veterinary Training & Reference Centre - Bridging Phase	01-May-04to31-Oct-04 »6 months	Somaliland
GFA Terra Systems	455-STY-LI05-04	Programme Design: Support to Marginal rural Areas in Somalia	09-Aug-04 to 08-Mar-05 7 months	Countrywide
Terra Nuova	456-NGO-LI06-04	Establishment of a Somali Regional Technical Veterinary Training & Reference Centre - Bridging Phase II	01-Nov-04to30-Jun-05 8 months	Somaliland
GFA Terra Systems	466-STY-LI07-05	Support to Marginal rural Areas in Somalia: Dissemination of Findings	10-Apr-05to09-May-05 1 month	Countrywide
Terra Nuova	514-NGO-LI2-04	Somali Animal Health Service ProjectCR	01-Apr-05 to 30-Sep-07 30 months	Countrywide
Vetaid	553-NGO-LI04-06	Somali Pastoral Dairy Development Project	15-Jul-06to14-Apr-09 33 months	Somaliland/ Puntland
FAO / VSF	565-UNO-LI05-06	Support to Pastoral Livelihood Development	01-Jan-07 to 30-Jun-09 30 months	Somaliland/ Puntland
Terra Nuova	567-NGO-LI06-06	Complimentary Activities to Support SAHSP and LTMP	01-Feb-07to31-Jul-08 18 months	Countrywide
Terra Nuova / ILRI	513-NGO-LI1-04	Improvement and Diversification of Somali Livestock Trade and Marketing	01-Feb-05to31-Jul-08 42 months	Countrywide
BBC World Trust Service	515-NGO-LI3-04	The Somalia Livestock Livelihoods Distance Learning Project	15-Jan-05to14-Jun-08 42 months	Countrywide
AU/IBAR	9 ACP SO 3/23	Somali Livestock Certification Project (SOLICEP)	01-Oct-07to31-Mar-2010 30 mths	Countrywide

NGO	CONTRACT	TITLE	IMPLEMENT	REGION
Terra Nuova UNA/COOPI, VS Fermany / FAO	9 ACP SO 3/32	Somali Animal Health Services Project Phase II - Risk Management of Livestock Trade Limiting Diseases (SAHSP II)	01-Jan- 08to31Dec-09 24 months	Countrywide

Italian Co-financed Contracts

NGO	CONTRACT	TITLE	IMPLEMENT	REGION
Terra Nuova	SO/0022/IT-COF/01	Establishment of a Technical Veterinary Training School, Sheikh District, Somaliland Phase I	01-Dec-01 to30- Apr-04 29 months	Somaliland
Terra Nuova	SO/0038/IT-COF/05	Establishment of a Somali Regional Technical Veterinary Training & Reference Centre Phase II	01-Jul-05to31- Dec-07 30 months	Countrywide

Regional Funds Contracts

NGO	CONTRACT	TITLE	IMPLEMENTATION	REGION
Terra Nuova	PACE/EDF/TN/003/04	Pan African Programme for the Control of Epizootics (PACE) Somalia Component Year 4	01-May-04to31- Mar-05 11 months	Countrywide

Annex 2: Composition of the Mission

Sector Development Expert/ Team Leader

Category: I
Family name: TALKS
First names: Kenneth Ian
Date of birth: 10/03/1943
Nationality: British
Civil status: Married
Education:

Institution [Date to]	Degree(s) or Diploma(s) obtained:
Reading University, UK, 1961 – 1965	BSc (Hons) Agriculture, specialising in Agricultural and Farm Management Economics (4 year course)

Language skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
English (mother tongue)	1	1	1

Present position: independent consultant

Years within the firm: associate consultant for 10 years

Key qualifications:

- 30 years professional experience as a rural development specialist in Africa, Asia and the Pacific; countries including; Somalia, Kenya, Ghana, Papua Guinea, Egypt, Malawi, Sierra Leone, Uganda, Namibia, Iran, Botswana, Nigeria, Sudan, Swaziland and South Africa.
- Client profile include; EU, WB, AfDB, IFAD, ADB plus bilateral (Danida, AIDAB).
- Over 100 short term assignments on sector reviews, project formulation, programming missions, identification and preparation missions as well as evaluation of EU funded programmes, including review of Animal Feeding Project in Somalia (1989), Red Meat Sector Review in Kenya in 2003 and Final Evaluation of Community Project in Kenya (2006)
- EC project cycle management, monitoring and evaluation and logical framework approach, as well as familiar with the formats for EDF project formulation reports, financing proposals/agreements and mid-term and final evaluation reports on missions touching on Livestock production systems, rural development sector strategy, smallholder dairy and horticultural projects in Semi-arid areas, water resource management, animal health and disease control, public/private sector involvement, agriculture/livestock market information systems, meat processing, dairy and food processing, meat processing sector, smallholder livestock development, beef cattle and strategy for new abattoir, milk production and processing.
- Training and experience as a Farm Management Economist, smallholder farming systems in Africa and Asia. Poverty reduction and improvement of livelihoods.
- Experienced in formulation and evaluation of rural development projects including; livestock, agricultural processing and marketing, and rural infrastructure including water supplies and sanitation, rural access roads.

Specific experience in the region:

Country	Date from - Date to
Somalia	1989 EU Study of Crop Residue Utilisation by Livestock
Kenya	2003 EU Sector Review of Red Meat Livestock Production and Marketing Sub-Sector
Kenya	2006 Final Evaluation of EC funded Community Development Programme Phase 2
Kenya	2005 Project Identification and Preparation Mission for the AfDB for a Smallholder Horticultural Development Project

Production and Marketing Systems Analyst Dr. Solomon Munyua

Category: II
Family name: MUNYUA
First names: Solomon J Muchina
Date of birth: 20 December 1954
Nationality: Kenyan
Civil status: Married
Education:

Institution [Date to]	Degree(s) or Diploma(s) obtained:
Nairobi University January 1992-October 1997	PhD, (Reproductive performance in small ruminants in arid and semi-arid areas of Kenya)
Murdoch University, Western Australia, 1982-1985	Master of Philosophy (MPhil)
Murdoch University, Western Australia, 1982-1985	BSc (Hons), Veterinary Biology
Nairobi University, September 1975-October 1979	BVM Bachelor of Veterinary Medicine
ABE, London, UK, January-December 1999	Diploma, Business Administration

Language skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
English	1	1	1
Swahili	1	1	1

Membership of professional bodies: Member, Kenya Veterinary Association (KVA) and the Animal Production Society of Kenya (APSK)

Other skills: Experienced in use of computers and working in MS office environment

Present position: Associate consultant of Cardno Agrisystems Ltd

Years within the firm: Associate since 2006

Key qualifications:

- A Veterinarian qualified at PhD level. Received his university education in Kenya, Australia and UK.
- 20 years professional experience of veterinary and livestock work. Was a lecturer/livestock expert at the University of Nairobi (1986-2001 and 2005-2006) and worked for the Pastoral Livelihoods Programme of the African Union Inter-Africa Bureau for Animal Resources from 2001 to 2005. Has worked as an independent livestock consultant since 2006.
- Has extensive experience and expertise in policy formulation and national/regional level strategic policy.
 - In Kenya has been involved since 1998 as a member of a government livestock sector legal and policy review team in the review of policies and laws that regulate the delivery of veterinary, livestock production and marketing and related services in Kenya.
 - During 2001 to 2005 he participated in AU-IBAR facilitated in-country consultative workshops (Uganda-Tanzania-Eritrea-Burundi-Zambia-Djibouti-Uganda) and a regional workshop involved in reviewing policies and laws governing the livestock sector in the Greater Horn of Africa region to revise and harmonise policies. Of special interest were those policies and the associated legal framework supportive of private sector led livestock marketing and value addition.
 - During 2006 to 2008 has been assisting the government of Southern Sudan on the formulation of policies and strategic plans for development of livestock production and trade.

Specific experience in the region:

Country	Date from - Date to
Sudan	2008, 2006, 2007, 2006, 2001
Ethiopia	2006
Kenya	1986 to date
Burundi, Eritrea, Djibouti, Somalia, Tanzania, Uganda & Zambia	over period 2001-date

Livestock Health, Gender and Sociology Expert Dr Rachel Masake

Category: III
Family name: MASAKE
First names: Rachel
Date of birth: 5 November 1945
Nationality: Kenyan
Education:

Institution [Date to]	Degree(s) or Diploma(s) obtained:
University of Nairobi, Kenya, 1967-1971	BVSc (Bachelor of Veterinary Science)
University of Nairobi, Kenya, 1971-1972	MSc, Functional Anatomy
Washington State University, USA, 1973-1976	PhD, Immunoparasitology/Immunopathology

Language skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
English	1	1	1
Teso (mother tongue)	1	1	1
Swahili	3	3	5

Key qualifications:

Bachelor of Veterinary Science. Over 25 years of field, practical and research work in the area of livestock management, Animal Health and Community Development projects. Her field experience ranges from validation of diagnostic techniques to evaluation of community-based agricultural projects. In this respect she has participated in formative and summative project evaluations such as Emergency Livestock Intervention in Somalia, Samburu, Marsabit and Moyale and Marsabit Development Programme funded by ECHO and GTZ, respectively. Evaluated a number of community development projects in agro-forestry, mixed farming and gender oriented field projects. Additionally she has facilitated a number of regional and international discussions on agricultural production, agricultural policy formulation and empowerment of farmer organizations.

Employment Record:

March 1998 to Now	VEDAMAN Consultancy Firm Coordinator: Undertakes monitoring and evaluation of agricultural sciences and multidisciplinary development activities; Manages the activities of VEDAMAN firm.
January 1995 to January, 1998.	International Livestock Research Institute Project leader in Disease Diagnosis. Conducted research on applied sciences and field validation of diagnostics reagents; Assisted Director of Bioscience and External relations in their administrative work.
March 1978 to December 1994	International Laboratory for Research on Animal Diseases, Kenya Research Scientist; Project leader. Conducted research on applied sciences and field validation of diagnostics reagents and organised training for field officers on disease diagnosis and undertook field validation of diagnostic reagents; Undertook evaluation of projects in the field.
February 1977 to February 1978	Cornell University, USA Intern in Pathology; responsible for disease diagnosis in domestic animals for both ante-mortem and post-mortem.
March to August 1973	East African Community, EAVRO Research Officer; Undertook laboratory and field study of parasites causing diseases in domestic animals

Annex 3: Supporting Tables, Maps and Charts

Annex 3 Table 1: EC Funded Development Projects in the livestock Sector 2002-2009

Project	Source	Impl Agency	End date	Main sub-sector focus and target area
Recently Completed Projects				
Veterinary Training Phase II	EDF	Terra Nuova	8/2001	Animal health/private sector (Countrywide)
Establish Sheikh Vet School-Phase II	EC/Italy (Cofinan)	Terra Nuova	3/2008	Animal health and training (Somaliland)
Export Related Vet Project Phase II	EDF	UNA	6/2001	Animal health and trade (Puntland)
Pan African Prog for Epizootics Control (PACE)	EDF + Italy/Switzerl and	Terra Nuova/UNA VSF Suisse	7/2004	Animal health and training (Countrywide)
Livestock Trade & Marketing Improvmt. Project (LTMP)	EDF	Terra Nuova & ILRI	7/2008	Marketing and trade (South, Central and Somaliland)
Animal Health Services (SAHSP I)	EDF	Terra Nuova	12/2007	Animal health (Somaliland, Puntland, South Central)
Livestock distance learning	EDF	BBC World Service Trust	6/2008	Training(South& Somaliland)
Pastoral Dairy Development	EDF	VETAID with VSG Germany	4/2009	Milk productn and marketing (Somaliland/ Puntland)
Support to Pastoral Livelihood Develop	EDF	FAO/VSF Germany	6/2009	Marketing, meat trade (Somaliland and Puntland)
Compl Activities to SAHSP	EDF	Terra Nuova	7/2008	Animal health/marketing and trade (?)
Livestock Certificatn (SOLICEP)	EDF	AU/IBAR and Terra Nuova	3/2010	Animal health and marketing and trade (countrywide)
Animal Health Services (SAHSP Phase II)	EDF	Terra Nuova + UNA, COOPI, VSF, FAO	12/2009	Animal health services, surveillance and capacity building in trade diseases
Livestock Census, Pilot Phase	EDF +USAID	FAO	Mid 2009	Pilot in 2 areas and 2 seasons South Central and Somaliland
Phase III Sheikh TV School	EC	Terra Nuova	9/2010	Further support to training achieve institute
Somali Ecosystem Rinderpest Eradictn Cord Unit SERECU.	EDF	AU/IBAR and Terra Nuova	6/2010	Animal health (Rinderpest) and capacity building
Emergency Livelihd Asset Support Project (ELASP)	ECHO	COOPI	9/2008-6/2009	Animal health Central and South regions
Enhancement of Capacity of Agricult Livestock Institutions (ECSALI)	EC	Terra Nuova	6/2006 – 8/2008	Capacity building in South Central government
Support to Livelihood Enterprises (SLES).	EC	VSF Germany	2/2009 - mid 2011	South Central region on milk marketing and slaughter slabs
Infrastructure Devel. in Public Health.	EU / UN Habitat	UNA	?	Slaughterhouse and meat marketing facilities

