

**East African Community (EAC)
&
African Union-Interafrican Bureau for Animal Resources (AU/IBAR)**

Harmonization of Livestock Policy in the East African Region

Workshop Proceedings

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Acronyms

ACF- Agricultural Consultative Forum (Zambia)
AGOA-Africa Growth and Opportunity Act (USA)
AI- Artificial Insemination
ARB-Agricultural Resource Bank (Sudan)
ASAL- Arid and Semi-arid Lands
ASF-African Swine Fever
ASMP-Agricultural Sector Management Programme(Zimbabwe)
AU/IBAR- African Union- Interafrican Bureau for Animal Resources

BSE-Bovine spongiform encephalitis

CAPE-Community based Animal Health and Participatory Epidemiology Unit
CBAHW's/ CAHW's-Community based Animal Health Workers
CBO- Community based Organization
CBPP- Contagious bovine pleuro pneumonia
CCPP-Contagious caprine pleuro pneumonia
CLA's- Community Livestock Assistants (Zambia)
COMESA- Common market for Eastern and Southern Africa

DALDO- District Agricultural and Livestock Development Officer (Tanzania)
DALEO- District Agricultural and Livestock Extension Officer (Kenya)
DVS- Director of Veterinary Services

EAC-East African Community
EC-European Commission
ESAP- Economic Structural Adjustment Programme (Zimbabwe)

FAO-Food and Agriculture Organization
FMD-Foot and mouth disease
FITCA- Farming in Tsetse Control Areas

GDP-Gross Domestic Product
GATT- General Agreement on Tariffs and Trade

HS- Hemorrhagic septicemia

IFPRI- International Food Policy Research Institute
ILRI- International Livestock Research Institute

LSD-Lumpy skin disease

MAAIF- Ministry of Agriculture, Animal Industries and Fisheries (Uganda)

NCD-Newcastle disease

NGO- Non governmental Organization

OIE- International Office of Epizootics

PACE- Pan-African Programme for the Control of Epizootics

PATTEC- Pan-African Tsetse and Trypanosomiasis Campaign

PMA-Plan for Modernization of Agriculture (Uganda)

PPR- Peste des petits ruminants

RVF-Rift Valley Fever

SGP- Sheep and goat pox

SPS- Sanitary and Phyto-sanitary Standards

TAD's-Transboundary diseases.

UBV-Uganda Veterinary Board

VO- Veterinary Officer

WTO-World Trade Organization.

Section I: Main Conclusions and Recommendations

1.1 Introduction

The Workshop on Harmonization of Livestock Policy in the East African Region was jointly organized by the East African Community (EAC) Secretariat and the Pan African Community based Epidemiology Programme (CAPE) of the African Union-IBAR.

The workshop was held at Lake Manyara Hotel in Tanzania between the 1st to the 3rd of August 2002 and drew a total of 41 participants from Kenya, Uganda, Tanzania, Djibouti, Ethiopia, Zambia and Zimbabwe representing academia, veterinary boards and the public and private sectors of the livestock industry. Also present were representatives of the EAC and AU-IBAR.

The objectives of the workshop were to define the current situation in the EAC with regard to policy and legislative development for animal health services and identify key areas requiring harmonization. It was also expected to review positive and negative lessons learned to date and address specific issues such as the control and management of trans-boundary diseases, the harmonization and management of trade in livestock and livestock products within and outside the region and the formulation of policy guidelines for the development of the livestock sector.

The workshop was opened by the Honorable Nuwe Amanyu Mushega, Secretary General of the East African Community who in his opening address highlighted the importance of the livestock sector and the role of the EAC in promoting agricultural development and complementarities within the region.

In the final session of the workshop, a drafting team was constituted to review the deliberations of the workshop and distill its outputs into a set of conclusions and recommendations upon which member governments, the EAC and other institutions could act to bring about positive changes and regional harmonization of policy in the livestock sector. These recommendations were subsequently discussed and endorsed by the workshop participants.

1.2 Main conclusions and recommendations

A. Harmonised regional structure and commodities trade

The Workshop noted deficiencies and disparities in the operational structure of veterinary services in the three Partner States and the need to harmonise relevant policies, which hinder development of regional trade and accessibility to international markets.

The Workshop therefore, recommends that a regional survey should be undertaken by the EAC to assess the performance of the current veterinary service structures and

policies in the three countries and recommend a suitable and harmonised regional structure.

The Workshop further recommends that concomitantly with the above, EAC in collaboration with AU/IBAR develop an alternative approach for accreditation of commodities in respect of international trade for discussion at the OIE's regional commission for Africa meeting to be held in Maputo in February 2003.

B. Control of trans-boundary diseases (TADs)

The Workshop recognised that TADs have become rampant in the region and these are a hindrance to livestock production and livestock trade (locally and internationally). This is also partly attributed to the role of wildlife in the disease dynamics. The following diseases are recognized as TADs:

- FMD;
- CBPP/CCPP;
- Rinderpest;
- Rift Valley Fever.

Further to the EAC Council of Ministers decision on Control of Trans-boundary Animal Diseases, the Workshop recommends that the EAC Secretariat should convene a meeting of Directors of Veterinary Services as soon as possible to consolidate and finalize a Regional Joint Program for control of TADs including FMD, CBPP, CCPP, Rinderpest and Rift Valley Fever.

In addition, it is recommended that an institutional framework be devised for the livestock and wildlife sectors in order to control TADs.

C. Addressing key constraints to increased local consumption and exports

The Workshop further recognized that the EAC Region has an enormous livestock resource for both local consumption and export market, but is unable to tap this potential due to among others the following constraints:

- Inadequate marketing infrastructure;
- Inefficient processing structures;
- Poorly established farmers and traders organizations; and
- Inadequate or lack of credit facilities.

The Workshop, therefore, recommends that:

- i. Partner States should devise public/private sector partnership for the promotion of trade in livestock and livestock products including value additions within the region and for export, which should include the development of appropriate

infrastructure including quarantine structures, abattoirs, and cold storage facilities.

- ii. EAC and Partner States should promote establishment and strengthening of farmers, traders and processors fora.**

D. Harmonising training

It was noted that there are different training institutions in the region for training of livestock services providers. These institutions have different curricula and do not keep pace with technological advancement. The Workshop further noted that the EAC has established an East African Science and Technological Council, which will deal with research among other issues.

The Workshop recommends that the Partner States should revise, harmonize and regularly review curricula for training of various cadres and increase resources for various types of basic and applied research.

E. Livestock sector data and increased state investment in the sector

Despite the significant contribution of livestock to the GDPs of the Partner States, the sub-sector continues to receive inadequate funding, which is partly due to inadequate and poor quality data generated from the sector and insufficient lobbying by private sector.

The Workshop, therefore, recommends that:

- i. Partner States should increase budgetary allocations to the sub-sector;**
- ii. Partner States should develop a periodic cost-effective livestock census; and**
- iii. Partner States should develop an appropriate system for livestock data collection and management.**

Section II: Overview of Workshop Proceedings

The Secretary General of the East African Community (EAC), Hon. Nuwe Mushega Amany, performed the official opening of the workshop. In his address, Hon. Amany exhorted workshop participants to make full use of this opportunity to participate in the formulation of policies, legislation and practices that would galvanize and consolidate regional integration in this crucial sector. He also challenged them to come up with workable recommendations for resolving difficult problems such as achieving self sufficiency in livestock products, controlling transboundary diseases and revitalizing domestic and international trade in livestock and livestock products. .

The first presentation of the workshop set the climate by outlining a series of actions that are necessary for achieving harmonization of livestock policies in the region. It was suggested that while globalization is a strong motivating force for regional integration, member states recognize that their development objectives can be best served by centralized or coordinated interventions rather than isolated individual efforts. The overriding purpose of integration is to secure tangible benefits for ordinary citizens in terms of improvements in their livelihoods.

A key lesson emerging from previous efforts at regional integration is that it is a politically driven process whose success hinges on sustained political commitment. Member states would have to work towards politico-ideological harmonization and be prepared to relinquish some degree of autonomy and national sovereignty.

Participation of stakeholders at all stages in the process is indispensable.

Institutional structures and a skilled labour force will be necessary to undertake and coordinate various initiatives and actions at the national and supranational level. New institutions may not be necessary if the existing ones are harmoniously integrated and accorded a conducive environment in which to operate. Information networks and technical expertise are also needed and must work in concert towards agreed and specified goals.

East Africa is fortunate in having a significant volume of trade in livestock and livestock products between member countries. This forms a good basis for strengthening and integrating the sector. However, constraints such as harmonizing fiscal and monetary operations and removing barriers that stifle trade will need to be addressed.

Country reports and discussions by the participants on the livestock sector in Tanzania, Uganda, Kenya and Rwanda further emphasized the importance of the sector to the regions national economies. Many other similarities emerged among which were the low per capita consumption of livestock products, the widening gap between domestic demand and supply, the failure of the sector to modernize and achieve its potential due to disease effects, poor husbandry and inadequacies in infrastructure, credit and services. Added to this was the growing threat to the sector posed by unfair competition from subsidized imports.

Member countries represented at the workshop reported the initiation and implementation of a suite of domestic policy and institutional reforms aimed at revitalizing the sector. The

reforms cut across major sub-sectors such as feed production and distribution, breeding, disease control, trade and service provision.

Throughout the region, the drive is clearly towards privatization and divestiture of public functions to the private sector accompanied by liberalization of the market. Not all these measures were welcomed by the discussants. Some felt that they were donor driven and not responsive to local conditions and needs.

The reforms affecting the provision of veterinary services received particular attention. It was widely held that restructuring the service with devolution of authority to the district administration, local government and private sector was compromising quality and seriously inhibiting progress towards meeting standards demanded by international trading partners. Similarly in the animal feeds and breeding sectors, the dominant view was that privatization had resulted in increased costs to the farmer while quality had deteriorated.

In view of this, there were repeated suggestions that each country correct deficiencies in its own policies before embarking on the process of regional harmonization.

A fundamental cause for the under performance of the livestock sector throughout the region was identified as the governments neglect of the sector and its failure to make investments in the sector commensurate with its contribution to the national economy. Reasons for this were identified as poor representation of the sector in government and the unavailability of reliable data on the basis of which convincing arguments could be made for change. The need for more effective communication between government and sector representatives was also stressed. In this connection, it was suggested that producer and professional associations be formed to act as pressure groups.

In reviewing the constraints to trade in livestock and livestock products within the region, attention was drawn to discriminatory legislation and erratic enforcement of laws that bedevil the sector, serve as a major disincentive to producers and undermine the regions credibility as an international trading partner.

Low producer prices and excessive taxation on livestock were cited as constraints to domestic and external trade as were the inadequate financial services available to entrepreneurs. It was noted that local entrepreneurs were not able to access finance to carry out feasibility studies for the development of basic infrastructure such as abattoirs. At the same time, governments did not place priority on the construction of roads, market yards, quarantine stations and watering points that were essential for stimulating and streamlining trade.

These constraints, the participants argued, could be removed by amending policy to divert more resources to the sector.

The current policy in some member states of permitting imports and exports of goods and materials that undermine the performance of local industries was deemed counter productive and in urgent need of reform.

Trade in the region is also inhibited by lack of domestic and external market information. There is no regular collection of data in most countries. Access to information on external markets, distribution channels, tariffs, regulations and the marketing strategies of competitors is at best, limited, thereby placing local exporters at a significant disadvantage.

Participants questioned the wisdom of trying to penetrate protected European and American markets when the potential for export to countries in Africa remained unexploited. Here again, appropriate policy interventions could open up new opportunities for trade.

From the animal disease perspective in East Africa, the two major issues that concern livestock owners and livestock industries are minimizing the impact of diseases that cause mortality or loss of productivity in livestock and gaining access to export markets.

A policy related problem in respect of these diseases (rinderpest is an exception) is that very few countries in the region have clearly defined policies for combating the individual diseases. In the absence of such policies, the veterinary services of these countries cannot focus their disease control efforts nor structure donor support to achieve the desired results. In these circumstances, donors are tempted to determine policies themselves.

It was observed that animal diseases cost sub-Saharan Africa US\$ 2 billion per annum. Kenya alone loses US\$ 14 million per annum from diseases, many of which are predictable, preventable and curable. These losses could be significantly reduced through the enactment of policies that promote efficient information collection and dissemination and capacity building among service providers and livestock producers.

Access of local exporters to external markets is currently restricted by the prevalence of transboundary diseases and by World Trade Organization (WTO) agreements that require member states to comply with sanitary requirements (SPS) stipulated by the Office of International Epizootics (OIE). In the face of these constraints, East African countries have 3 options:

The first is to find other less demanding markets or make country-to-country agreements. However, this option is limited by the obligation of WTO members not to trade with any WTO member on more favourable terms than are offered to other WTO members.

Another option is to use information and linkages to lever resources to meet the OIE sanitary requirements. The WTO is committed to providing technical support to developing countries to help them meet international rules and standards although this assistance has yet to come on line.

The final option is to change the rules. Rules are necessary but SPS rules often seem arbitrary and excessive. Developing countries form the majority in both WTO and OIE and should use this advantage to press for SPS regulations that are achievable while meeting market requirements.

Presentations from Zambia and Zimbabwe offered valuable insights into the reform process in these countries. Many of the reforms closely mirror those being undertaken within the EAC. However, it was rightly pointed out that there are no off the shelf remedies for ensuring success. Each country must assess its own situation and determine the most appropriate policy interventions. Commitment to dialogue and stakeholder participation are key elements of a successful approach to formulating astute policy interventions.

In the closing session of the workshop, the varied perspectives and suggestions made by participants were distilled into a set of recommendations that address pressing needs for policy harmonization in the EAC. Priority areas include the structure of veterinary services in members countries, a regional programme and institutional framework for the control and management of transboundary diseases, enhancement of domestic and external trade in livestock and livestock products, capacity building to improve performance and service delivery within the sector and the development and activation of effective information networks.

What remains now, suggested a participant, is for regional institutions to “keep the fire burning” while governments and country teams “blow the fire”.

Section III: Workshop Proceedings – Day I

3.1 Opening ceremony

Dr. Calleb Weggoro, Economist in the EAC Secretariat, welcomed guests and participants to the Workshop. He thanked the Chief Guest, the Hon. Nuwe Amanywa Mushega, Secretary General of the EAC, the representative of the Director of AU-IBAR and participants for their enthusiastic response to invitations sent out by the Secretariat.

He explained that the workshop had not taken place in May as originally planned due to an EAC Ministerial Meeting that had been scheduled for the same time.

He outlined the objectives of the workshop and the main thematic areas that would be the subject of discussions over the next three days.

He then invited Dr. Tim Leyland, representative of the Director, AU-IBAR to address the gathering.

Dr. Leyland thanked the Chief Guest, representatives of the EAC Secretariat and participants for taking time to attend the workshop.

He introduced AU-IBAR's mandate in Africa and said that its vision was to become a center of excellence for livestock production in the continent.

He observed that since its inception, AU-IBAR had established strong linkages with member states and was actively working with national authorities to strengthen the livestock sector. In this regard, AU-IBAR had a strong commitment to working in the sphere of policy and legislation especially in the field of animal health.

He noted that the East African Community held the mandate for harmonizing policy in East Africa and hence the need for AU-IBAR to establish strong linkages and working relationships with the EAC Secretariat. He expressed the hope that this workshop would be the start of a long and productive relationship between the EAC and AU-IBAR.

He noted that the four thematic areas selected for discussion at this workshop namely, regional policy harmonization, the control and management of transboundary diseases, trade and institutional development were pertinent issues for discussion as they had a strong bearing on the development of the livestock sector in the region.

He added that while it was important for member states of the EAC to consolidate regional integration through harmonization of policies, it was equally important to strengthen institutional capacity to maintain and sustain progress into the future.

In this endeavor he assured the participants, the member states would receive AU-IBAR's fullest support.

He concluded by wishing the participants success in their deliberations, thanked the EAC Secretariat for the efficient organization of the workshop and invited the Secretary General of the EAC, the Hon. Amanya Mushega to officially open the workshop.

3.2 Opening address by the Hon. Nuwe Amanya Mushega, Secretary General of the East African Community

In his address to the participants, the Hon. Nuwe Amanya Mushega expressed his satisfaction at the representation achieved at the workshop.

He reminded the participants that nearly 80% of East Africa's population derived their living from agriculture which made a valuable contribution not only to food security in the region but also to maintaining the dignity of its people.

He highlighted the importance of the livestock sector and the role of the EAC in promoting agricultural development and complementarity within the region. He exhorted participants to make full use of the opportunity afforded by the workshop to participate in the formulation of policies, legislation and practices that would galvanize and consolidate regional integration in this crucial sector.

He also challenged them to come up with workable recommendations for resolving difficult problems such as achieving self sufficiency in livestock products, controlling transboundary diseases and revitalizing domestic and international trade in livestock and livestock products.

He concluded his address by thanking the organizers and participants for making this workshop possible and wished them success in their deliberations.

With these remarks, he declared the workshop open.

(Full text of speech in Annex 1)

3.3 Policy Harmonization within the East African Community: How to go about it.

Dr. Florence N. Masembe Kasirye, Dairy Development Authority, Uganda

Policy has been defined as executive decisions as to the measures to be taken and harmonization as agreement of feelings, interests, and opinions.

Globalization is here and there is no activity more intrinsically globalizing than trade. Because globalization integrates markets, public policy is increasingly being taken out of its territorial context, ringing down the curtain on economic nationalism and heralding a new age of regional integration.

A key lesson to be learned from previous efforts in economic integration is that regional integration is a politically driven process underpinned by the recognition that sovereign interests are best advanced through regional actions. Sustained political commitment is, therefore, a necessary prerequisite.

While there is an essential and legitimate place for leadership in the process of regional integration, it is equally important that it should be a participatory process that carries the people along and translates into tangible benefits for ordinary Africans.

The vision for integration already exists and has been articulated by East Africa's leadership. Now attention must turn to sharing the vision with stakeholders and collaborators in the three countries and securing their full participation in the process of policy harmonization.

Multidisciplinary expertise and appropriate institutional structures will be necessary to coordinate various initiatives and actions at the national and supranational level. We need not envisage the creation of new structures but rather the weaving together of existing institutions and the creation of a conducive environment in which they can operate.

On the technical side, information networks and technical expertise must work in concert towards agreed and clearly specified goals.

Among the most often cited constraints to greater intra-African trade is the inhospitable macro-economic environment associated with overvalued exchange rates and non-convertible currencies. These are less of an impediment in the East African context but other deficiencies related to trade policies and fiscal and monetary operations need to be addressed. This presents a daunting task for East African governments but is achievable with the support of their development partners.

Tax revenue is extremely important to all three East African countries but its generation should not stand in the way of stimulating trade while securing the individual and collective interests of the region.

Regional level policy coordination will also require an institutional framework for monitoring and evaluating agreed policy measures.

Another demanding task is to agree on major convergence criteria and ensure their implementation. This requires setting up a surveillance mechanism to track progress, backed up by an efficient enforcement mechanism to ensure compliance.

Asymmetry of shocks is often a problem of integration. Most African countries trade in primary commodities and hence are vulnerable to external shocks, cyclical commodity price and terms of trade deterioration. Such shocks could have asymmetric impact and elicit variation in policy response. In harmonizing policies between member states, there is need to consider and cater for such eventualities.

In summary, to have effective policy coordination across countries, East African governments should agree upon a common programme, develop an action plan and identify relevant institutions to administer it. It may be necessary to have a regional team to “keep the fire burning” and individual country teams to “blow the fire”. Success will require total agreement and commitment of all.

3.4 Plenary discussion

Participants concurred that it was in the best interests of East African countries to achieve integration and use their collective and comparative strengths to promote development in the region.

Within the livestock sector, the integration of trade between member countries and the control and management of livestock movement and transboundary diseases were identified as priority areas for policy integration and harmonization.

It was acknowledged that political commitment was crucial for success and should be based on sound technical considerations. Participants also underscored the importance of stakeholder participation in the formulation of national and regional policies.

Disagreements between member states were inevitable but could be overcome through dialogue, consensus seeking and compromise.

3.5 Country Report: The United Republic of Tanzania

Mr. R.C.A. Kweka, Director for Livestock Development, Ministry of Water and Livestock Development.

Tanzania covers an area of 940,000 Km² and supports a human population of 33 million people. The economy of the country is heavily dependent on agriculture, which accounts for 50% of the Gross Domestic Product, provides 85% of its exports and is the country's largest employer.

According to 1998/99 statistics, Tanzania has a population of 16.4 million cattle, 11 million goats, 3.6 million sheep and about 47 million chicken. About 80% of livestock keepers are also crop farmers while the rest are pastoralists. The largest concentrations of cattle and small

ruminant stock are found in the regions of Arusha, Singida, Shinyanga, Mwanza, Dodoma, Mara and Kilimanjaro. Livestock production in Tanzania is largely of a subsistence nature, geared towards meeting the requirements of the home market. Most poultry are of the indigenous variety and are reared under free-range systems of management.

The livestock sub-sector contributes about 30% of the agricultural GDP, out of which, 40% is from beef, 30% from milk and the remainder from poultry and small stock.

It is estimated that 500,000 head of cattle, 250,000 goats and about 150,000 sheep are slaughtered annually to meet the domestic demand. Failure to export is attributed to the lack of export-accredited abattoirs and the absence of disease free zones.

Milk production is mainly from indigenous breeds of cattle that in 2000/01 accounted for 63% of the 800 million liters of milk produced. The bulk of the milk produced is consumed at the household level. Demand for milk in Tanzania has outstripped production and processing industries are operating at 30% of their designed capacity.

Major constraints to livestock production in Tanzania include inadequate animal nutrition, high prevalence of diseases, inadequate animal health delivery services, seasonal and poorly developed water resources, insecure land tenure, lack of credit for producers and poor farming skills.

Policy and Institutional Reforms in the Livestock Sector

The overarching objective of recent agricultural reforms in Tanzania is to commercialize agriculture so as to increase income levels and assure basic food security for the nation.

Effective control of animal diseases is crucial to the achievement of this objective. To this end, Tanzania places the responsibility of disease control at the farm level on the livestock keeper while facilitating the provision of requisite services and inputs through the private sector. The government has assigned itself the role of controlling epidemic diseases, exercising sanitary control and inspection, fighting pests and diseases beyond the farm level and establishing a regulatory framework for veterinary products and services.