Annex 3 Table 2 :List of Main Animal Diseases in Somalia

<ul style="list-style-type: none"> • Ectoparasites (mange, lice in goats, sheep and cattle) • Gastro- intestinal Helminthosis and liver fluke infection • Respiratory complexes (bronchitis in camel and nasal fly larvae infestation), • Viral diseases (Rift valley fever, F and M disease, Nairobi sheep disease, peste des petits ruminants(PPR), heart water, cattle and camel pox, sheep and goat pox, rabies in all animals), • Prorozoan diseases (Trypanosomiasis, Babesiosis, coccidiosis), • Bacterial infections (pasteurellosis, mastitis, brucellosis, anthrax, botulism, foot rot, salmonellosis and ulcerative balanoposthitis in sheep), • Mycoplasma Infections {Contagious bovine (CBPP) and caprine pleuropneumonia, • Contagious ecthyma, fungal infection (ringworm), Rickettsial infection and anaplasmosis.

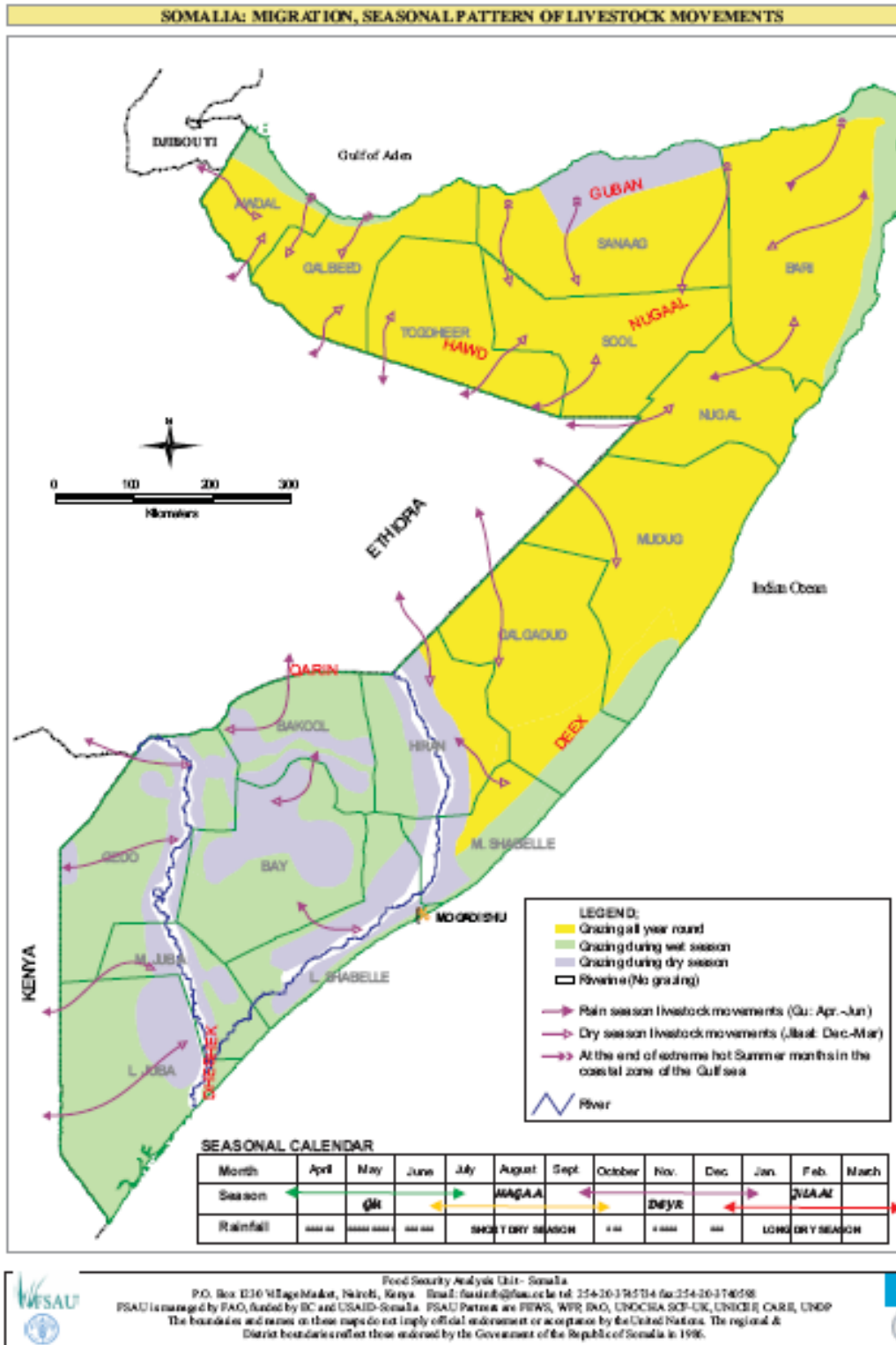
Annex 3 Table 3: Coping strategies adopted by farming, agro-pastoral and pastoral communities in regions of Somalia

RISK FACTOR	STRATEGY
Crop failure	<ul style="list-style-type: none"> • More sales of livestock and live stock products (increased offtake). • Charcoal sale in local market and pole making for construction. • Gifts among relatives (zhakas) and foreign remittances from family members living abroad; • Reduction in household expenditures mainly purchase of khat and cigarettes reduced. • Seeking casual labour work. • Hunting and wild fruits collection and sale • Relying on the social system of sharing resources among clan members
Water shortage	<ul style="list-style-type: none"> • Herd migration in search of water points. • Selling water in urban areas
Non-availability of pasture	<ul style="list-style-type: none"> • Migration in search of pastures and water. • Family splitting for migration.
Markets Inaccessibility and ban on export	<ul style="list-style-type: none"> • Sale of livestock at village level. • Exploring new markets in Yemen, Kenya and Ethiopia.
Contingency needs	<ul style="list-style-type: none"> • Conservation of grains and sorghum fodder • Sale of grains when family incurs major expenses (dowry) or unexpected expenses (food at the end of Jilaal season, medicines). • Contracting debt

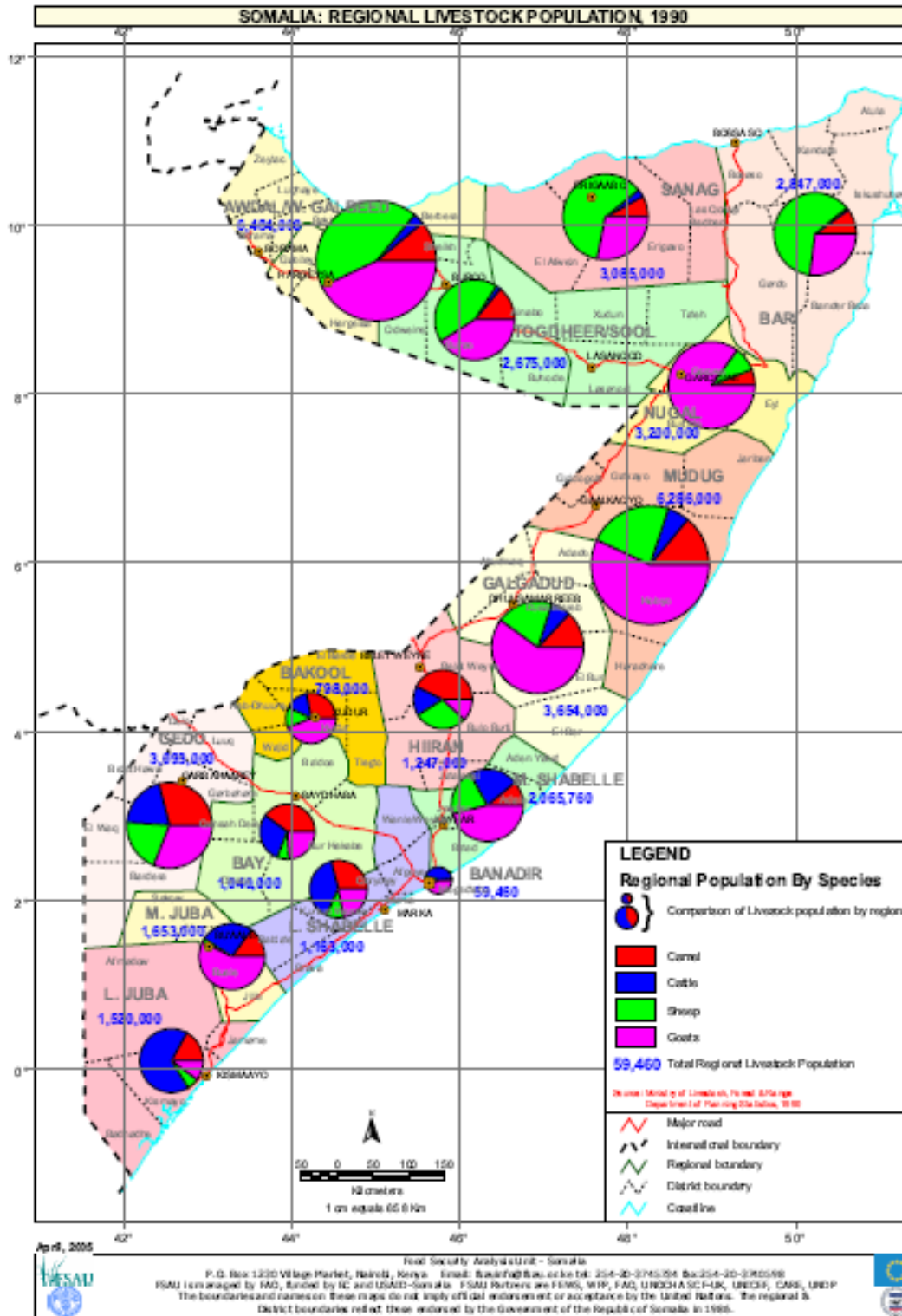
Annex 3 Table 4: SWOT Analysis of the Puntland Livestock Sector (2007)

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> • Strong base with traditional knowledge. • International demand. • Stakeholder-driven sector development strategy designed (the SLSS). • International support interventions available (animal health and marketing). 	<ul style="list-style-type: none"> • Absence of a comprehensive livestock policy. • Low productivity due to low carrying capacity and poor management. • Absence of research /institution capacities. • Lack of access to credit and technical services. • Unclear land tenure rights- enclosure of grazing land and watering points. • Absences of cold chain/chilled carcass processing plants. • Lack of credibility in product standards. 	<ul style="list-style-type: none"> • Improved value addition • Institutional strengthening • Improved management practices • Increased competition through private participation. 	<ul style="list-style-type: none"> • Fragile and uncertain environment. • Uncertain export markets.