Privatization of veterinary services is gradual and includes the promotion and establishment of self-financed para-veterinarians who will work under the guidance and supervision of qualified veterinarians.

Government support to the livestock export business takes the form of provision of know-how, establishment of export handling infrastructure and the provision of market information. The government also maintains zoo-sanitary surveillance on livestock and livestock products entering the country from abroad.

Since the 1980's there have been a number of reforms that affect the livestock sector. These include reforms in the civil service and local government. Veterinary staff in the districts have been removed from under the direct control of the Director of Veterinary Services and placed under the jurisdiction of the Local Government Authority. Other noteworthy reforms

include the merger of the Pharmaceutical and Poisons Act and the Food Act of 1978 into a single law overseen by the autonomous Tanzania Food and Drug Authority.

The antiquated Animal Disease and Veterinary Surgeons Ordinances are also undergoing extensive review to reconcile them with changing situations and circumstances in the country.

In order to have effective control over livestock movements, the Ministry of Water and Livestock Development is working on a programme to identify livestock and their owners by geographic location.

Marketing remains a private sector function with some public sector regulatory responsibilities. There is much room for improvement in livestock marketing to meet the existing and anticipated demand for livestock products within and beyond Tanzania.

To reap the benefits of regional integration in the livestock sector, policy harmonization in East Africa must address the following objectives:

- The free flow of trade in livestock and livestock products while protecting human, animal and environmental health.
- The adoption of sanitary measures, including TBT in accordance with international standards, guidelines and recommendations of WTO/SPS and more specifically the International Office of Epizootics (OIE).
- Agreement on recognition of equivalence of specific sanitary measures in accordance with the WTO.

3.6 Country Report: The Republic of Uganda

Dr. W.S.N Wesonga, Assistant Commissioner, Veterinary Inspection & Regulation, Ministry of Agriculture, Animal Industries and Fisheries

Agriculture, the mainstay of the Ugandan economy accounts for 43% of the National Gross Domestic Product and provides employment to about 80% of the country's 22 million people. The livestock industry accounts for 17% of the national GDP.

There are an estimated 6.4 million cattle, 7 million goats, just over 1 million sheep and 33 million poultry in Uganda. The annual livestock production for the year 2001 was estimated at 900 million liters of milk, 107,000 tonnes of beef, 17,000 tonnes of goat meat and mutton and just under 7,000 tonnes of hides. Uganda earned US\$ 59.8 million from the export of hides and skins in 2000. Exports of other livestock products including beef and milk are picking up but are constrained by international zoo-sanitary standards.

The main constraints to livestock production in the country include the prevalence of animal diseases including trans-boundary diseases, poor animal husbandry, inadequate marketing infrastructure and information, high levels of environmental degradation and natural resource depletion, and inadequate investment of funds in the livestock sector.

Policy and Institutional Reforms in the Livestock Sector

Since 1986, the government has been putting in place macroeconomic policy and public service reforms aimed at creating an enabling environment for general economic development and the improved delivery of public goods and services. These include policies aimed at promoting privatization, liberalization and divestiture. In addition, the government formulated the Poverty Eradication Action Plan that includes a Plan for the Modernization of Agriculture (PMA). The PMA aims at transforming subsistence farming to commercial market oriented farming.

As a result of changes in the national legal and policy framework (1995) and Public Service Reforms (1998), the Ministry of Agriculture, Animal Industry and Fisheries is no longer involved in direct service delivery. This function has been divested to local governments and other private sector institutions while the Ministry continues to be responsible for planning and policy formulation, setting standards, controlling epizootics and pests, conducting research, enforcing regulations and coordinating national livestock development programmes. Functions divested to the private sector include the production, processing and marketing of livestock and livestock products, production and distribution of stocking materials including artificial insemination, delivery of veterinary clinical and advisory services and investment in water harvesting technologies.

The National Policy for Delivery of Veterinary Services aims at improving the service as a means to achieving greater productivity especially on smallholder farms. Consequently, the Veterinary Surgeons Act of 1970 is to be amended to legitimize private veterinary practice and recognize para-veterinarians. Also slated for amendment are the Cattle Traders Act and the Animal (prevention of cruelty) Act.

A National Veterinary Drug Policy is being drafted. The policy will pave the way for better coordination between veterinary and medical authorities working under the umbrella of the National Drug Authority.

Other policies being examined relate to the control of epidemic diseases and pests under the PMA, the animal and fisheries regulatory services under the PMA, and the animal and animal products residue monitoring and control plan.

A policy on the animal feed industry has been formulated to promote and regulate production, manufacturing and marketing of animal feeds. It defines the roles of stakeholders in the industry and assigns standard setting and regulation to the public sector.

A meat policy has been formulated within the broad framework of the PMA to guide the production, processing and marketing of meat and meat products for the domestic market and export. Responsibility for implementation will be shared by the private and public sector with the latter playing a facilitating and regulatory role.

The Animal Breeding Policy and Act of 2001 addresses the need to improve and conserve animal genetic resources. It provides for the sustainable improvement of livestock and fish genetic resources by laying down regulations and guidelines governing breeding, marketing, import, export and quality assurance.

The Dairy Act of 1998 facilitated the withdrawal of government from direct participation in milk production, processing and marketing and permitted the creation of the Dairy Development Authority to regulate and develop the industry while a commercial limited liability company, the Dairy Corporation deals with milk processing and marketing.

A National Agricultural Advisory Service has been established to provide advisory services to livestock producers and other stakeholders in the sector.

A policy and strategic plan to improve producer access to domestic and international markets is in formulation. This will rectify a long-standing deficiency. Also in formulation is a policy on pasture and rangelands aimed at curtailing degradation and promoting sustainable utilization of rangeland resources.

3.7 Country Report: Republic of Kenya

Dr. W.K.T Chong, Director of Veterinary Services, Ministry of Agriculture and Rural Development.

Kenya occupies an area of 587,000 Km². Medium to high potential land takes up 16% of the land area and the rest is classified as arid and semi-arid (ASAL). Dairy farming and cropping are confined to the medium and high potential areas while nomadic pastoralism predominates in the ASAL areas that support over 60% of Kenya's livestock population.

The dairy industry, currently valued at K.Sh 33.6 billion was liberalized in 1992 and is regulated by the Kenya Dairy Board. At present, 45 registered firms process and market 12% of the milk produced.

The red meat industry, liberalized in 1987 is valued at K.Shs 43.2 billion and is regulated by the government. The white meat industry is valued at K.Shs 24.7 billion and eggs contribute a further K.Shs 5.9 billion.

The hides and skins industry is valued at K.Shs 1.2 billion. Several tanneries across the country process hides and skins for the local market and for export to Europe.

Honey and beeswax production are valued at K.Shs 4.59 billion. Among the emerging livestock enterprises, ostrich and crocodile farming merit mention. This former sub-sector is currently valued at K.Shs 1 billion.

The animal feeds industry was liberalized in 1989 and is currently valued at K.Shs 7.8 billion. Liberalization resulted in a marked increase in animal feed prices and a corresponding decline in quality.

Since the closure of the Kenya Meat Commission in 1987, Kenya has not been able to export to several European countries. This is due to the absence of disease free zones and abattoirs that meet international standards. Trade in some commodities, however, continues within COMESA, the Arab states, Russia, UK and Netherlands.

Domestic trade in livestock and livestock products is constrained by weak marketing associations, inadequate infrastructure and lack of up to date market information.

Constraints to livestock production arise primarily from weaknesses in policy, the legal framework and regulatory mechanisms. Policy and institutional reforms spurred by Structural Adjustment Programmes and the down turn in the economy were carried out hurriedly and without adequate stakeholder involvement. Liberalization proceeded without concurrent development of capacity within the public and private sectors.

Manifestations of these deficiencies include shortfalls in the availability and quality of animal feeds, inefficiencies in breeding arising from the prohibitive cost of privatized artificial insemination services and the shortage of breeding stock, a resurgence of notifiable transboundary diseases, an increase in drug resistance and residue levels in livestock and the faltering trade in livestock and livestock products.

These problems have been compounded by reductions in budgetary allocations to the livestock sector, recurrent droughts, an upsurge in human-wildlife conflict and insecurity especially in border areas.

Policy and Legislative Reform in the Livestock Sector

With a view to eliminate the constraints mentioned above, the government together with relevant stakeholders has initiated a review of existing policies and legislation.

Policies under review relate to disease and vector control, hides and skins improvement and leather development, veterinary public health, laboratory services, the Kenya Veterinary Board, animal welfare, animal identification, veterinary projects planning and management, animal breeding, and veterinary training and extension.

Legislative Acts under review include the Animal Disease Act, Pharmacy and Poisons Act, Rabies Act, Veterinary Surgeons Act, Animal Welfare Act, Meat Control Act, Hides and Skins Improvement Act, and the Cattle Cleansing Act.

Apart from the implementation of amended policies and legislation detailed above, the government proposes to establish a marketing entity for livestock products, develop modalities for harmonized control of trans-boundary diseases, establish disease free zones and quarantine stations, facilitate the implementation of Sanitary and Phyto- Sanitary (SPS) measures, complete work on standards for farm inputs and formulate a strategy to deal with livestock related emergencies. Also to be developed is a network to provide the industry with current information on animal health and production, markets and marketing.

Matters Requiring Harmonization in the East African Region

The East African Community's committee on Agriculture and Food Security has already concluded harmonization of SPS measures and inspection and certification procedures within the region in line with guidelines and recommendations of the WTO, OIE, Codex Alimentarius and the IPPC. Other areas that merit harmonization include:

- Quality standardization of animal feeds.
- Systems and structures for animal breeding.
- Disease control measures
- Environmental conservation measures
- Strategies for ameliorating the effects of droughts.
- Strategies for addressing insecurity and trans-boundary conflict.
- Infrastructure development especially in rural areas
- Strategies for addressing human-wildlife conflict
- Training curriculum development.

3.8 Country Report: Republic of Rwanda

Director of Livestock Development, Ministry of Agriculture, Livestock Development and Forests.

Rwanda is a land locked country with an area of 26, 338 Km² and a population of 8,100,000 inhabitants. It is a country with a long history of livestock keeping, where cattle have been an important source of livelihood for her people.

During the colonial period, the administration discouraged livestock keeping and cattle rearing in particular. The political and social upheavals of 1959 and 1994 further aggravated the situation by precipitating the flight of many cattle keepers and their herds into neighbouring countries. These events diminished the national herd in terms of both quantity and quality.

The current number of livestock in Rwanda is estimated at 815,898 cattle, 756,581 goats, 287,672 sheep, 229,399 pigs, 229,399 rabbits and just over 2 million poultry.

Total annual milk and meat production is estimated at 62,852 tonnes and 52,516 tonnes respectively. This represents 24 % of the country's milk requirement and 79.4% of the meat requirement. Per capita consumption of animal products falls well below WHO/FAO recommendations. The livestock sector contributes only 5.7% of the GDP.

The majority of cattle that make up the national herd are of indigenous breeds with low milk and meat production. This is compensated for by keeping large numbers of cattle especially in the drier areas of East and North-eastern Rwanda. In order to bridge the gap in production and conserve the environment, there is need to de-stock and upgrade the indigenous breeds. This will entail establishing effective feeding, breeding and disease control programmes.

There are four major constraints to the development of the livestock sector, namely, poor genetic composition of the national herd, poor animal nutrition, inadequate health facilities and poorly organized extension services. Animals are affected by a variety of enzootic and parasitic diseases and serious epidemic diseases such as FMD, LSD and CBPP.

Strategies to develop the livestock sector

In order to develop the livestock sector and increase its contribution to national food security and the economy the following strategies will be employed:

- (i) Policies and legislation will be reformed to facilitate the disengagement of the State from production and place commercialized production and processing in the hands of the private sector. By the same token, private veterinary practice will be promoted, credit schemes for livestock producers instituted and research made more responsive to the needs of the livestock sector.
- (ii) Improvements in animal health will be achieved by building capacity for effective surveillance and diagnosis of animal disease and through disease control and eradication programmes.
- (iii) The genetic potential of the national herd for milk, meat and egg production will be improved through importation and distribution of exotic stock and by strengthening the artificial insemination services.
- (iv) Management of livestock enterprises will be made more efficient through the establishment and conservation of pasture, development of watering facilities in areas of scarcity and by promoting improvements in animal husbandry.

3.9 Working Group Session: I

The participants were divided into 4 working groups.

Group 1 was assigned the task of reviewing the veterinary service structures in the three East African countries and proposing a desirable structure. They were also requested to identify the training needs of various cadres of animal health delivery personnel and suggest ways in which the training curricula could be harmonized.

Group 2 was assigned the task of identifying areas of contradiction in the policy and legislation of the 3 East African countries and proposing ways to harmonize them.

Group 3 was assigned the task of proposing how governments could be persuaded to allocate more resources to the livestock sector.

Group 4 was assigned the task of identifying research needs, proposing a research agenda and identifying possible sources of funding.

The main points of the group presentations and discussions that followed are summarized below.

3.9.1 Group I presentation: Veterinary Service Structures

The group observed that World Bank lead structural reforms had reduced the effectiveness of veterinary services in member states of the EAC and compromised their ability to achieve standards set by the OIE.

All three states had instituted measures to decentralize and privatize the service. Responsibility for the provision of veterinary services was now shared between central government, the district administration, local government and the private sector. Central government continued to be responsible for planning and policy formulation, setting standards, controlling epizootics and pests, conducting research, enforcing regulations and coordinating national livestock development programmes. Functions divested to the private sector included the provision of artificial insemination and veterinary clinical and advisory services.

Restructuring of the service with devolution of authority to the district administration and local government had affected the chain of command and reporting procedures, thereby weakening data collection, reporting and the maintenance of discipline.

Measures taken to involve the private sector and most notably the involvement of community based animal health workers in service delivery had raised costs for livestock producers while seriously compromising quality.

The group recommended:

- The adoption of a simple structure for the veterinary service with a clear line of command and reporting.
- A clear definition, differentiation, and demarcation of the roles played by local government and the line ministry.
- Standardization of the nomenclature applied to technical personnel throughout the region that is linked to their level of training and expertise.
- Standardization of the minimum levels of training for each cadre of veterinary personnel.
- The allocation of adequate resources to the sector to allow it to function effectively.
- Reconsideration of the proposed divestment of the sanitary mandate to the private sector.

3.9.2 Plenary discussion

There was vociferous opposition to the idea of granting community based animal health workers legal sanction to provide veterinary clinical services. It was felt that they did not possess the necessary skills to be entrusted with such responsibility. The accommodating attitude of governments and the support received from NGO's for this intervention had resulted in the proliferation of CAHW's even in areas where professional veterinary services were available.

It was noted that in Kenya and Uganda, CAHW's had not been sanctioned by the respective Veterinary Boards and were operating outside the law.

It was suggested that the funds invested in the training and deployment of CAHW's could be better utilized in increasing the number of formally trained veterinary personnel. Retrenched personnel could also be re-engaged to meet the shortfall in veterinary staffing.

As a counter argument, it was suggested that CAHW's are a way of bringing order to a disorderly situation. They were seen as a temporary measure to be employed until such a time as proper veterinary services were available. CAHW's, it was proposed, need not be sanctioned by primary legislation. Subsidiary legislation can be effected to legitimize and regulate their activities until such a time as their services were no longer needed.

In Ethiopia, it was noted CAHW's operate in remote areas and highlands where they are no vets or para- vets. Farmers cannot standby and watch their animals die. In the absence of a vet, they will find someone to treat their stock. It was far better to have someone with some knowledge and training than none at all. The workshop was informed that in the absence of a viable alternative, the Ethiopian government was accepting the idea of regulated CAHW's.

It was concluded that the performance and utility of CAHW's should be formally and objectively evaluated and a decision on their future involvement in the delivery of animal health services taken on the basis of this evaluation.

3.9.3 Group II presentation: Policy and Legislation

The group noted that time and circumstance did not permit a through review of the livestock policy and legislation in the EAC. There were several policies and over 23 Acts to be considered in each member country.

The group recommended that:

- Since the term “public good” is interpreted differently in each country there needs to be a commonly accepted definition.
- There is a clear need to harmonize disease control and cost issues
- Policy and legislation in each of the member states needs to be reviewed by a task force and areas of disharmony identified.

3.9.4 Plenary discussion

The participants observed that in the past, East African countries employed uniform systems and nomenclature in the livestock sector. They recommended that these be re-instituted if still appropriate.

It was resolved that a standing committee be set up to review the policies and legislation of the 3 states and make recommendations for their harmonization.

3.9.5 Group III presentation: Increased Public Investment in the Livestock Sector

The group noted that sources of finance to the livestock sector included government budgetary provisions, credit, NGO contributions and levies

A major reason for under funding of the sector despite its enormous contributions to national economies was the poor representation it received in government. The absence of pressure groups to lobby for increased investment perpetuated the status quo.

The group recommended that:

- Specific authorities for the various livestock sub sectors and pressure groups composed of producers, processors, traders and professionals be formed to exert pressure on the government to divert resources to the sector.
- A percentage of the revenue generated from livestock levies be reinvested in the sector to ensure sustainability of essential services.
- Governments be persuaded to facilitate the establishment of credit schemes for stakeholders.

3.9.6 Plenary discussion

It was noted that the paucity of reliable data from the livestock sector made it difficult to fully evaluate its economic contributions and justify demands for increased public investment in the sector. It was also noted that representation of the sector at the highest levels of government were inadequate especially in Kenya and Tanzania and that these countries would do well to follow Uganda's example by appointing a commissioner of livestock production and marketing.

It was concluded that marginalization of the sector would continue unless it assumed a proactive role in securing the resources and services needed for its growth.

3.9.7 Group IV presentation: Research Priorities and Potential Sources of Funding

The group observed that there were several compelling reasons for undertaking research in the livestock industry. These included generating vital epidemiological information on the basis of which effective disease control measures could be designed and identifying and assessing opportunities for livestock producers in existing and emerging markets.

They proposed that such research should be basic, applied, adoptive/adaptive and strategic. It should be carried out by multi-disciplinary teams and involve relevant stakeholders in the design and execution.

In order to ensure efficiency and coordination of the effort, a regional research agenda should be agreed upon and a network established to facilitate collaboration, information sharing and the development of critical mass.

The group proposed the following sources of funding for a regional research programme:

- Commodity-based cess / revenue
- Industry / consumer taxation
- Development partners and agencies
- Revenue derived from commercialization of research outputs and veterinary services
- Royalties received from innovations.
- A regional research fund established by member countries.

3.9.8 Plenary discussion

Participants acknowledged the need to co-ordinate the regional research effort and recommended that the EAC Secretariat take on the task of harmonizing and coordinating research in the region. Uganda is currently reviewing its national research programme and this presented an opportune moment for the EAC Secretariat to initiate a similar process in other member states.

It was recommended that apart from the areas mentioned by the group, research should assess the sustainability of current livestock production systems and incorporate new and emerging technologies like biotechnology and bioinformatics.

Section IV: Workshop Proceedings -Day 2

4.1 Constraints to Trade in Livestock and Livestock Products in the East African Region

Mr. Yacob Aklilu, CAPE, AU-IBAR

A characteristic common to member states of the EAC is the inadequate financing of the livestock sector. This occurs despite the contributions made by the sector to the national GDP.

In Kenya, the livestock sector contributes 10% of the agricultural GDP and 3.3 % of the national GDP but receives a paltry 0.75 to 0.47 % of the total recurrent budget. A similar situation prevails in Tanzania, Uganda, Ethiopia and Sudan.

Livestock related legislation is often discriminatory and enforcement erratic in most countries in the region. In Kenya, producers are required to sell their animals on the day of arrival at the market regardless of the price being offered.

There is evidence to show that authorities are reluctant to enact new legislation governing animal health, livestock products and derivatives in line with the changing international standards and requirements. A case in point is the failure of Kenya to impose a ban on international trade after the outbreak of Rift Valley Fever.

Livestock are probably the most repeatedly (and perhaps the most highly) taxed agricultural commodity in the region. In Sudan, traders pay as many as 20 types of taxes between the point of purchase and their final destination. In Kenya, a hefty tax of K.Shs 600 is imposed on every head of cattle sold in the Moyale livestock market.

Another limiting characteristic of the sector is the inadequate financial services available to entrepreneurs. Only Sudan provides specialized financial services for the livestock sector through the Agricultural Resource Bank (ARB) and even then, the *Muharaba* system extracts a 24 % interest.

Exporters of livestock are encumbered by having to produce Letters of Credit before they can export stock. This is the case in Ethiopia and Kenya whereas in Europe, Australia and New Zealand exporters extend credit lines of up to 2 months.

Export and import practices in some countries militate against the growth of local industry. Both Sudan and Kenya permit the export of raw hides and skins despite the shortages of

these materials for local tanneries. Paradoxically, authorities allow the establishment of new tanneries while existing ones suffer from shortage of supplies.

Local exporters have yet to realize the gains that can accrue from adding value to their products. A study in Sudan revealed that semi-processed hides generate three times as much income as raw hides.

Trade in livestock throughout the region is inhibited by the lack of domestic market information. There is no regular data collection in most countries and even when it is collected, it tends to be short lived. Data is rarely processed and disseminated or translated into market forecasts. The opportunity presented by collection of livestock taxes to generate data is not exploited.

Similarly, there is a glaring dearth of external market information. No regular collection or analyses are carried out on market trends, consumer preferences, distribution channels, tariffs, rules and regulations of importing countries or on the marketing strategies of competitors. This places local exporters at a significant disadvantage.

Institutional weaknesses and rivalries are yet another constraint to trade in the livestock sector. Lack of trained manpower, budgets, and equipment and in some cases, a clear purpose in relevant institutions such as the departments of livestock marketing and veterinary services detract from effective trading.

Most Trade Associations, whether involved in domestic or export markets are financially weak, lack organizational capacity and require capacity building. Support for this does not seem forthcoming from the authorities.

Throughout the region, trade is hampered by poor infrastructure. This presents a disincentive to produce for the market especially among pastoralist and agro-pastoralist producers.