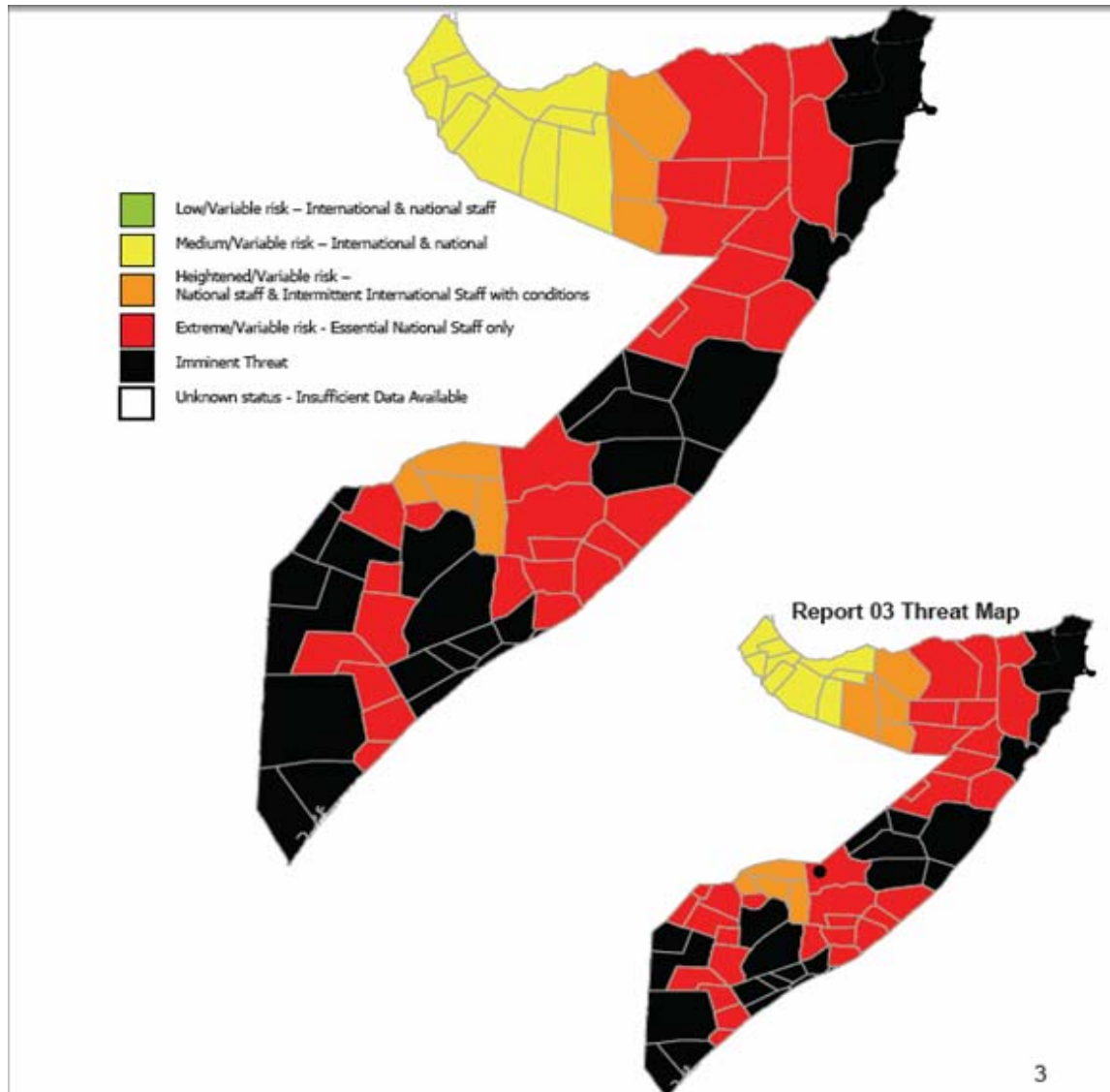
Annex 3 Map 1: MIGRATION, SEASONAL PATTERN OF LIVESTOCK MOVEMENTS



Annex 3 Map 2: SOMALIA REGIONAL LIVESTOCK POPULATIONS IN 1990

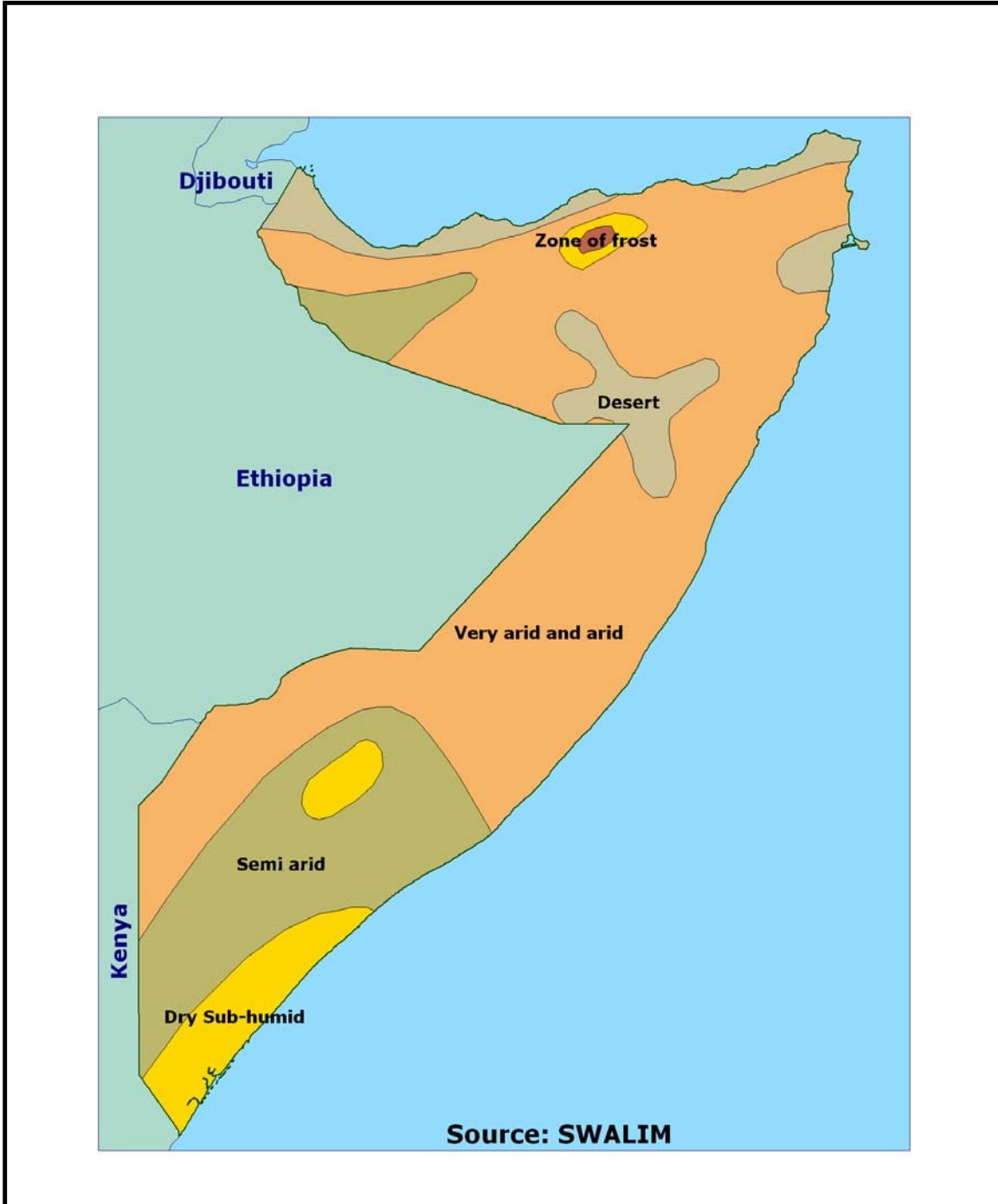


Annex 3 Map 3: SECURITY STATUS/THREAT MAP AS AT JANUARY 2009

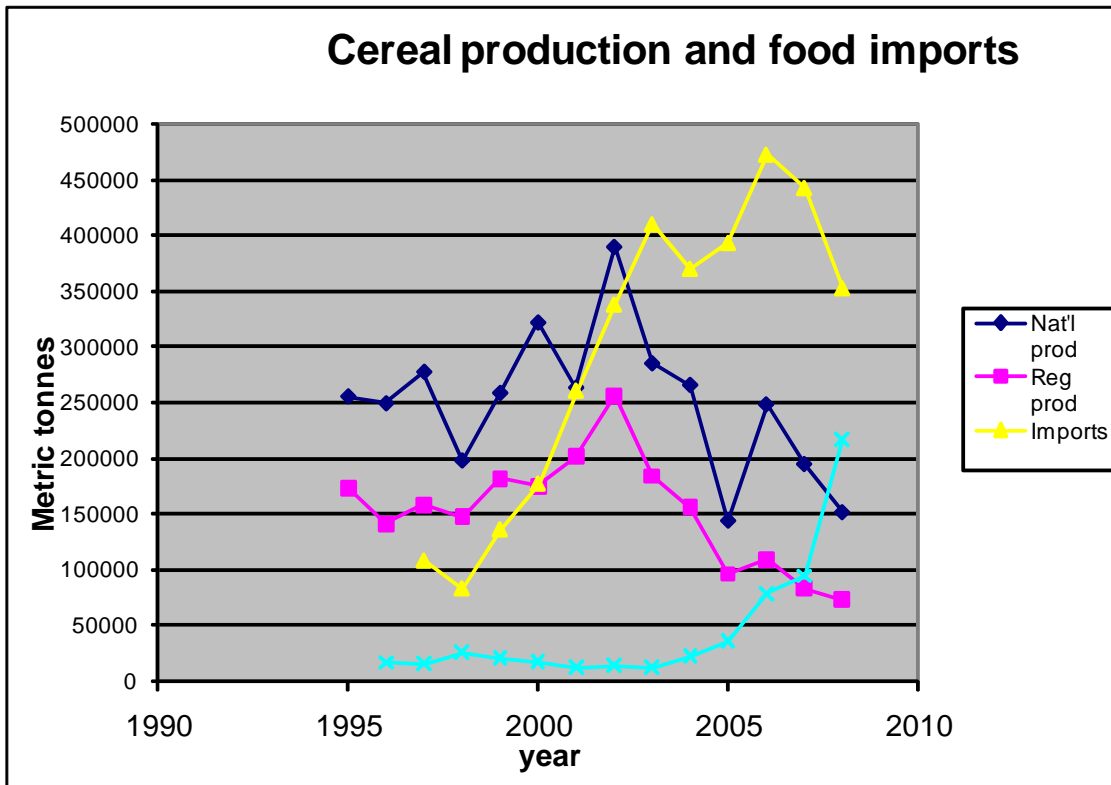


(Source: SPAS REPORT)