The sharp end of the livestock marketing business in each country is dominated by cartels that dictate consumer prices. The price of meat in Nairobi, Addis Ababa and Khartoum has remained more or less the same over the last 5 years despite fluctuations in livestock prices. The producer's share of the retail price for cattle shows a declining trend over time. In Sudan the producer receives between 25-50% of the retail price. In Kenya between 47-52% and in Ethiopia, the share has declined from 76% to 55% in 1995 and to below 50% at present.

The consumption level of red meat has not increased significantly in proportion to human and livestock population growth due to stagnation of the economy. Domestic markets are becoming increasingly supply driven and are increasingly controlled by traders, middlemen and butchers.

4.2 Plenary discussion

Domestic Trade

Participants observed that the linkage between livestock producers and the domestic market is weak. Trade is dominated by cartels and middlemen who take up to 60% of the revenue generated. While it was acknowledged that middlemen play a useful role in marketing livestock it was felt that producer associations could easily fulfill this role while securing better terms of trade for their members. Reference was made to European farmer associations that own abattoirs and processing plants and are able to render services that add value to the products produced by their members.

It was also proposed that a regional forum of producers be formed and modeled on the East African Business Council.

Participants noted with concern that the free market concept is detrimental to small holders. In Tanzania, small holders have lost the market for their milk because of the influx of cheaper imports.

It was noted that although prices for live animals had gone down, the taxes imposed on trade remained unchanged. In the absence of a realistic price structure for livestock and livestock products, farmers could not afford quality services that would enable them to modernize and improve performance in the sector.

Regional Trade

Participants questioned the wisdom of trying to meet the stringent requirements of external trade when opportunities for trade within the region went a begging. It was noted that strategically placed infrastructure was lying idle because of the stagnation of regional trade.

External Trade.

Participants expressed the need for an umbrella body that could engage in dialogue with importers and keep producers abreast of the changes and opportunities in international markets.

Governments should be persuaded to strengthen the veterinary services in the region and invest in essential infrastructure (such as export accredited abattoirs) that would enable producers and exporters meet the standards for international trade.

It was noted that the EA region did not have an efficient disease surveillance system and did not spontaneously impose bans on international trade following outbreaks of OIE listed diseases. Maintaining credibility was extremely important if the region is to secure and maintain external markets for its products.

In conclusion, it was noted that the region had the resources to develop all aspects of the livestock sector, however, member countries would need to reappraise their development priorities and allocate resources to the most deserving sectors.

4.3 Policy Issues Related to Control and Eradication of Transboundary Animal Diseases.

Dr. G.R Thomson, PACE, OAU-IBAR

Terms such as “transboundary”, “List A” and “epizootic” diseases are essentially synonymous and are usually intended to convey the idea that such diseases are capable of spreading rapidly, thereby infecting large numbers of animals in a short period of time over a wide geographical area and inflicting significant economic damage to livestock owners and industries.

Increasingly, the zoonotic potential of animal infections (e.g. BSE) is also used to determine their “importance” and inclusion in the transboundary group of diseases, as is a tendency to include erosive but non-epizootic diseases such as brucellosis. It seems therefore, that with the exception of “List A” diseases which are clearly indicated in OIE’s International Animal Health Code (2001), the composition of other groupings is a matter of debate and will be dictated by the perspective of the country, region, organization or even individual concerned.

It is noteworthy that the OIE does not define the characteristics required of diseases to be included in “List A” even after 8 years of effort to arrive at such a definition.

A further complication arises from the realization that in some circumstances, the presence of infectious agents that cause transboundary or List A diseases do not always result in the occurrence of the disease concerned. Examples of such diseases include classical swine fever, swine vesicular disease, perhaps the mild form of rinderpest, foot and mouth disease (FMD) and contagious bovine pleuro pneumonia (CBPP). For trade purposes, it may be important to prove that an infection is not present in a particular locality even though there is no clinical evidence for its presence.

Currently, from the animal disease perspective in eastern Africa, the two major issues that concern livestock owners and livestock industries in the region in general are:

- Minimizing the impact of diseases that cause mortality or reduce the productive capacity of livestock;
- Gaining access to export markets by ameliorating the effect that the presence of transboundary infections have on trade.

Some diseases have an effect in both these areas. Further more, as far as gaining access to export markets in the developed world is concerned there are other animal health issues aside from infections that need to be considered. These include the absence of residues, hormones and other potentially biologically active substances in the exports. Genetically modified organisms and exposure to ionizing radiation are less troublesome issues in this region but also need to be considered.

Minimizing the impact of diseases that cause mortality or reduce the productive capacity of livestock

In eastern Africa, transboundary diseases falling in this category include Rinderpest, CBPP, Lumpy skin disease (LSD), Haemorrhagic septicaemia (HS), Peste des petits ruminants (PPR), Sheep and goat pox (SGP), African swine fever (ASF) and Newcastle disease (NCD). These diseases together with trypanosomiasis, East Coast Fever and other tick borne diseases have posed a serious problem to the livestock industry for decades.

A policy related problem in respect of these diseases (rinderpest is an exception) is that very few countries in the region have clearly defined policies for combating the individual diseases. In the absence of such policies, the veterinary services of the various countries cannot focus their efforts and similarly, donors find it difficult to understand how best they can compliment the activities of the country concerned. This can lead to situations where donors are tempted to determine policies themselves.

It is therefore recommended that for each of the major transboundary diseases, the official veterinary service of each country formulate a clear policy that is made available not only to the relevant national officials but also to other organizations operating in the animal health sphere.

Gaining access to export markets by ameliorating the effect that the presence of transboundary infections have on trade

There is a strong move on the part of individual countries in eastern Africa, regional and international organizations (including AU-IBAR, the European Commission [EC] and FAO) as well as trade groupings to embark upon initiatives in this connection. So far, however, little is being implemented. This is mainly because ideas and possibilities are still evolving.

Zoning to control disease and facilitate trade is a well established concept within the OIE. However, there are difficulties for African countries in delineating borders for zones. The concept of compartmentalization, also propagated by the OIE (whereby production processes can be isolated from infectious agents in the surrounding environment), is not yet fully developed.

A prerequisite for trade that is becoming increasingly clear is that other conditions apart from disease control will need to be fulfilled. These may include considerations such as residue levels, environmental and socio-economic conditions that cannot be addressed on a piece-meal basis because importers need to have all these issues under control at the same time. For this reason the idea of developing "export zones" that produce products to meet the specific requirements of the importer is gaining acceptance.

Because this matter is still evolving it is difficult at this stage to be clear on what policy issues need to be addressed to facilitate progress. This workshop could provide valuable inputs by deliberating on this issue.

4.4 Plenary discussion

Participants noted that in the absence of a clear definition for List A diseases, the region should draw up a list of priority diseases that have implications for international trade. This list should be reviewed and updated periodically. The diseases listed should become the focus of a comprehensive regional strategy for disease control.

Participants were informed that there were no minimum infrastructure requirements for the establishment of export zones. The bottom line was that products from these zones must meet the requirements of the importer. It was noted that since the type of infrastructure required would depend on the type of product exported, it would be easier to certify and export processed products rather than live animals.

In response to a query as to why it was necessary for exporting countries to adhere to any environmental and labour standards, the workshop was informed that in a buyers market the buyers wishes prevailed.

Noting that the WTO and OIE had no jurisdiction over the terms of trade between two consenting countries, it was proposed that African countries argue the case of being allowed to export products that meet the specific requirements of the importer rather than any superfluous international standards.

It was further noted that most developing countries would have difficulty in meeting the high veterinary standards required by the OIE. Creating export zones would allow developing countries to focus their limited veterinary resources in these areas while employing alternative approaches in other less sensitive areas.

4.5 Working Groups Session: II

Participants were divided into 4 groups.

Group 1 was assigned the task of proposing ways to promote and expedite trade in livestock and livestock products in East Africa.

Group 2 addressed the task of proposing ways to promote trade between East Africa and the rest of the world.

Group 3 was assigned the task of proposing measures for the control of transboundary diseases.

Group 4 undertook a review of the requirements for the production of good quality livestock and livestock products.

The main points of the group presentations and discussions that followed are summarized below.

4.5.1 Group I Presentation: Promoting Trade in Livestock and Livestock Products in E. Africa

The group reviewed the current status of trade in the region and observed that both formal and informal trade existed but was constrained by several factors including protectionism and excessive taxation, the unavailability of market information to producers, the absence of any communication or direct linkage between producers and consumers, competition from subsidized imports, weak enforcement of zoo sanitary standards and inadequate infrastructure such as cold chains and abattoirs.

The group proposed the following measures to promote and expedite increased trade in the region:

- Formalize trade between EA states through operationalisation of a Customs Union.
- Encourage formation of a Regional Producers Forum to identify opportunities and set prices.
- Build marketing capacity among producers and minimize the involvement of middlemen where feasible.
- Promote an organized marketing system (auctions, market information etc)
- Create a conducive environment for private investment in infrastructure. Government could establish infrastructure and later divest these facilities to the private sector.
- Implement harmonized sanitary and phyto- sanitary standards.
- Enact legislation to counter dumping, unfair competition and counterfeit trade.
- Promote value addition to encourage consumption of livestock products and optimize profits for producers.

4.5.2 Plenary discussion

The role of middlemen in marketing livestock was acknowledged but it was recognized that in some instances the number of intermediaries between producer and the consumer were excessive. In such cases, disintermediation was necessary.

It was recommended that prices for livestock and livestock products should not be fixed but be responsive to producer costs and to changes in supply and demand.

It was noted that sanitary standards for the region had been established and harmonized and should be implemented.

4.5.3 Group II Presentation: Promoting External Trade in Livestock and Livestock Products

The group proposed that the first step towards stimulating external trade was to map out the opportunities and requirements for international trade and communicate these to producers and processors. Trade attaches accredited to embassies, trade commissions appointed by governments and the EAC should play a proactive role in negotiating international trade agreements.

In order to maintain the quality of exports and ensure compliance with international standards, the Directorates of Veterinary Services should have complete control over the certification of exports.

Governments should invest in infrastructure and services that are beyond the means of the private sector to provide. These include the establishment of export quality abattoirs, facilities for handling perishable goods, infrastructure for watering, feeding and resting stock along stock routes and appropriate mechanisms for disease surveillance and control and for the provision of credit to producers and exporters.

4.5.4 Plenary discussion

The workshop concurred with the recommendations made by the group. It was noted that commercial attaches have already been accredited to our Embassies abroad and may need orientation and exposure to familiarize them with the potential and possibilities for international livestock trade.

4.5.5 Group III Presentation: Measures for Control of Transboundary Diseases

The group proposed that a comprehensive epidemiological survey be carried out to establish the status of transboundary diseases in the region. This would form the basis for designing appropriate and coordinated control measures.

The group further recommended the establishment of disease free zones. This would entail forging partnerships between governments and the private sector. Governments would be primarily responsible for facilitating trade and ensuring effective disease control especially in areas adjoining the zones. The private sector would be responsible for producing consistent supplies of high quality products, maintaining environmental quality and ensuring the equitable distribution of benefits among stakeholder groups.

4.5.6 Plenary discussion

The workshop suggested that strategic partnerships need not be confined to within the region. Egypt for instance, could help market East African livestock products in Saudi Arabia as products originating from Egypt would evoke less suspicion in Saudi Arabia.