Annex 3 Map 4: FAO ECO-CLIMATIC CLASSIFICATION EQUATORIAL CLIMATES

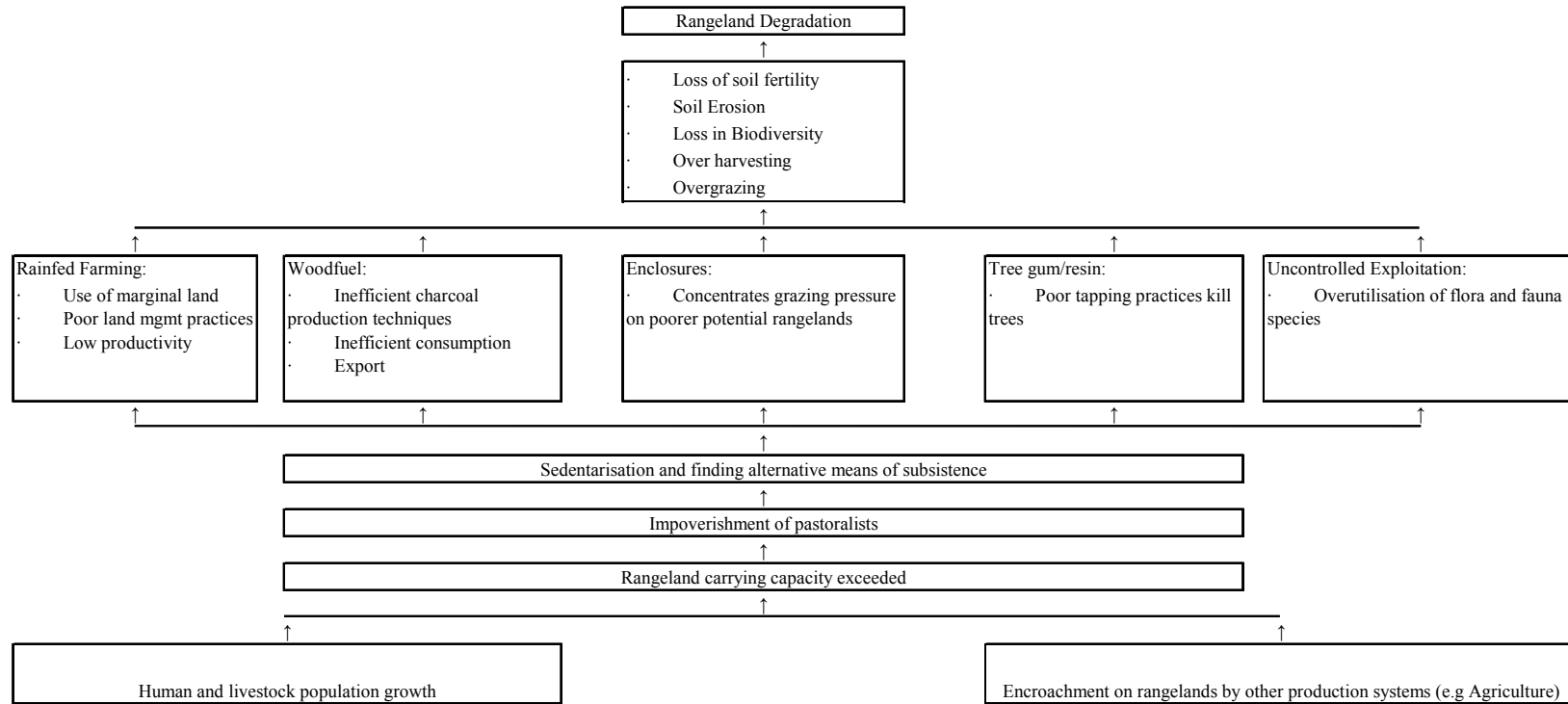


Annex 3 Chart 1: CEREAL PRODUCTION, IMPORTS AND WFP FOOD AID 1994-2008



Source: EC Irrigation Sector Programme Mission, 2009

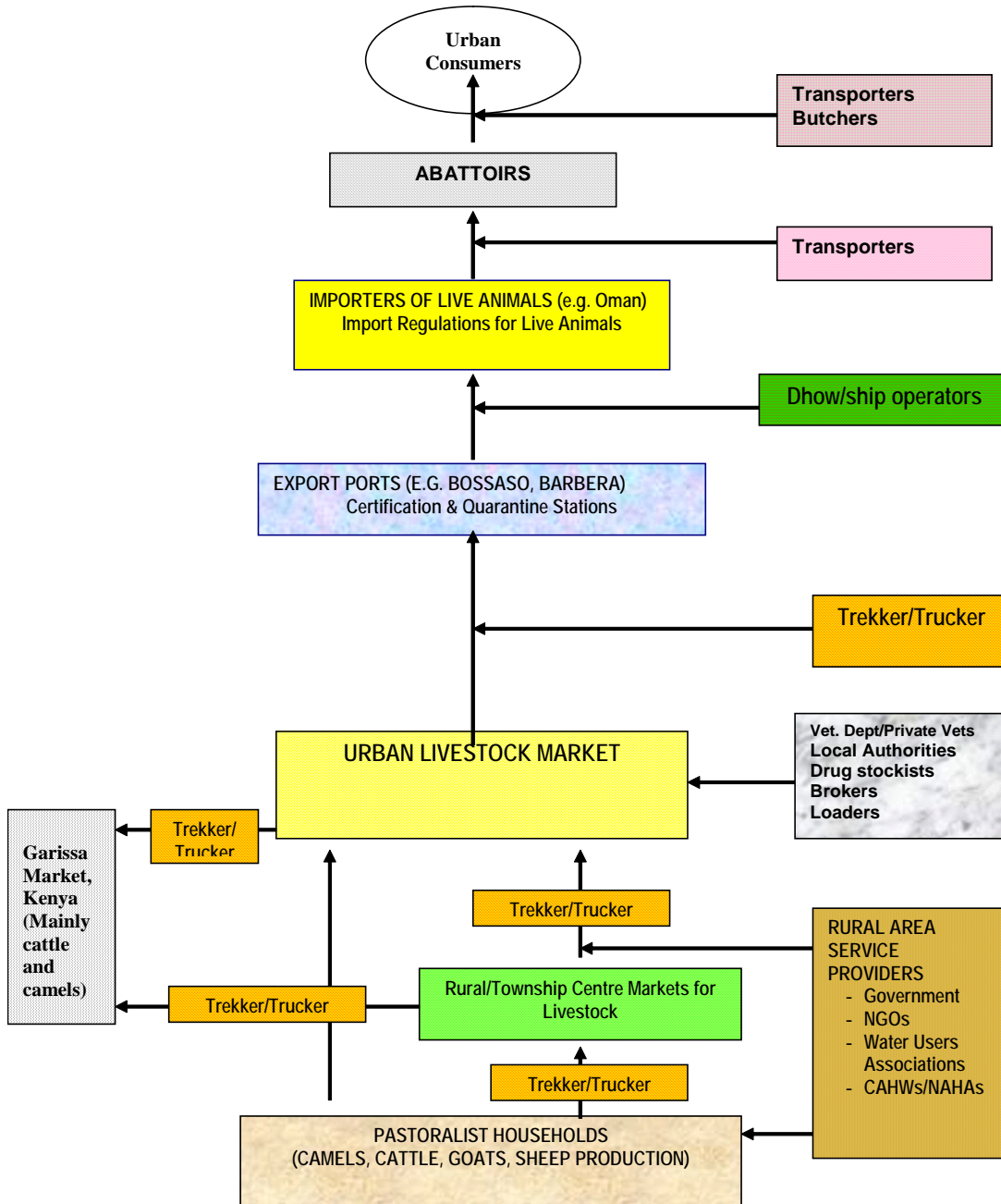
Annex 3 Chart 2: RANGELAND DEGRADATION



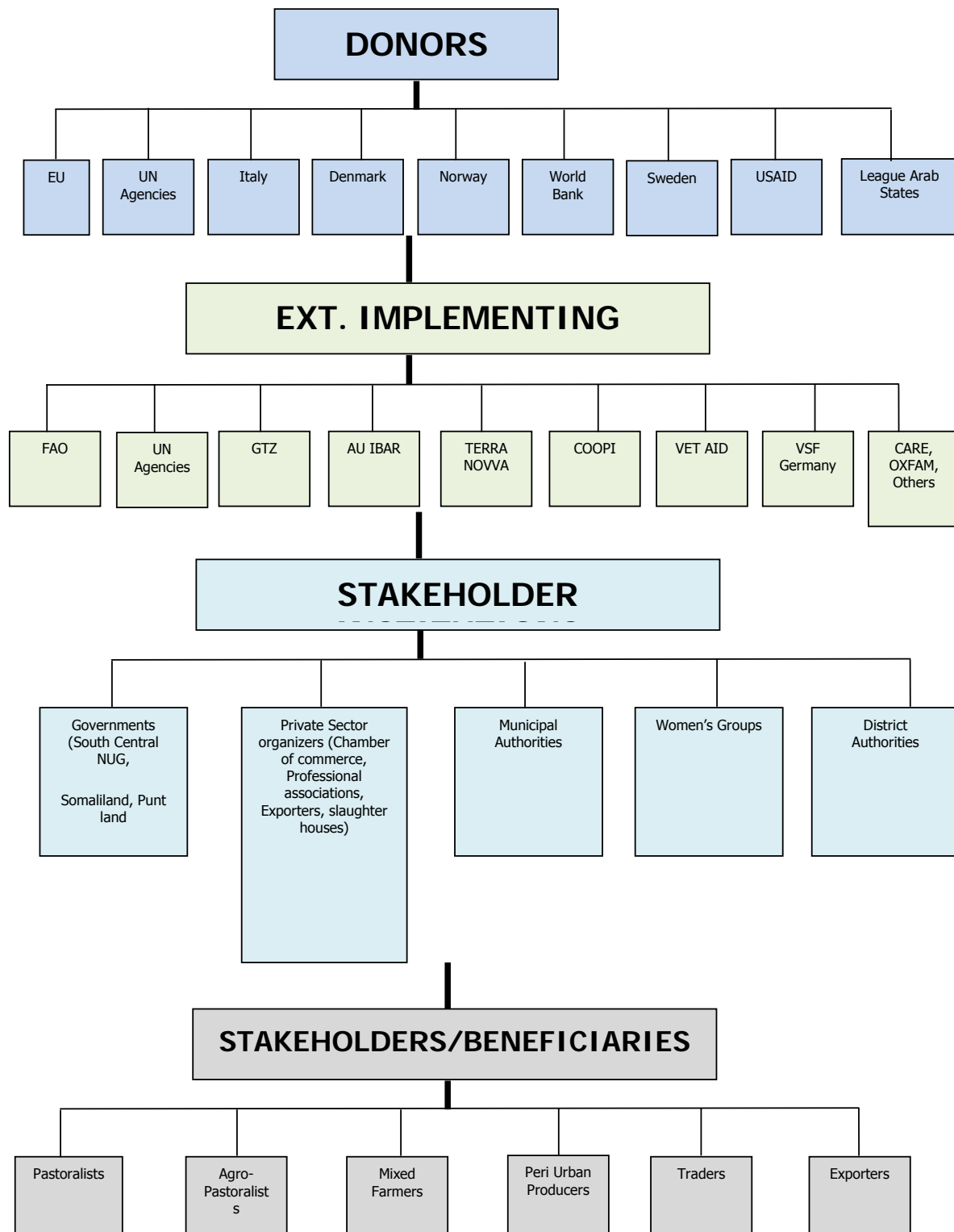
Source Agricultural Programme Mission 2009

Annex 3 Chart 3: SOMALIA LIVESTOCK VALUE CHAIN

Somali Livestock Value Chain



Annex 3 Chart 4: OVERAL STAKEHOLDERS IN LIVESTOCK SECTOR



Annex 4: Itinerary and Schedule of the Mission

Date	Place	Purpose/Activity
PHASE I Inception		
14/1		Team leader Travel to Nairobi
15/1	Nairobi	Briefing EC-SOU LWG Meeting Introduction/Contacts
16/1	Nairobi	Literature collection and review
17/1	Nairobi	FSAU/FAO Briefing meeting
18/1	FREE	
19/1	Nairobi	FSAU/FAO Overview, sector and project discussions
20/1	Nairobi	Project Review and planning visits VSF Suisse and VSF Germany for Meat and Milk Marketing project reviews
21/1	Nairobi	Planning Somaliland visit FAO Donor interventions GTZ AU/IBAR SOLICEO and SERECU Project Review
22/1	Nairobi	COOPI Project Reviews and Central/South Region Terra Nuova SAHSP and Marketing Project Reviews VETAID Review milk marketing project
23/1	Nairobi	Prepare Inception Report
24/1	Nairobi	Team coordination and submit to SOU/EC Inception Report, Phase II planning
25/1	FREE	
26/1	Nairobi	EC-SOU Debriefing/Discussion of Inception Report/Agree Phase II Field Visits programme. Team Leader depart in evening for Europe
PHASE II Field Investigations		
29 th January	Nairobi	Travel to Hargeisa aborted
30 th January	Hargeisa	Travel to Hargeisa, Preliminary discussions with COOPI staff Met by FAO ground staff and made tentative plans
31 st January	Hargeisa	Meet COOPI, ULPA, OXFAM
1 st February	Berbera	Meeting with Ministry of Livestock, Ministry of Agriculture EU Commission, VETAID NAGAAD, Travel to Berbera
2 nd February	Sheikh	Meet with Port Veterinary Officer, visit Port, and Animal Holding area, Travel to Sheikh, Visit Sheikh Veterinary school, meet with School staff
3 rd February	Burao	Travel to Burao, Qoyta – Village milk centre, Municipal authority, Slaughter House, Tannery, VetAID staff and university of Burao milk testing laboratory, Milk parlour
4 th February	Hargeisa	Travel to Odweyne, Meet with pastoralist, Women groups, Municipal leaders and Travel to Hargeisa
5 th February	Hargeisa	Travel to Togwajale and Gabiley, Cattle market facilities and Livestock traders
6 th February	Hargeisa	Review of report from the local assistants and NAGAAD
7 th February	Nairobi	FAO staff (Lead project; Animal health);
14 th February	Hargeisa	Travel and firming ground travel plans
15 th February	Travel to Borama through Togwajale	<ul style="list-style-type: none"> - fodder production and marketing - Crop residue improvement - Livestock market infrastructure
16 th Feb	Borama to Hargeisa through Dalli, Ghalapiye and Gabiley	<ul style="list-style-type: none"> - Water harvesting - Livestock Market Information - Hides and skins recovery and trade