4.5.7 Group IV Presentation: Prerequisites for Production of Good Quality Livestock and Livestock Products.

The group observed that livestock and livestock products should be wholesome for human consumption and utilization and meet the specific requirements of consumers.

In order to achieve this goal, exporting countries would need to maintain acceptable standards in the areas of breeding, nutrition, health services, processing and marketing.

At present breeding standards were compromised by the lack of a comprehensive breeding policy, the poor genetic resource base for the national herd and the undefined roles of the public and private sectors in promoting excellence in the field.

The maintenance of animal health was constrained by the unavailability of essential drugs and equipment and inadequate access to veterinary services.

Farmers were not employing the best practices in feeding and managing their stock and marketing was constrained by lack of information and essential infrastructure.

The processing sector was constrained by inadequate infrastructure and scarcities in the supply of electricity and water. The development of cottage industries was impeded by the unavailability of technologies suitable for adoption by rural producers.

The unsupportive legal and policy environment did not encourage livestock trade. Excessive taxation and the practice of allowing imports at the expense of local producers were major deterrents to increased trade and investment in the sector.

The group recommended the institution of remedial measures to address these constraints but acknowledged that this could only happen when the legal and policy environment was made more favorable.

4.5.8 Plenary discussion

Participants agreed that deficiencies in national policy and legislation must be corrected before we can achieve higher levels of investment and productivity in the livestock sector. This must take precedence over regional harmonization.

Section V: Workshop Proceedings-Day III

5.1 Institutional Development and Reform in the Department of Veterinary Services, Zimbabwe.

Dr. Stewart Hargreaves and Mr. Ahmed Jama, Ministry of Lands and Agriculture, Zimbabwe

Agriculture in Zimbabwe provides employment and income to 70% of the population. Raw materials from the sector form the basis for nearly 60% of manufactured product and some 45% of the export merchandise. Domestic trade, transport and other support services are highly dependent on agriculture.

The sector possesses a strong dualistic structure composed of 4,500 large-scale commercial farms and 1.2 million smallholder farms.

After independence in 1980, the Ministry of Lands and Agriculture responded to the government's new agriculture policy of energizing the smallholder sector by taking control of all agricultural parastatals (such as the grain and cotton marketing boards etc), determining and controlling prices, expanding technical and extension services to smallholder farming areas, acquiring and distributing land to the disadvantaged and enhancing production and marketing of agricultural produce.

In 1990, the Economic Structural Adjustment Programme (ESAP) was initiated with the main aim of reducing government expenditure. Under the ESAP, the Ministry revised its roles and responsibilities to remove the monopolistic position of the agricultural marketing boards, involve the private sector in marketing agricultural commodities, eliminate agricultural subsidies and price controls and allow the market to determine prices for agricultural commodities.

An agricultural sector review carried out in 1994/95 revealed that the public sector was still heavily involved in agri-business. It also identified the need to improve management of the agricultural sector, make it more responsive to a market oriented economy and chart a course that would ensure its sustainable development.

As a result of the review, the Ministry embarked on the preparation of a long-term sector policy framework. The Zimbabwe Agricultural Policy Framework 1995-2020 states that the Government's agricultural policy is built on four basic pillars:

1. The transformation of smallholder agriculture into a fully commercial farming system.
2. Average increase in total agricultural output each year that is significantly larger than the increase in population.
3. The full development of physical and social infrastructure in all the rural areas throughout the country.
4. The development of fully sustainable farming systems throughout the country that reverse current environmental degradation and soil erosion.

Pressure for institutional reform came from 3 sources: Government, donors and stakeholders. The government wanted to see further reduction in the fiscal deficit, further liberalization of the economy and increased divestiture of state enterprises to the private sector. Donors required the adoption of a programme approach as opposed to isolated and uncoordinated implementation of projects. Stakeholders demanded greater efficiency and improved quality of services.

The Agricultural Sector Management Programme (ASMP) was conceived by the Ministry in late 1996 as a short-term (3-year) programme to operationalise the Zimbabwe Agricultural Policy Framework. The programme had two outputs, namely:

- Rationalization and reform of the ministries service delivery and strategic approach.
- Increase the capacity and enhance the efficiency of its operational systems.

Boards and committees were set up to oversee the institutional reform process at both ministerial and departmental levels.

Capacity and operational efficiency was upgraded through intensive training programmes aimed at ministry staff and stakeholder groups. The idea was to demonstrate alternative ways of doing business.

The Zimbabwe experience in institutional reform has shown the following prerequisites to be necessary for success:

- A shared vision and local ownership of the process
- Full and unwavering support from the management to the change process. Without the support of institutions like central ministries and the Public Service Commission, reform cannot occur. These institutions must be actively lobbied.
- Full participation of all key stakeholders. .
- Establishment of an effective culture of openness and communication with its external clients.
- Effective management of the institutional development and reform process.

Institutional development and reform in the Department of Veterinary Services

There are 6.4 million cattle, 634,787 sheep, 3.8 million goats, 313,817 pigs, 473,522 donkeys and 10,645 horses in Zimbabwe. Most of the cattle are concentrated in central Zimbabwe. Commercial farms account for 20% of the cattle. The rest are in the non-commercial sector- an indication of the great potential within this sector and the place where veterinary services are most needed.

Zimbabwe currently has an annual European export quota of 9,000 tonnes of meat that she is not able to fulfill.

The veterinary workforce consists of 1,258 workers. More than half of these are dip attendants. A total of 85 veterinarians, 320 veterinary technicians, and 138 animal health inspectors make up the rest of the workforce.

The Veterinary Services budget in 2002 stands at Zimbabwe \$ 1.2 billion, up from just over 200 million in 1999. The increase in the department's budget over this period is the result of effective marketing of the veterinary services to central government.

Areas of strategic intervention by the department include:

1. Creation of an enabling environment for the non-state sector to play a meaningful role in the development of the livestock sector by fostering partnerships and effective collaboration.
2. Policy formulation and enforcement of legislation and regulations
3. Establishment of efficient community animal health systems
4. Strengthening of linkages with other service providers (state and non-state) for complementarity and effective collaboration.

Major steps and actions taken during the reform process included:

1. Adoption of institutional reform and development with the accompanying change management process.
2. Examination and prioritization of strategic business areas.
3. Institution of cost recovery measures
4. Streamlining and rationalization of departmental functions. This included restructuring and capacity building.
5. Review of legislation
6. Contracting out.
7. Private sector partnerships/ Veterinary Service Council.

5.2 Plenary discussion

Q: *Since Zimbabwe has an export quota to Europe that she cannot fulfill, why not import the outstanding tonnage from the EAC?*

A: The same considerations that prevent EAC from exporting directly to Europe would still apply.

Q: *What can the EAC borrow from Zimbabwe in terms of reforming the sector and improving our export trade?*

A: No one can prescribe reforms for another country. The chosen reform strategy should be determined through dialogue. Countries must own the reform process and tailor it to meet their needs. Let us not blame others for forcing reform upon us. Reforms are intended to correct deficiencies. If none exist there is no need to reform.

The Australians may have influenced OIE regulations to suit their interests and in the process captured a lucrative Saudi Arabian market. East Africa must counter this effectively by marketing its assets and capitalizing on its comparative advantage. Goats from East Africa can reach the markets of Saudi Arabia fresh and still smelling of the east African savannah. Can the Australians match this?

Q: How did the Zimbabwe Veterinary Department go about persuading government to increase its budget 6 fold in the space of 3 years?

A: I believe the answer lies in effective communication. Ministers do not know what the veterinary services are doing. It is up to you to put together your most persuasive arguments and lobby vigorously and relentlessly.

Q: In view of the global trends in trade and liberalization, shouldn't the directors of animal health/production be more competent in matters related to trade?

A: This depends on the objective of the service. Times are changing and veterinarians are required to be more than clinicians. They have to deal with production, marketing and broader developmental issues. In Zimbabwe we have instituted an aggressive training programme to equip senior management with these skills.

5.3 Livestock Service Provision and Institutional Development Framework: The Zambian Experience.

Dr. Mwilola Imakando, Ministry of Agriculture and Cooperatives, Zambia

In Zambia, prior to independence, veterinary services were provided mainly to European settlers farming in the copper belt. Since 90% of Zambia's income was coming from copper, there was little investment in the traditional livestock sector. The service was predominantly government driven.

At independence, revenue from copper fueled the expansion of agricultural services into the traditional sector. Livestock production was encouraged. Parastatal commercial ranches, dairy plants and hatcheries were established as were marketing boards and co-operatives. Government incentives for livestock production included free vaccination and dipping and subsidized inputs for dairy, beef and poultry production.

However, between 1980-90, world copper prices declined and revenue plummeted. The government could not sustain its investment in the agriculture sector. Service provision deteriorated, banks withdrew support for livestock production, farm inputs became scarce, productivity declined and marketing boards defaulted on their payments to producers.

The rapidly deteriorating situation forced a change in government policy in 1991. The market was liberalized and privatization introduced. The state devolved powers to the districts and

introduced the Agricultural Sector Investment Programme and the Public Service Reform Programme to orchestrate the process.

Between 1991-2002, the roles of the public and private sector were redefined. The public sector assumed a regulatory and supervisory role and left implementation to the private sector. NGO's and Trusts (private and public sector partnerships) filled the gaps. Appropriate legislative changes were introduced and financial assistance extended to the productive sector.

Several facilitating institutions were created to oversee the reform process. Farmers were organized into Private Sector Development Units. The Zambia Privatization Agency supervised the sale of government companies and the Veterinary Privatization Trust Board, composed of a wide representation of stakeholders was set up to oversee the privatization of veterinary services. A process that was resisted by veterinarians.

It was agreed that the government veterinary service would shoulder responsibility for regulating the service and controlling epidemics while the private sector would provide clinical services.

The process of shifting responsibilities around created conflict among stakeholders necessitating the formation of an Agricultural Consultative Forum (ACF) to deal with and resolve contentious issues.

Strategies employed for promoting veterinary privatization.

Several strategies were employed concurrently. These included:

1. The Veterinary Apprenticeship Scheme in which fresh graduates were attached to existing practices.
2. Disbursement of loans for privatization of the veterinary service
3. Continuous Professional Development Courses
4. Contracting out government work to private operators
5. Awarding sanitary mandates
6. Commercialization of selected services
7. Leasing of government facilities e.g. veterinary clinics to private practitioners

Strong political support together with a responsive private sector have contributed to the success of these strategies. Donor support and institutional realignments have also been important. The dwindling financial resources from the Central Treasury and the record of poor performance by the public sector have helped overcome resistance.

Challenges facing the livestock sector

- Due to many years of government domination, private sector capacity is weak.
- Rigidities inherent in the government bureaucracy are slowing down progress.

- Conflicts of interest arise when government employees work part-time in the private sector.
- Politically motivated programmes are difficult to manage.
- Farmers are often not willing or able to pay for services.
- Institutions such as the Veterinary Association of Zambia, the University of Zambia, the Zambia National Farmers Union and Community based organizations are not actively engaged in advocacy and lobbying.
- The Veterinary Council of Zambia is ineffective.
- Information dissemination is poor.
- Donors are imposing conditions on their assistance.