REVIEW AND IDENTIFICATION OF A LIVESTOCK SECTOR STRATEGY AND PROGRAMME TO
ADDRESS FOOD INSECURITY AND ECONOMIC DEVELOPMENT IN SOMALIA
FINAL REPORT – MAY 2009

Date	Place	Purpose/Activity
17 th Feb	Burao with stops in Duharburook, Sheikh Abdaal, Qyota, Karasha and Ximan	- Duharburook – Chinese Tannery - Sheikh Abdaal – Camel Milk Market - Livestock and fodder production - Range management
18 th Feb	Toghdeer region – Beer area	- Beer area – fodder production and marketing - Vet Aid – Camel milk production, processing and marketing project, Range management and Honey production
19 th Feb	Burao – Hargeisa through Odwein and Xaxi (Hahi)	- Odwein and Xahi – fodder production and marketing, Range management, feedlot being set up
20 th Feb	Hargeisa	Hides and skins curing and drying Leather development – Tannery
21 st Feb	Nairobi	Travel to Nairobi
22-26 th Feb	Nairobi	Meet Somalia officials in Nairobi and meetings with ICRC, ECHO and LAS
PHASE III Draft Report Preparation		
26 th February	Nairobi	Team Leader travel back to Nairobi from Europe
27 th February	Nairobi	Aide Memoire preparation
28 th February	Nairobi	Aide Memoire preparation
March 1 st	FREE	
March 2 nd	Nairobi	Aide Memoire preparation
March 3 rd	Nairobi	Submission of Aide Memoire to EC-SOU
March 4 th	Nairobi	Preparation of Draft Report
March 5 th	Nairobi	Preparation of Presentations for workshop
March 6 th	Nairobi	Preparation of Presentations for workshop
March 7 th	Nairobi	Preparation of Presentations for workshop
March 8 th	FREE	
March 9 th	Nairobi	Preparation of Presentations for workshop
March 10 th	Nairobi,	Workshop
March 11 th	Nairobi	Preparation of Draft Report, Meeting with EC-SOU
March 12 th	Nairobi	Preparation of Draft Report, Meeting with Terra Nuova, further discussions with FSAU and further data collection from NGOs
March 13 th	Nairobi	Preparation of Draft Report
March 14 th	Nairobi	Preparation of Draft Report
March 15 th	FREE	
March 16 th	Nairobi	Preparation of Draft Report
March 17 th	Nairobi and internt travel	Preparation of Draft Report and Team leader depart for Europe in evening
March 18-19	Home office	Submission of Draft Report
March 19-31		Preparation of comments by EC-SOU
April 1- 17	Home office	Finalisation of Report

Annex 5: List of Persons/Organisations Consulted

NAME	ORGANIZATION
List of People Met During Inception Phase	
Luciano Mosele	Rural Development Technical Assistant SOU/ECD, Kenya
Ernest Njoroge	Programme Officer, Livestock Sector, SOU/ECD, Kenya
Paollo Toselli	Food Security Adviser SOU/ECD, Kenya
Rose Jeptoo Kioko	Programme Assistant, Rural Development, SOU/ECD, Ken.
Massimo Castiello	Programme Manager FSAU, FAO
Dr. Jotham Musiime	Consultant to FAO (focus on Somali institutions)
Dr. Abdullah Hussain	PM Support to Meat Industry Project
Dr. Abdulcadi Farrah	Consultant to FAO on livestock in Somalia
B. Mphande	PM Pilot Livestock Census Project
G Farmer	FAO, Somalia
Dr. Seiffuddin Maloo	Regional Coordinator VSF Suisse
Dr. Martin Nyamweya	Program Coordinator Somali VSF Suisse
Dr. W.H. Duehnen	Head of Mission, Nairobi, VSF Germany
Robert Bowen	Previous Coordinator VETAID in Somalia
G. Wessel	Team Leader GTZ
Vitorrio Cagnolati	Manager SOLICEP, AU/IBAR
Hassan M Ali	VETAID Somalia
Maurice Kiboye	Project Manager, COOPI
Titus Mutitu	Field Water Supervisor, COOPI
Mary Miningwo	Livestock Supervisor, COOPI
Dr. Augustine Namanda	Project Manager, and ex Field Veterinarian, COOPI
Dr. Henry Wamwayi	Chief Technical Adviser Livestock, Terra Nuova
Lucy Wood	Regional Representative, Terra Nuova
Dr. Riccardo Costagli	Project Manager, Livestock, Terra Nuova
List of People Met During Field Mission to Somaliland	
Dr Yasser M Ghanem	Koff Elsheikh University, Egypt, Berbera Laboratory Manager
Mr. Abdulkader Jibril Tukale	Ministry of Agriculture, Director General, MOL
Dr. Hussein Abdillah	Ministry of Livestock, Focal point person for FAO
Dr. Abdihelani Mohamed Ahmed	Ministry of Livestock, Director of Planning, Somaliland
Dr. Hussein Abdillah	Ministry of Livestock, Focal point person - FAO
Suleiman Abdi	Ministry of Livestock, Technician for Bacteriology and Parasitology
Mustafa Ahmed	Ministry of Livestock, Technician-Sereology
Dr. Ahmed Haibeh Warsame	Coordinator, Ministry of Livestock, Berbera port vet. officer & Regional
Mercy Gitau	COOPI, Water Coordinator
Ambrose Siwa	COOPI, Project Manager
Mohamed El-Sayed	Gulf Intern. Company, Vet. Quarantine inspector (OIC) Berbera Port
Ahmed Mahed Nour	Odwiene, Chairman
Rashid Muhumed Ahmed	Odwiene, Council Member
Abdillahi Ali H. Abdillahi	Odwiene, Council Member
Mukhtar H. Abdillahi	Odwiene, Council Member
Fahma H. Ibrahim	Odwiene, VetAID Milk Centre – Women
40 women members	Odwiene, VMC Women Group Member
Abdirahman Aideed;	Oxfam GB, Programme Manager
40 women members	Qoyta, VMC Women Group Member
Cyprien Biaou,	STVS, Director of STVS
Qeiliye Abdirahman Nur	TFG, Director General for MLFR
Daud Ismael	ULPA, Secretariat personnel
Dr. Deeq Abdi Hashi	ULPA, Secretariat personnel

NAME	ORGANIZATION
Yusuf M. Jama	ULPA, Secretariat personnel
Daud Ismael	ULPA, Secretariat personnel
Michael Eregae	VETAID, Project Manager (Milk Hygiene)
Asili Barre	VSF Germany, Project Manager – Puntland
Isse Nur	Ministry of Livestock, Veterinarian
Ahmed Abdi Jamac	Burao Municipality
Yusuf Jamac Yusuf	Burao Municipality
Ahmed Mohamed Ibrahim	Burao Municipality
Ahmed Aden Yusuf	Burao Municipality
Ahmed Ali Saleebaan	Burao Municipality
Mrs Amina	NAGAAD, Women Organisation, Chief Executive Officer
Hussein Osman Yusuf	Tog – Wajale, district of Gabiley, MOL
Abdi Besak Abdi Hassan	Tog – Wajale Assistant
Mohamed warsame farah	FAO LEAD
Jama Mohammed	FAO-Somaliland Field Operations Manager
Ali Gulleed	FAO –WB, FAO
Dr. Ali Mohammed	FAO Livestock Census Project
Eng. Hassan Haibeh Ighe	guide and Interpreter
Hussein Mohammed	guide and Interpreter
Yusuf Omar Saeed, Mahmoud	Livestock traders and Regional officials in Togwajale Chairman Slaughterhouse and meat
Ahmed Calin Hassan and Adkin Shiva Dahir	Beer Cooperative Village elders/committee members
Sulub Ahmed Ismail	VETAID field Team
Hassan Ali	VETAID field Team
Michael Eregae	VETAID field Team
Yusuf Warsame	Regional Coordinator, Ministry of Pastoral Development
Mohammed Abdi	Mahmoud Barwaaq cooperative
Farrah Aaabi	head teacher
Ahmed Mousa, Hassan Moulid	
Abdulrahman Yassin	Feed lot
Jamal Dek Mohammed	Chairman of Odwein town council and whole team
Abdi Sheikh Ahroble	Xahi – Cooperative representative
Abdikarim Aden Oman	Director General, Ministry of Pastoral Development and Environment
Mohammed Ibrahim Mohamed Director	Ministry of Pastoral Development and Environment
Additional People Met in Nairobi Including at the Workshop	
Dr. Abdirahman Nur Qeiliye	Director General Ministry of Livestock NUG Somalia
Aadrian Sullivan	ECHO
Piers Simpkin	ICRC
Dr. Abdirahman Nur Qeiliye	Director General Ministry of Livestock NUG Somalia
Dr. Abdilatiff	Chairman of SLPF, TFG, Somalia
Dr. Kioko Peter	League of Arab States (LAS) FAO/UNDP
Geoffrey King	Team Leader, Study for Integrated Programme for Agriculture and Water Development
Dr. Stephen Atkins	Team Leader, Study for Review and Identification of Agriculture Programme in Somalia
Dr. Abukar A. Osman	Minister of Livestock, NUG, Somalia
Barnabas Asora	ECHO
Betina Gollander	Counsellor, (Development) Royal Danish Embassy
Dr. Felix Njeumi	Animal Production and Health Division FAO Rome
Mr. Daniel Wachira	FAO Somalia
Dr. Paul Rwambo	FAO Somalia
Cindy Holleman	FSAU
Abdirazak Nur	FSAU
Dr. Zziwa Samuel	IGAD - Natural Resource Management

NAME	ORGANIZATION
Francis Chabari	PACAPS
Samuel Gitahi	UNDP
Samuel Wakhusama	USAID
Shaiye Ismail Fahmy	USAID
Victoria Kyallo	VSF Germany
Asili Barre-Dirie	VSF Germany
Mohamed Dirie	SAHSP
Patrick Martin	VSF Suisse
Dickens Chibeu	AU-IBAR
Muchabo M	VETAID
Mohamed D.	VSF
Abdikadir Mohammed	FEWS NET
Catherine Marangu	COOPI

Annex 6: Literature and Documentation Consulted

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Annex 7: Recently Completed and Ongoing EC and Other Donor Funded Projects in the Livestock Sector

7. 1: Livestock Marketing

7.1.1: Somali Livestock Certification Project (SOLICEP)

This EC funded 30 month project, which was launched in 2007 and due to end in March 2010 with a budget of € 2.8 million, and implemented by AU-IBAR in collaboration with Terra Nuova, was established to contribute to poverty reduction and peace through sustainable and equitable economic growth and regional integration. The project has laid down the essential framework for engaging the actors along the production and marketing chains to participate in the development and implementation of animal health inspection and certification system. It is expected that 5 million people (55% of the Somali population), 200-250 private veterinary professionals and 1000-1500 livestock traders will benefit, either directly or indirectly through the implementation of the proposed inspection and certification activities.

7.1.2: Support to Pastoral Livelihood Development

This funded by the EC and implemented by the FAO in partnership with VSF-Germany. The project represents a support to Somali meat exports with the specific objective to introduce Somali meat traders to and be compliant with regional sanitary and food safety standards in domestic and regional whole sale markets. The Project became operational on 1st January 2007 and is due to end on 30th June 2009 and had a budget of €1.8 million.

7.1.3: Livestock Trade and Marketing Project (LTMP)

This EC funded project was implemented by Terra Nuova and the International Livestock Research Institute (ILRI) between 2004 and 2008 with a budget of € 2.0 million to spearhead the improvement and diversification of Somali livestock trade and marketing. The project facilitated the development of capacity (physical and human) within public (ministries and municipalities) and private (SLCCIA and CCIAP) sector organisations to promote trade transactions. The project also addressed a grading system in export quality livestock and developed a marketing information system (MIS) for disseminated marketing information for export quality livestock. While the EC funding ended in 2008, and the project was largely successful, it requires a follow up for the MIS. This received 9 months funding from UNDP until April 2009, and enforcement of the regulations remains to be achieved.