Lessons learnt

- Reforms must be holistic and comprehensive to achieve results.
- There must be strong commitment to the process of transferring services to the private sector
- Politically motivated programmes misuse resources and are unlikely to succeed, as they do not capitalize on comparative advantage.
- Adapted livestock service delivery e.g. Community Livestock Assistants is feasible especially in areas where professional service is unavailable.
- The public sector should be reorganized realistically. Institutions cannot restructure themselves.
- Stakeholder participation is crucial
- The benefits accruing from the livestock sector must be well accounted in order to attract commensurate funding.

Community Animal Health Workers

Community animal health workers known in Zambia as CLA's operate in areas that do not have adequate veterinary services. They are appointed in consultation with local communities and attached to a veterinarian. CLA's are licensed, operate according to a strict code of conduct and are required to maintain a log of all their activities. In view of the useful role they have played, Zambian legislation is in the process of recognizing them as bonifide animal health workers.

5.4 Plenary discussion

Reforms

Q: *Zambia has so many bodies orchestrating the reforms. How do you coordinate them? How sustainable are these bodies?*

A: Many of the reform institutions are temporary and will be phased out when they complete their mandates.

Q: *What are the benefits of setting up Trusts?*

A: Trusts in Zambia are partnerships between the state and the private sector. They allow investments and risks to be shared between the two.

Q: *Are subsidies a useful policy tool. Should we be considering them?*

A: During President Kaunda's administration, Zambia had an excessively subsidized economy. This created a "government dependency syndrome". There may still be room for subsidies but they should be of a temporary nature. African economies cannot sustain subsidies in the long run.

Comments:

- Only time and a comprehensive evaluation of the results will determine how successful the reforms have been.
- Our agriculture sector is donor driven. It is hard to see our own input in the reforms. Reforms in Ghana, Zambia and Uganda are World Bank driven.

Trade:

Q: *Does Zambia export meat and if so where? How is it complying with OIE standards?*

A: Zambia exports to Angola, Congo and Burundi. These countries do not have rigorous importation standards. However, South Africa is considering importing meat from Zambia for canning.

Community Animal Health Workers

Q: *What is the ratio of veterinarians to livestock in Zambia? What kind of training do you provide for community animal health workers?*

A: There are 2.5 million cattle in Zambia. Only 20% are in the commercial sector and the rest in the traditional sector. There are 120 veterinarians in government service and 50 in quasi government organizations. Zambia currently turns out 15 veterinarians/annum. CLA's were first tried in 1991 as part of a donor supported programme. They are trained by government and NGO vets for a period of one month before being deployed under the supervision of a vet. The whole CLA programme is supervised by vets appointed by the Veterinary Trust Board.

5.5 East Africa Livestock Sector: Information Needs and Management

Dr. Delia Grace, CAPE, AU-IBAR

A quiet revolution has taken place in the last half a century-the telematics revolution.

There is an unprecedented amount of information available in all sectors, supplied through a wide range of media and channels and the cost of processing, storing and transmitting information has been decreasing at the rate of 50% every 18 months.

With the growth in information capacity, a digital divide has developed between the information rich and the information poor. However, the divide is gradually narrowing as electronic equipment and access to information networks penetrate even into the remotest villages of Africa.

Notwithstanding the decrease in costs over the last 4 decades, information carries a price that often places it out of the reach of individuals. Although there has been increasing liberalization and privatization in what for most countries is a highly controlled and inefficient sector, the use of innovative communication technology is still constrained by imperfect markets.

Although information is not cheap for everyone, ignorance is more expensive.

Livestock disease is estimated to cost sub-Saharan Africa US \$ 2 billion per annum or twice what is earned from the export of livestock and livestock products. Most livestock diseases are predictable, preventable and curable. Tick borne diseases, trypanosomiasis, anthrax, foot and mouth disease and helminthiasis, the scourge of livestock production in the region are all preventable.

The problem is not the unavailability of inputs. A recent survey carried out by CAPE in Tanzania, Uganda and Kenya found that all livestock keepers interviewed used modern medicines. It is clear that the problem has less to do with the availability of inputs than the lack of knowledge on how to use them properly. Animals are not dying from disease but from ignorance, and information is the cure.

Lack of information also excludes East African farmers from domestic and international markets. Improved information systems allow producers to monitor export markets and negotiate prices with overseas buyers. It also allows producers to link more directly with consumers, and by decreasing the number of intermediaries in the marketing chain, increases their share of the final product value.

There are powerful lobby groups in the developed world that safe guard the interests of their farmers in ways that place producers in the developing world at a considerable disadvantage. This inequitable system can only be challenged by co-ordinated counter lobbying by developing countries. Access to information can facilitate the enactment of timely counter measures.

Information can help prevent spending on things that do not work. Many years of development interventions have generated large amounts of information on what works and what doesn't. By accessing this store of information government and development agencies can avoid repeating the same costly mistakes.

Regional organizations have a key role in information management. Chief of these is the creation of an enabling environment for the knowledge economy. This entails reducing tariffs and non tariff barriers to the information sector, provision of public good information and incentives for private good information, investment in education and infrastructure, encouraging competition and decreasing entry barriers to the information sector.

A regional organization can also build strong platforms for promoting members interests. Over 80% of the population of the East African Community are farmers and the majority of these keep livestock. Livestock provides food, income, fertilizer, draft power and status and the sector is a major contributor to GDP. However, partly through lack of understanding of the significance of livestock, the sector receives little funding from central government. A regional livestock desk would be well placed to take on a PR and marketing role, explaining to member governments and donors the importance of livestock.

Agreements entered into by members of the WTO together with SPS regulations set by the OIE militate against the development of external trade in livestock and livestock products in sub-Saharan Africa. In some cases, the SPS rules are out dated and unnecessarily restrictive.

Developing countries form the majority in both WTO and OIE and there is no reason why they should not lobby for SPS regulations that are more in line with current regulatory thinking and which are achievable for developing countries while meeting market requirements.

Information is power and as we move from material-based to knowledge-based economies, the importance of information systems increases. In the East African livestock sector information can prevent losses, maximize productivity, make internal markets function and open doors to external markets. Regional organizations such as the East African Community have a key role to play in this both through facilitating information systems that meet members' needs and by promoting members interests internally and externally.

5.6 Plenary discussion

Participants noted that the glaring deficit of reliable information in the livestock sector compromised the ability of East African states to make good policy decisions.

It was proposed that incentives be offered for the collection and dissemination of information. It was further recommended that data generated by existing projects be subjected to more careful analysis and that mandatory reporting on livestock production and disease incidence be enforced through out the region.

While acknowledging the need for better information systems, participants conceded that there was sufficient information available to formulate policies for the control of major livestock diseases.

5.7 Closing address by Dr. J Musiime, Director, AU-IBAR

Dr. J Musiime, Director, AU-IBAR closed the workshop with the following remarks:

He thanked the participants and organizers for making this a productive and enjoyable workshop. He regretted that he had not been able to attend the workshop from the start due to pressing engagements in South Africa that delayed his return to Nairobi.

He noted that the transformation of the Organization of African Unity to the African Union reflected a new era in the unification of Africa. The renewed efforts to integrate the East African States into a Community were testimony of this.

He assured the participants that AU-IBAR would study the recommendations of the workshop seriously and make every effort to facilitate their implementation.

He expressed satisfaction over the proposed establishment of an EAC desk to give the livestock sector in the region the attention it richly deserved.

He noted with gratitude that the participants at the workshop had worked with determination and commitment and that attendance right to the very end had been exemplary. The recommendations of the workshop he noted were the product of a truly collective effort.

He envisaged this workshop as the first in a series that would systematically address issues related to the integration and development of the livestock sector in East Africa.

Last but not least, he thanked the Secretary General of the East African Community for according this workshop its due importance by opening the workshop and participating in the initial session.

Thanks were also due to the organizers and the hotel management for the smooth running of the workshop.

He concluded his address by wishing the participants a safe journey back to their homes.

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- 1. Text of opening address by the Hon. Nuwe Amanyu Mushage**
- 2. Policy Harmonization Within the East African Community: How to go about it. Dr. Florence N. Kasirye**
- 3. Country Report: The United Republic of Tanzania- Mr.R.C.A Kweka**
- 4. Country Report: The Republic of Uganda-Dr.W.S.N Wesonga**
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- 6. Country Report: The Republic of Rwanda, Director of Livestock Development, Rwanda.**
- 7. Policy Issues Related to Control and Eradication of Transboundary Animal Diseases- Dr. G.R Thomson**
- 8. East Africa Livestock Sector: Information Needs and Management- Dr. Delia Grace.**
- 9. List of Participants.**

Annex 2

Policy Harmonization within the East African Community: How to go About It.

Paper Presented at the EAC Policy Harmonization Workshop:
1st - 3rd August 2002.
Lake Manyara, Tanzania

Dr. Florence N. Masembe Kasirye
(*BVM. MSc.*)

Policy has been defined as executive decisions as to the measures to be taken and **harmonization** as agreement of feelings, interests, and opinions.

It is certainly beyond the scope of this paper to delve too deeply into the subject of policy harmonization. However, some suggestive remarks should help to focus our attention on the context within which we are challenged to ensure that we support East Africa's regional integration. It is true that processes of globalization do present policy makers in Africa with a more complex environment within which to make choices. This necessitates the application of rapidly generated knowledge from increasingly inter-related domains. We must be careful not to construct or see the challenge in purely narrow technocratic terms but as a requirement for better informed policy and decision making.

The age of economic nationalism is over. The key lesson to be learned from these efforts of economic integration is that regional integration is a politically driven process underpinned by the recognition that sovereign interests are best advanced through regional actions. Sustained political commitment is, therefore, a necessary first step towards regional integration.

There is an essential and legitimate place for leadership in the process of regional integration. It is equally vital that it should not be a top down process that fails to bring people along. As an apparently largely successful experiment in new supranational political formation, the European Union (EU) may offer many lessons to the East African Community.

Globalization is here. In broad terms, the challenge to East Africa in this age of globalization is both political and technical. In protecting the interests of Africans and advancing their chances of well being and prosperity, African leaders and policy makers must ensure that the push towards regional integration translates into tangible benefits felt by ordinary Africans in terms of improved livelihoods.

Evolving political structures that ensure democratic accountability will be crucial to the long-term success of this venture. This means translating the local into the regional and translating the regional into the local, and making appropriate connections between the two, as well as between

them and the global environment. Civil society structures must evolve and adapt in response to Africa's new political landscape.

Here, we need not envisage the creation of whole new structures but the weaving together of existing local organizations in East Africa to address the challenges that EAC now faces. We need to give more attention to creating a conducive environment that will enable the emergence of institutions that support the East Africa's regional integration.

On the technical side, dedicated knowledge networks and expertise in East Africa have an important role to play. If we are to see positive results soon, all the key actors must work in concert towards agreed and clearly specified goals.

The vision already exists and has been articulated by East African's leadership. It is in effect a call for a new brand of Pan-Africanism. Now attention must turn to sharing the vision with all stakeholders and collaborators in the three countries. A clear and thorough stakeholder analysis needs to be undertaken in order to bring them on board and allow them to participate fully in the process of policy harmonization. This will further ensure that the needs, expectation, values and opinions of the end-users are addressed.