7.1.4: Support to Somali Meat Export

This EC funded project, implemented by the FAO in partnership with VSF-Germany, was initiated in 2007 and ends in June 2009. The project is aimed at improving the livelihoods of the pastoral communities in northern and central Somalia through the introduction of quality Somali meat products, compliant with regional sanitary and food safety standards, into domestic and regional whole sale markets. This project supported the formulation of policy and legal frameworks in regions of Somalia, facilitated the development and implementation of HACCP and supported the strengthening of SOMEAT.

7.1.5: Pastoral Dairy Development

This is a milk production and marketing projects funded by the EC with a budget of € 1.8 million VETAID has the contract with EC and implements activities in Somaliland, while VSF-Germany is a partner, implementing activities in Puntland, from 2006 and due to end in April 2009. Most of those trading in milk are women and thus the benefits are to the family. Indications are that these projects have good socio-economic impact at household level as they focus on women and youths and that

there is considerable scope for further expansion and development of the project. Women are charged with the responsibility of milking goats and cattle. Men milk the camels for fear of a woman being kicked by a camel, but women sell all the milk. Handling of this product is important for health reasons. For a long time, the women were using plastic containers for storage and transportation of milk. Currently, the EC funded milk projects are training producers on milk hygiene including handling, storage and processing. This has greatly enhanced the ability of women to maintain clean milk and store longer without it getting sour. The use of aluminium containers seems to have improved hygienic standards and keeping quality of milk as they are easy to clean and can hold camel milk for a hold day without losing taste. This is vital in a society that values fresh milk and is reflected in the price. Women have also tried to add value to cow milk through preparation of ghee. Those communities working with other NGOs such as GTZ have progressed even further in the value addition to make cheese and butter.

7.1.6: Support to Livelihood Enterprises (SLES)

This EC funded project started in February 2009 for 27 months (until mid 2011), with a budget of €0.7 million and implemented by VSF Germany is focused in selected areas in the South Central region on milk marketing and slaughter slab to improve quality of meat and milk consumed locally.

7.1.7: Infrastructure Development in Public Health

This is an EU funded directed through UN Habitat and implemented by UNA. It is concerned with slaughterhouse and meat marketing facilities and associated hygiene and health aspects.

7.2: Animal Health

7.2.1: The Somali Animal Health Services Project (SAHSP I)

This EC funded project with a budget of € 3.0 million was implemented from April 2005 to September 2007 by Terra Nuova and aimed at (i) capacity building of Somali institutions to effectively deliver and regulate animal health services strengthened. (ii) measures for the eradication of Rinderpest from the Somali ecosystem and (iii) mechanisms for reducing the vulnerability of nomadic Somali livestock to threats of major epizootics through the establishment of a surveillance system. Built on the achievement of the former Somali PACE project, SAHSP I focused on consolidating issues such as animal disease surveillance that would determine the Rinderpest status of the Somali eco-system, promoting service delivery through the private veterinary sector by strengthening and collaborating with the veterinary professional associations, as well as the nascent public sector, where possible and practical. The project consolidated and/or set up some strategic interventions that will have a long term impact, such as initiating a system for disease surveillance, disease information and disease emergency preparedness, supporting the regional authorities to develop livestock policy documents, Master Plans and Veterinary Codes and put in place mechanisms and systems for a future national veterinary service.

7.2.2: The Somali Animal Health Services Project (SAHSP II)

This € 2.5 million EC funded project is being implemented by a consortium comprising Terra Nuova, UNA, COOPI, VSF and FAO until the end of 2009 and is concerned with capacity building of Somalis institutions for risk management of trade limiting animal diseases. The project represents a follow up to SAHSP I and involves (i) disease surveillance through training laboratory staff and field personnel including the planned use of STVS to train younger workforce. In Puntland and Somaliland, support is aimed at the public sector while in Central and Southern Somalia the work is through veterinary professionals and local authorities; and (ii) livestock policy and legislation, the key being the enactment and enforcement of the veterinary code. Somaliland (2008) and Puntland (2005) have gazetted their veterinary codes but enforcement remains an issue. In general, the private sector was

recognized as a key service provider in the livestock sector, while the public sector's role was supervisory.

7.2.3: The Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU)

This EC funded project is being implemented by AU-IBAR and Terra Nuova from May 2007 to June 2010 with a budget of € 4 million (initially operated under the former PACE programme) and is spearheading the development of a harmonized and coordinated strategy for Rinderpest eradication from the Somali Ecosystem region (SES). Part of the strategy and a good amount of efforts were focussed on assessing the capacity of the existing veterinary service delivery systems in the SES, and particularly determining their effectiveness in disease control and surveillance, thus providing the basis for further capacity strengthening / building in support of Rinderpest eradication and improved animal health service delivery. The success of SERECU is demonstrated by the fact that Ethiopia has received the provisional Rinderpest free without vaccination status from the OIE, while Kenya and Somalia have submitted their applications for consideration.

7.3: Capacity Building

7.3.1: Enhancement of Capacity for Somali Agricultural Livestock Institutions (ECSALI)

This project started in June 2006 and was due to end in September 2009. However, the Project experienced some major shortcomings as it was a public sector support project and unutilised funds were returned to the EC. It was designed to complement SASHP I and II in all regions of Somalia and build the capacity of human resource and physical infrastructure in all regions, as well as create sustainable and functional public / private sectors. However, the operating environment in South Central Somalia was shaky due to frequent changes in senior public sector personnel and insecurity. The project, however, undertook an exhaustive human resource capacities and needs assessment, supported the regions to develop livestock and agriculture Master Plans and funded training of public sector officials in M and E in Kenya. The main lessons learnt were: (i) future funding for public sector support should only be made if the political situation is stable – there was little or no impact in infrastructure developed and the running cost support could not be justified and (ii) it would be better to support veterinary professional associations as these are committed, politically neutral and would provide a trained pool of human resource in the private sector that can be hired by the public sector.

7.3.2 Somalia Livestock Livelihoods Distance Learning Project

This EC funded project from 2005 to 2008 with a budget of € nearly 1.0 million implemented by the BBC World Service Trust was concerned with using radio for training, awareness and reinvigorating interest in the livestock industry and involved setting up local production bases with local radio stations, course design and training of production staff. Radio programmes were produced and broadcast in Mogadishu and Hargeisa in 2005-06 and trained staff involved.

7.3.3: Sheikh STVS Phase III

The STVS is currently being funded by both the EC and by Denmark in a parallel funding arrangement. The EC funding for Phase III is from 2008 and is due to terminate in September 2010 with a budget of € 1.2 million and represents a continuation of support after Phases I and II co-funded with Italy (€ 3.2 million EC funds) to the Sheikh School to become a regional training centre to cover the whole of Somalia and to achieve sustainability. It is being implemented by AU/IBAR in conjunction with Terra Nuova. It is concerned with construction, provision of operational costs and establishing the institution as a legal entity to generate fees to achieve sustainability. The school is the only functioning veterinary training institution in Somalia and specialises in training adapted to the Somali eco-system, which cannot be found in any other institutions in other neighbouring countries. It produces a pool of trained certificate and diploma holders to work in the livestock sector and support services, but some can go on to Makerere University in Uganda to become veterinary graduates. The

middle level technicians from the school are currently working in both private and public livestock sectors in the three regions of Somalia. The Danish funded project is described in section w) below.

7.4: Integrated Projects

7.4.1: Food Security Project in Bay and Middle Juba and Support to Pastoral and Agro-Pastoral and River Communities of the Juba Valley

These co funded projects with a total budget over € 1.0 million (€0.1million from FAO, implemented by COOPI, involve animal health and capacity building, fodder production and income generating activities in an integrated approach in the Southern Region and are due to be completed by May 2009.

7.4.2: Improvement of Livelihood in Bay/Bakool Regions

This GTZ implemented project co-financed with the EC in the South is a good example of a participatory integrated community development project focussed on training women in a multi-sector approach in agriculture and livestock. While the regional public sector institutional structures are shaky at best, the structures at district and village level, namely District councils and council of elders and religious leaders are more stable, motivated and responsive. The GTZ approach targets communities with project framework and works with them through inclusive participatory community dialogue to develop prioritized community action plans. During the first 7-8 months the project was successfully involved in i) conflict resolution concerning minority interests, grazing rights, compensation for damage to crops and access to land; (ii) re-establishment of stock routes; (iii) creation of awareness to of the existence and extent of community resources; (iv) training community based extension agents with women and youth as the cornerstones and (v) impress on the communities to contribute at least 30-40 % of the project costs – this not only created sustainability but also enhanced community ownership of the project and reduced chances of resource misuse.

7.4.3: Somali Livestock Census – Pilot Project

The EC is joint funding (with USAID) a pilot project being implemented by FAO Somalia to test and validate livestock census methodologies most suited to the Somali production system and environment taking into account the volatile nature of the political and social landscapes. The pilot project is in Johwar (South Central Somalia) and Odwein (Somaliland) is expected to be on the ground in March 2009 (for the dry season) and May 2009 (wet season) for testing and validation. The project will be implemented with the support of Somali nationals and with the support of local and regional authorities and will enable recommendations to be submitted for a full national census that may be included under the priority interventions for 10th EDF funding.

7.5: Other Donor Funded Projects

7.5.1: Rapid Response Rehabilitation of Rural Livelihoods Project (RRRRLP)

This World Bank (WB) grant funded two year project with a USD 7 million budget is being implemented by FAO-Somalia from the end of 2008 to 2010 in South Central, Somaliland and Puntland in some 37 districts. It is an integrated project aimed at food security and rehabilitation with two main components in a multi-sector approach. In the livestock component, it involves improving livestock production, through promoting fodder production and associated equipment, range rehabilitation, promoting water harvesting and promoting crop residue use, and slaughterhouse rehabilitation/improvement to existing municipal slaughterhouses in Borama and Bosaso in Somaliland and Puntland respectively, plus support to growth of value added in hides and skins and meat processing and improved offal utilisation. The project partly is a pioneering venture of an integrated approach and therefore progress and impact will be of special interest to donors and stakeholders. In particular it is not clear if the two components will be implemented together in an integrated

approach in one area, or in different areas in a single component approach. It is too early to assess impact at this stage.

7.5.2 : Support to the Somali Meat Export Project I

The project was funded by the League of Arab States (LAS) from 2007 to 2008, implemented by UNDP/FAO and AOAD, and addressed growing concerns over imports of live animals from Somalia in view of the poor animal health services delivery system and internationally recognized livestock and livestock products inspection and certification authorities. The project emphasized that there were many interventions in Somalia targeting and supporting the export of live animals while none (at the time of the project's inception) focused on exports of meat and meat products. To address this real need, the LAS I project was deliberately structured to work synergistically with the EC funded Support to Pastoral Livelihood Development Project described above. The specific objectives of the project were: (i) to design a QAS including a regulatory legal framework for meat hygiene and safety and (ii) build capacity of sector operators' skills through training Public and Private workers (in private export abattoirs), and provision of laboratory equipment to the MOL and (iii) to promote the QAS of the Somali meat.

While most of the activities have been completed there were some challenges that needed to be addressed during the close-out of LAS phase I and before the starting LAS Phase II. Among these challenges were (and still are): (i) inadequate resources limiting the ability of the private sector to implement the QAS requirements, (ii) limited awareness and / or ability to lobby for the enactment of the supportive legal framework. Despite these challenges, the project was able to register some impressive achievements including: (i) a meat QAS framework developed (ii) some initial training of public and private sector veterinary staff on meat quality and safety (iii) laboratory equipment for public veterinary meat QAS analysis delivered awaiting hand over to MOL in Hargeisa, Galkayo and South and Central together with laboratory training of public veterinary staff on meat QAS analysis in SL and PL and (iv) promotion of Somali meat QAS in Dubai and region.

7.5.3: Other Livestock Projects concerning meat processing

Three projects funded by the Swedish and Italian governments (two) respectively and implemented by FAO involve meat handling capacity and capacity building in meat processing (Sweden) and animal health, strengthening of veterinary service delivery, meat processing hygiene training for public and private sectors (Italy) and complement other support projects to the Somali meat sector.

7.5.4: Rural Livelihoods Support in Shabelle Valley⁵

This project is funded by Norway with a budget of USD 1.63 million from 2008 to June 2009 and is being implemented by FAO. To-date it has contributed towards developing a livestock policy in South Central region with the issuing of Guidelines for Livestock Policies in the Livestock Sector, which has yet to be finalised with stakeholders and accepted as policy by the regional government. It also intended to link fodder production with milk production and marketing in South Central region.

7.5.5: The Enhanced Livelihoods in the Mandera Triangle (ELMT) project

This is a regional USAID funded project implemented by VSF Suisse on the borders between Kenya and Somalia (in Lower Juba, Gedo and Bakool) focusing on animal health (capacity building in the private sector) and fodder production using riverine irrigation. The main activities were:

55

- Capacity building on best practice livestock husbandry and health breeding management of shoats, product value addition, worm control importance & stocking density, It was attended by 22 participants of which 6 were women.
- Field day activities were fodder production preservation and proper utilization. (43 people comprising 8 were women, 20 were men, while 15 were school age children). An average of 250 kgs of Sudan grass and fodder are processed and redistributed by beneficiaries monthly’.
- Training was conducted for women 25 women on milk hygiene, preservation, storage and handling. Water trucking started targeting 12 villages

7.5.6: Support to Marketing in Puntland

Recently announced project funded by USAID for €0.7 million concerning slaughterhouse support in linkage to the RRRRLP.

7.5.7 :Regions of Origin Phase III

Puntland and Somaliland from 1/2009 to 12/2011 funded by Denmark with a total budget of € 2.2 million and linked to the current EC funded STVS Phase III. At the STVS, it is funding the construction of a female hostel for trainees, a food hygiene laboratory and a power supply, but no running costs (total €1.1 million). It is also supporting public sector veterinary services through establishment of six regional veterinary offices in the two regions, cold chain facilities and training of veterinary personnel as a pilot project (total € 1.1 million).

7.5.8: Short Term Relief Projects

7.5.9: ECHO Funded Short Term Relief Projects

Two projects of six months duration funded by ECHO in the Central and South regions, and in Puntland implemented by COOPI and VSF Germany respectively and due to end in 2009 with a budget € 0.9 million and with a focus on emergency aid in animal health and provision of water as emergency aid. The distinction between relief and development is not clear in practice. The main activities and locations are as follows: (i) Puntland and Gedo, VSF Germany involving veterinary pharmacies and CAHWs linked to the private and public sector operators with community dialogue. This initiative is funded by CARE (USAID) and Swiss Government. This programme is planned to end in July 2009 The next relief aid is water and vaccination in GEDO and Lower Juba region to support pastoralists not to be drop outs. Accessibility is an issue as the security situation is deteriorating.

Annex 8: Economic Activities and Sources of Income and Socio-Economic Effects of the Prevailing Political Environment

8. 1: Economic Activities and Sources of Income

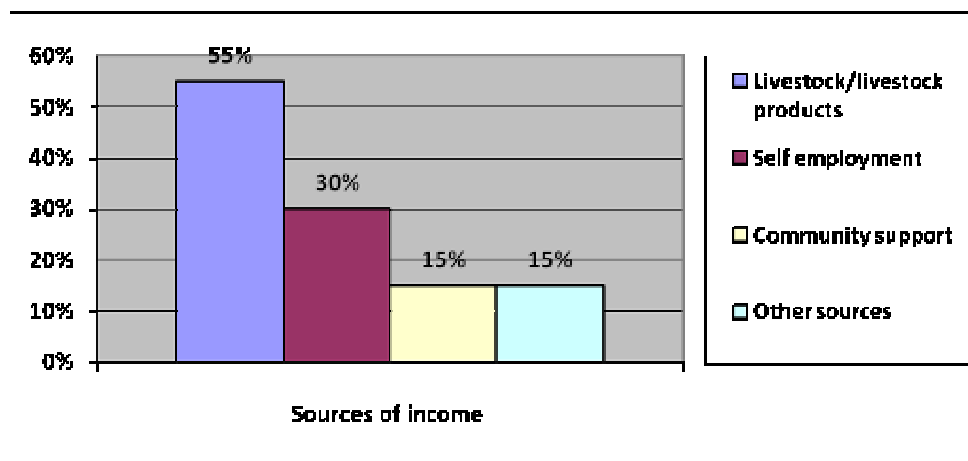
8.1.1: Pastoralist

Pastoralist rear primarily camels, sheep, goats and donkeys to meet their household nutritional and income requirements. The major income sources are from trade in livestock and livestock products including camel (15-20L/day), cow (1-3l/day) and goat (100-300ml/day) milk and ghee and hides and skins. In most cases the camel milk is used to meet the family nutritional requirements while cattle and goats milk are sold to generate money for purchasing grain and other household stuff. Camels, which are only sold when families are in dire needs, are also used as pack animals when moving camp, ferrying water and to a limited extent in commercial transport. The herd sizes vary but the large herds often have an average of 60 camels, 200 heads of cattle, 100 sheep, 500 goats and 10-20 donkeys. The largest numbers of camels are found in Somaliland, Puntland and Central Somalia while the highest concentrations of cattle are in the Juba Valley and Southern Somalia (FSAU 2007).

8.1.2: Agro-pastoralists

The main source of income in poor households is sale of livestock and livestock products. Many of these agro-pastoral families engage in livestock trade and their earning makes up to 45% - 55% of the poor households' total family income. Self employment and community support are the other sources of income for the poor. Self employment activities are mainly charcoal making and collection of construction poles and sticks. Community support is in the form of Zakaas, gifts and credit. Other sources of income include crop and fodder sales and employment. Main employment is farm work and payment is usually in kind (cereal). The different sources of family income are depicted graphically in Figures 4; 5 and 6.

Annex 8 Figure 1: Sources of income: The Poor Wealth Group, Agro-Pastoral

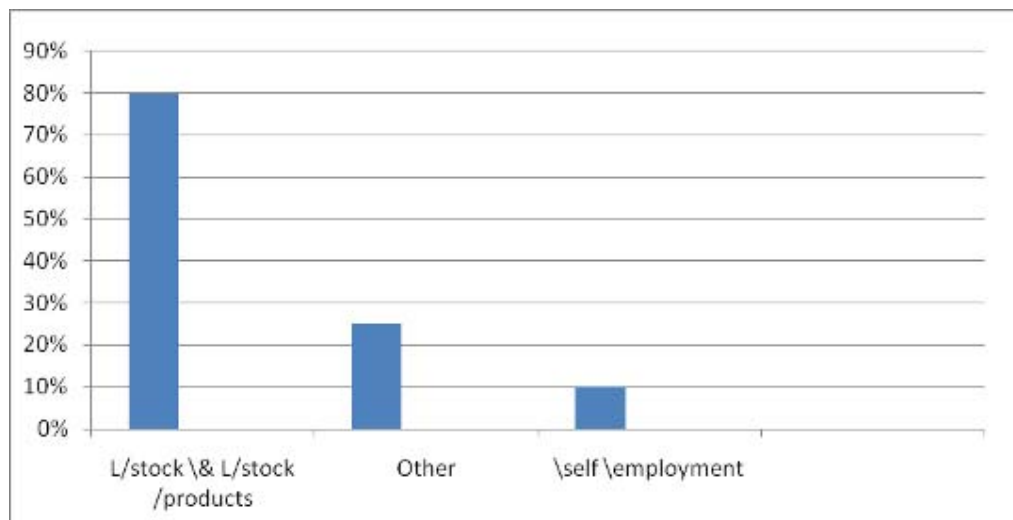


Source FSAU Livelihood Baseline Profile; Central Agro-Pastoral

The EC pastoral dairy development project implemented by VSG Germany and VETAID was aimed at increasing milk production and improving handling, collection, processing and distribution in selected areas. The project was justified by the fact that estimated 25-30% of Somalis live in urban areas, forming a captive market for quality milk and milk products. According to the beneficiaries, including

producers, traders, consumers and local authorities the pilot projects which are scheduled to close down in June 2009, were a success and should thus be expanded to other urban centres.

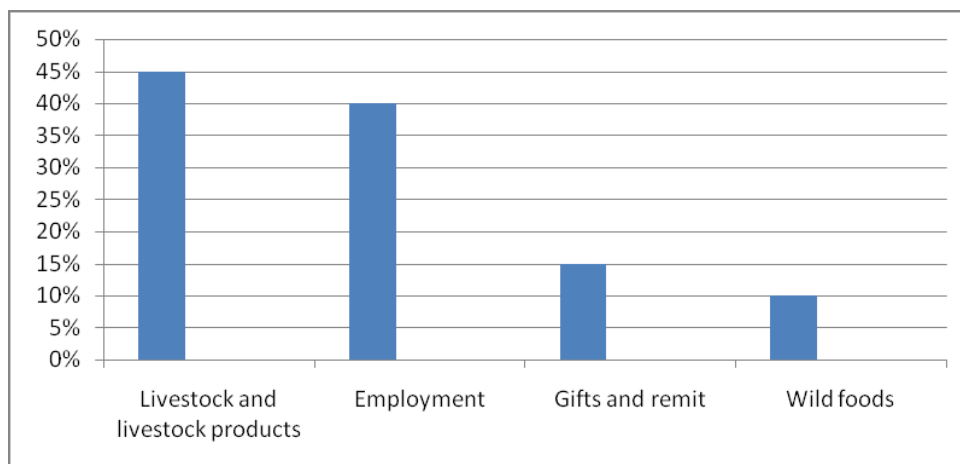
Annex 8 Figure 2: Sources of income: Middle Wealth Group, Central Agro-Pastoral



Source: FSAU Livelihood Baseline Profile; Central Agro-Pastoral

The main source of income among the poor group is livestock and livestock products that accounts for 40-45% of family income as shown in figure 6. Employment accounts for 35-40% and gifts and remittances account for 10-15% while wild foods accounts for 5-15%.

Annex 8 Figure 3: Sources of income; Poor Wealth Group- Pastoral



Source: FSAU Livelihood Baseline Profile; Hawd and Sool, Pastoral

Regarding the expenditure patterns, majority of families spend proportions of their income on items shown below;

- The poor agro-pastoralists 60%- 65% of family income on food items and 35-40% on non-food items such as clothes, kerosene, medicine, soap and Koranic schooling. Any savings are used to restock to both replace those sold and build the herd.

- The middle wealth group spend 34- 45% of family income on food purchases and 55-66% on other household needs and savings. These households take some credit, mainly in kind during land preparation and weeding. This groups sells older animals and buy a higher number of young stock that that was sold.
- The better off wealth group spend about 43% of their income on food purchases staple (rice and wheat flour), and non- staple (sugar, oil, tea/coffee, salt, soap, kerosene) and water for humans. About 28% of the income is spent on livestock inputs and 18% on other items that include clothing, clan taxes, gifts and debt repayment.

8.2: Socio-economic effects of the prevailing political environment

8.2.1: Population

Somali had an estimated human population of 8,298,000 people (UNDP, 1987, World Health Organisation 2003) out of which 25% live in urban areas. In 2008 the population was estimated at 8,198.4 persons and was projected to increase to 8,444.3 by 2009 and to 8,697.6 by 2010. These estimates are based on the 1975 census, which is the last time Somalia had a reliable census and the numbers of Somalis who moved abroad has been significant. The World Bank quotes a population of 7.7 million in 2006.

Crude birth rate is 46.4 per 1,000 people and crude death rate is 17.6 per 1.000 people. About 44.8 % of the population is below 15 years while those who are 65 years and above account for 2.7% of total population. Dependence ratio in Somalia is very high at 90%. This is due to widespread violence since 1991, endemic poverty and recurrent droughts, and floods which have generated a complex emergency situation in the country. This situation is made worse by continued civil war and inter-clan conflicts which has led to approximately 476,000 Somali refugees fleeing the country and more than 1.1 million internally displaced persons (IDPs).

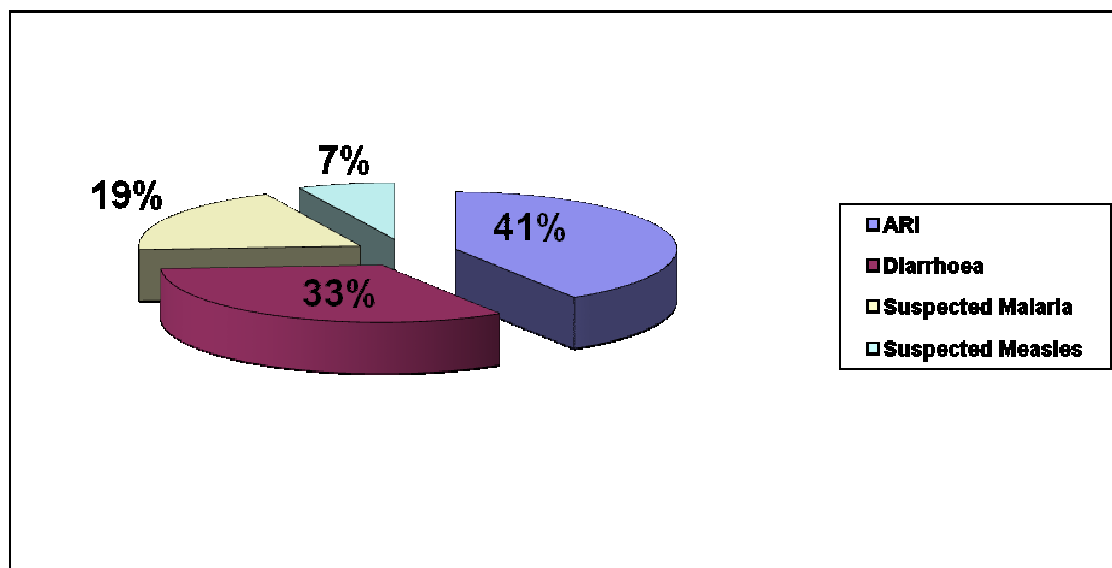
8.2.2: Poverty levels

Somalia is classified as one of the poorest countries in the world with an annual per capita income of less than US\$200 per year (UN Somalia fact sheet 14 November 2003). About 80% of the total population lives in general poverty. The percentage of population living in extreme poverty is 23% in urban areas and 53.4% in rural areas. The situation of poverty and extreme poverty is exacerbated by the general state of insecurity that exists in the country especially Puntland and South Central regions. The economy is largely dependant on the exploitation of natural resources, namely livestock and agriculture with 80% of the population being dependant on agriculture and livestock for a living.

8.2.3: General access to basic resources- water, food, health, education and housing

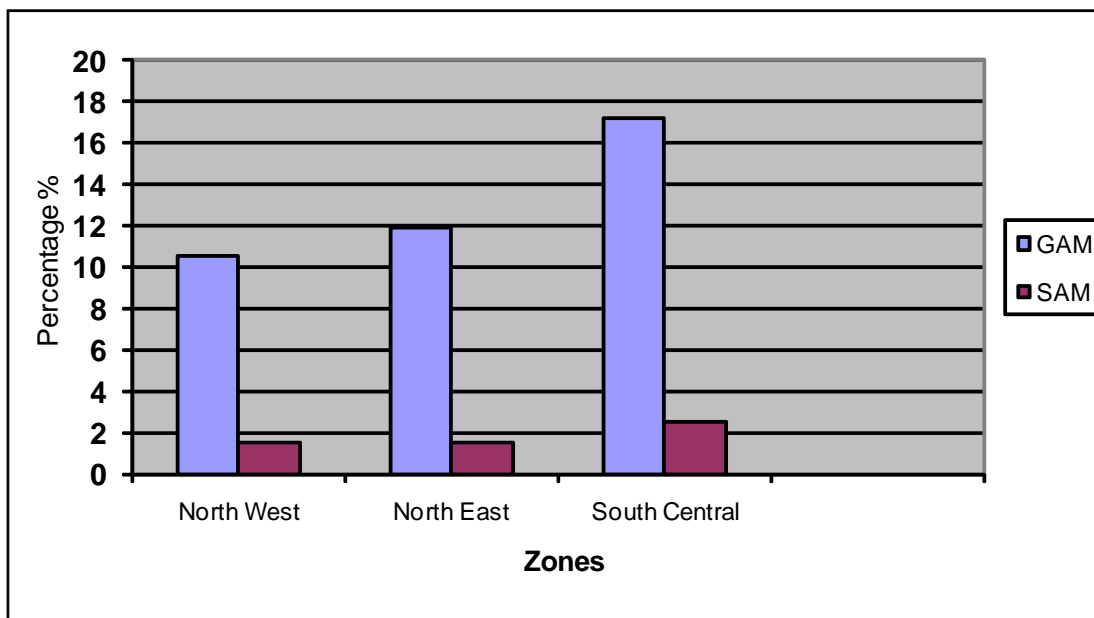
The Human Development Report for Somalia (UNDP 2007) estimates that Somalia's annual renewable freshwater fell from 2,500 m³ per annum in 1950, to 980m³ in 1990 with a prediction of 363 m³ by 2025. When this value falls below 500 m³ per annum, the condition of water scarcity becomes life threatening. The available data indicates that by 2007, only 15% of the total population in Somalia had access to improved water source while 48.5% of total population have access to improved sanitation. The low access to improved water and sanitation has contributed to the continued high cases of Acute Watery Diarrhoea (AWD) (Fig 1), which is compounded by poor access to primary health care services and malnutrition especially among children and the elderly (Fig. 2; 3).

Annex 8 Figure 4: Morbidity burden in regions of Somalia 2001 - 2007



Source: FSAU: Analysis of Malnutrition Trends in Somalia 2001/07

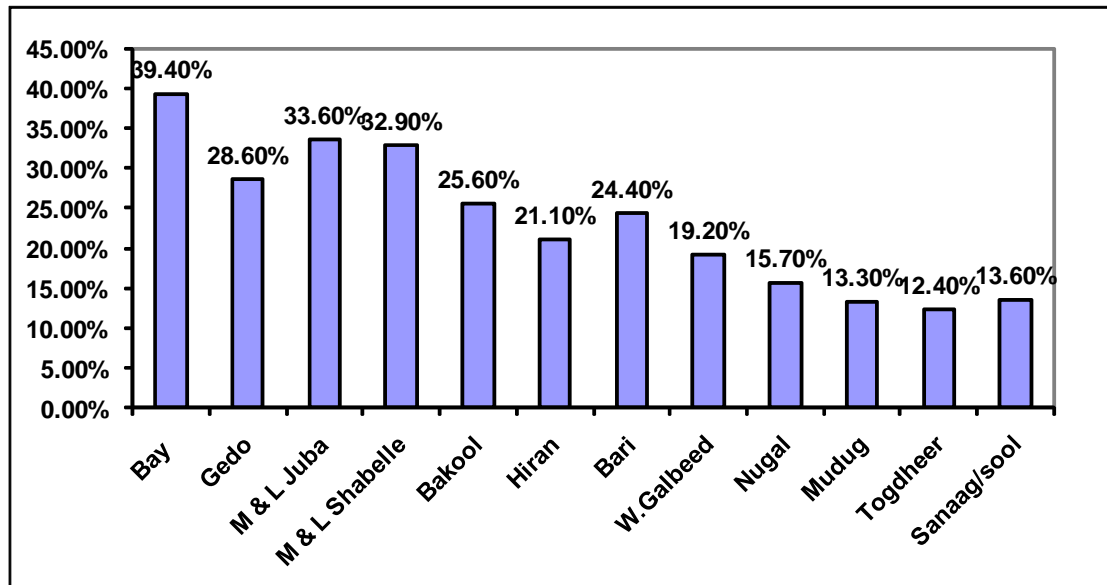
Annex 8 Figure 5: Median Acute Malnutrition Rates of Pastoral by Zones 2001/07



Source: FSAU: Analysis of Malnutrition Trends in Somalia 2001/07

Stunting is an indicator of long term cumulative effects of inadequate food intake and poor health conditions. Stunting is believed to be caused by recurrent illness and sustained micronutrient deficiency from early childhood over time which prevents potential for linear growth. According to a report on malnutrition trends in Somali, the median stunting rates for the whole of Somalia was estimated at 21.6%, which is alert phase based on the WHO thresholds. The Global Poverty Map produced by FAO (2003) estimated the stunting rates for the northeast region within the acceptable range while those for south central and northwest were estimated at the alert level.

Annex 8 Figure 6: Stunting Prevalence by Region 2001/07



Source: FSAU: Analysis of Malnutrition Trends in Somalia 2001/07

Access to education in Somalia especially in Puntland and South Central where civil strife has continued unabated, remains limited. The UNDP's Human Development Report (2007) places Somalia at the very bottom in terms of its Human Development Index. Somalia's Primary Education Gross Enrolment Ratio of 20% is the lowest in Africa and about half that of neighbouring countries of Ethiopia, and Sudan and one fourth the level of Kenya. The collapse of education facilities has only helped to swell the list of human development challenges.

Annex 9: Regional Institutions (IGAD and COMESA)

9.1 IGAD (Inter Government Authority on Development)

IGAD (Inter Government Authority on Development) argues that throughout the Horn of Africa, the enormous potential of livestock in combating poverty goes underexploited. Livestock underpin the livelihoods of some two thirds of the region's 60 million poor, who invariably rank them among their most likely means of escaping poverty. Proportionate to their wealth, it is the poor who keep the most livestock and are prepared to spend the most on keeping them healthy. IGAD points out that despite this, livestock are largely invisible to policy makers and reliable livestock information is still difficult to get. IGAD contends that livestock remain absent from national strategies while institutions that could enable the poor to take full advantage of livestock have not been put in place.

IGAD argues that over 80% of the populations in the IGAD region derive their livelihood from agriculture including livestock and therefore factors that affect land productivity directly impact on the welfare of the population. As the Sub-region has the highest livestock population in Africa, IGAD attaches a great deal of importance to its production and marketing. In its latest efforts to support the sector IGAD has initiated several livestock projects among them a livestock market information system which operated for over ten years before financial difficulties in member countries caused it to falter. IGAD with funding from EC supported the establishment of the IGAD Livestock Policy Initiative (IGAD LPI), implemented in collaboration with FAO, to work with the governments and civil society of its member states, it is developing the capacity to support the region's poor to unlock the potential of livestock. The IGAD LPI project started operations on January 1, 2006 and the targeted end of its operational implementation phase is August 31, 2010. A further closure phase is due to end on May 31, 2012. The geographical scope of activities covers the 7 countries in the Horn of Africa – Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan and Uganda. The Project is effectively working in 6 countries, since Eritrea has suspended its membership in IGAD, although operations in Somalia are restricted because of the ongoing disturbances in the southern part of the country. Total approved funding from EDF9 funds amounts to €5.490 million out of total of €6.200 million.

In its latest efforts IGAD is seeking funding to address the range resource degradation including overgrazing and invasion of rangelands by noxious weeds, livestock and regional and international livestock marketing. The later will form a key agenda in regional meetings on cross border trade and animal movement, which will part of the wider discussions on regional economic integration, which is within the renewed IGAD mandate.

9.2: COMESA (The Common Market for Eastern and Southern Africa)

COMESA (The Common Market for Eastern and Southern Africa) has a membership of 19 member states, a population of over 389 million and annual import bill of around US\$32 billion with an export bill of US\$82 billion, and forms a major market place for both internal and external trading. Its area is impressive on the map of the African Continent covering a geographical area of 12 million sq. km, and it is implementing the Comprehensive Africa Agriculture Development Program (CAADP) of behalf of AU-NEPAD. CAADP is the highest policy level framework for the development of agriculture in Africa. CAADP was established by the African Union's New Partnership for Africa's Development (AU/NEPAD) in July 2003. The overall goal of CAADP is to "Help African countries reach a higher path of economic growth through agriculture-led development, which eliminates hunger, reduces poverty and food insecurity, and enables expansion of exports." COMESA has the mandate to implement the CAADP agenda in Eastern and Southern Africa. Some of the key issues being addressed by COMESA to support the CAADP are the development and domestication of the sanitary and zoo-sanitary procedures and protocols to be adopted by the member states. This initiative which is on going is funded by USAID and supported by the Turft University, Pastoral Policy Programme (PACAPS).