While celebrating the diversity of the East African region, our task must be to weave a rich tapestry of civil society passionate about and supportive of regional integration efforts. We need to create mechanisms of communication, collaboration and co-operation between the East African civil society and authorities and policy makers.

Among the most often cited constraints to greater intra-African trade is the inhospitable macro-economic environment associated with overvalued exchange rates and non-convertible currencies. Clearly, in the context of the East African region integration, the issue of overvalued currency is of less concern these days due to the widespread exchange rate liberalisation policies carried out in all the three countries. This, in addition to harmonizing trade policies, coordination of macroeconomic policies, covering fiscal, monetary and operations of all financial institutions, is a necessary condition for a smooth implementation of economic integration.

The adoption of Structural Adjustment programs (SAPs) starting in mid 1980s in almost all the three East African countries has led to openly adopting a liberalized (open economy) policy. The identical nature of policy instruments prescribed by International Financial Institutions (IFIs) across countries in the continent implies a defacto macro policy harmonization, at least at the level of intent.

In sum, although the importance of regional economic groupings is crucial for survival in the increasingly integrating world economy, addressing major obstacles such as macro policy coordination is a daunting task. It is important that both East African government's and their development partners appreciate this challenge. In particular, the latter can play a significant role by focusing on regional support programs.

National policy actions can have quantitatively significant inter-jurisdictional spill over effects, or externalities. These need to be taken on in decision-making processes to reach global optimum.

This can best be achieved by use of macro policy harmonization. Put differently, the justification for policy harmonization could be found from the fact that some developmental objectives can best be handled by centralized (or coordinated) organs than individual countries. This is because they might have externalities or there could be the possibilities of exploiting scaled economies.

It is noted that tax revenue is extremely important to all the three East African countries. Thus, policy harmonization needs to focus on such taxes, their importance and the associated costs of integration across members. Furthermore, structures of countries differ. This has implication for designing appropriate policies, which suits each case and introducing safeguard clauses when some countries are adversely affected by harmonization efforts.

Reducing trade barriers in economies where tariff revenue is one of the most significant sources of government revenue complicates the inter-temporal trade off between the apparent short-term loss of revenue and the expected long-term benefits emanating from regional integration. This has been cited by many countries as one of the major problems of regional integration in Africa. There is tension between surrendering the sovereignty of policy making and the gain that could be obtained from policy coordination. It is therefore logical to expect such tensions in East Africa.

Regional level policy coordination will also require an institutional framework set-up for monitoring and evaluating the agreed upon policy measures. This may require an elaborate institutional set up and an effective surveillance mechanism. Thus, establishing such institutional structure is very important.

The next task is to agree on major convergence criteria and ensure its implementation. This requires working on surveillance mechanism aimed at monitoring progress towards the agreed upon targets. This needs to be backed by enforcement mechanisms so that the convergence criteria are adhered to.

Governments could agree upon a common program administered by relevant (already existing or new) East African institutions. Co-ordination could involve intergovernmental surveillance over national policies, but should have no binding constraints on the exercise of nation sovereignty. In the latter model, coordination would result from peer pressure. It has been argued that the model that eventually prevails will be determined in the political arena, and economic considerations will be only one, and perhaps not the most important consideration. It is imperative to note that establishing the institutional framework for policy harmonization is a very difficult process, even for advanced European countries, let alone for countries in Africa.

The lesson that could be drawn is that establishing the institutional framework for policy harmonization and maintaining the surveillance mechanism to monitor the convergence criteria drawn is a daunting task. It requires:

- The submission of certain degree of autonomy in domestic policy making.
- Establishing an elaborate and transparent institutional mechanism (or harness the existing ones) both to design feasible convergence criteria and to use it as surveillance mechanism and
- A skilled labour force equipped with a research wing which could undertake rigorous periodic analysis.

Asymmetry of shocks is also often a problem of integration. One such problem relates to external shocks. Most African countries trade in primary commodities; hence they are vulnerable to external shocks, cyclical commodity prices and terms of trade deterioration. Such shocks may not be well correlated (could have asymmetric impact). There is therefore need for designing policy harmonization that takes such variation in policy responses to external shocks on board.

Thus to have effective policy coordination across countries, East African Governments should agree upon a common programme, develop an action plan and identify relevant institution(s) to administer it. It may be necessary to have a regional team to “keep the fire burning” and individual country teams to “blow the fire”. Success will require “total” agreement and commitment of all.

Annex 3

**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF WATER AND LIVESTOCK DEVELOPMENT**



**A COUNTRY REPORT PRESENTED TO THE
“WORKSHOP ON POLICY HARMONISATION IN
LIVESTOCK IN THE EAST AFRICAN REGIONS”**

HELD AT MANYARA HOTEL

1ST – 3RD AUGUST, 2002 – ARUSHA

*Prepared by:
Livestock Department*

Introduction

Tanzania is one of the Least Developed Countries (LDCS) with a per capita income of about US\$210 per annum. Covering an area of over 940,000km² the country has a human population of about 33 million estimated to be growing at the rate of 2.8 percent a year. The economy of the country is heavily dependent on agriculture (crops, livestock, fisheries and forestry) which account for 50 per cent of the Gross Domestic Product (GDP). Agriculture also provides 85 percent of the exports and is by far the largest employer.

According to current statistics (1998/99), Tanzania has about 16.4 million cattle, 11 million goats, 3.6 million sheep and about 47 million chickens (Annex I). Cattle are the dominant species accounting for about 75% of the total livestock units. About 58% of all farming households in Tanzania own poultry, 19% own small stock while 17% own cattle. About 80% of livestock keepers are also crop farmers while the rest are pastoralists. Small stock particularly sheep and goats consist of almost entirely of local breeds and have significant contributions to local consumption and incomes in the rural areas. Their small size, reproductive efficiency and relatively low cost make them attractive to smallholders with limited feed resources and capital.

The largest concentrations of small stock are to be found in more or less the same areas, which have high cattle numbers. The regions of Arusha, Singida, Shinyanga, Mwanza, Dodoma, Mara, Kilimanjaro have about two thirds of the total small ruminant population.

Livestock production in Tanzania is largely subsistence and is essentially for home market, with very small number of export of live animals and products.

Sheep and goats are kept by almost one-third of all rural households and are common throughout the country. It is estimated that 1.1million households keep these animals and they are mainly kept as savings (Bank on the hoof) and capital to be exchanged for either consumption or sold for cash. In livestock keeping communities, they are often associated with women and children but most times women have more say over these animals. For female-headed households small stock can often be the only primary source of cash incomes.

Most of the poultry found in Tanzania are the traditional village chicken and nearly all-rural households keep a few chickens on the backyards for home consumption or sale. One of the major constraints is the Newcastle disease. A heat stable vaccine has recently become available and expectations are that this will make it feasible for farmers to vaccinate their chicken without the need of cold storage. According to reports from Animal Diseases research Institute (ADRI), which is the current producer of the vaccine the demand has drastically increased. Any improvements in these chickens would have far reaching advantages to a large member of households in terms of nutrition and incomes.

PRODUCTION

The livestock sub sector in Tanzania contributes about 30% per cent of the agricultural GDP out of which 40% is from beef, 30% milk while poultry and small stock is about 30 percent. Livestock play various roles in livestock keeping regions but in particular they provide a relatively secure form of incomes, savings, and investment and as guarantee against crop failures.

It is estimated that about 500,000 cattle, 250,000 goats and about 150,000 sheep are slaughtered annually countrywide giving an average weight of about 180,000 tonnes, 30,000 tonnes and 15,000 tonnes respectively (Annex II). This is entirely used for local consumption with little or no export. The main reasons for the failure to export are due to the lack of suitably constructed and export accredited abattoirs as well as lack of disease free zones.

Many countries for fear of introducing diseases in their countries by importing live animals prefer to import meat. The present abattoirs at Mbeya, Shinyanga and Arusha are strategically located for export of meat to the South, West and North of Tanzania respectively. But for this to happen there is an urgent need to rehabilitate and upgrade them so that they conform to acceptable international standards.

Milk production in Tanzania is mainly from the traditional cattle. In year 2000/2001 a total of about 800 million litres were produced out of which about 500 million litres came from the traditional sector. This amount of milk from the traditional sector is hardly collected and processed, but usually consumed at the households level. Milk production is still very low and does not meet the growing demand resulting from increasing human population.

The present processing capacity of industries is about 500,000 litres per day but only operate at 30% producing about 150,000 litres a day.

The high degree of urbanization and population increase gives a better opportunity for increased milk demand and therefore production. Demand is therefore likely to continue increasing and given the constraints urban-based dairy farming faces supply is undoubtedly going to come from the traditional sector. In order for this to happen investments in milk collection, processing and distribution systems will need to be put in place.

The livestock sector within the EAC aims at promoting integration and sustainable livestock production through the coordination of animal disease control strategies, livestock products utilization in order to create employment, improve the living standards of the people and meet the region's food security objectives. The sector offers the region an opportunity for accelerated growth, diversification and increased trade. The ongoing problems of poor/ineffective control of trans-boundary animal diseases and communal grazing in some areas are associated with overgrazing and low nutritive value. Creating a

regionally harmonized animal disease free environment within which trade can flourish and expand is a necessary prerequisite.

In order for livestock growth to be beneficial to the poor, it must be broadly based and coupled with policies that are specifically aimed at strengthening the capacity of the poor to participate effectively in economic activities and thereby reduce poverty.

Trade and industrialization are the keys to effective utilization of the region's abundant resources.

The objective should be:

To facilitate the free flow of trade in livestock and livestock products while protecting human, animal health and the environment,

To harmonize sanitary measures including TBT in accordance with international standards, guidelines and recommendations of WTO/SPS and more specifically the International Office of Epizooties (OIE).

To facilitate consultations with the aim of achieving agreements on recognition of equivalence of specific sanitary measures in accordance with the WTO.

LIVESTOCK POLICIES IN TANZANIA

ANIMAL HEALTH SERVICES POLICY

The goal is the improvement of the well being of the people whose principal occupation and way of life is based on livestock farming. The focus of the policy (Agriculture and Livestock Policy 1997) is to commercialise agriculture so as to increase income levels, assure basic food security for the nation, and to improve national standards of nutrition by increasing output, quality and availability of food commodities.

The Government recognizes that effective control of animal diseases is crucial to the achievement of increased animal production in Tanzania. The main objective therefore is to diminish the prevalence of animal diseases and mortality of livestock and to protect consumers and livestock against diseases and pests:

The principle is that at farm level disease control is the responsibility of livestock keeper and he/she should buy the services, drugs, vaccines and inputs from the private sector. The role of government is limited to the control of epidemic diseases, sanitary control and inspection and fighting pests and diseases beyond farm level. Furthermore the use of low cost communal methods e.g. dips managed by users is promoted. The Government will continue to promote private sector in all dealings of the veterinary products and establishment of an effective regulatory framework.

Privatisation of delivery of veterinary services is gradual, mainly in urban and periurban areas where the services can easily be provided by the private sector in the rural areas it includes promotion and establishment of self financed para-veterinarians who will work under guidance and supervision of qualified veterinarians.

The Government will encourage and promote individual traders who would like to invest in livestock export business; in terms of know-how, animal export handling infrastructures and domestic/export market information.

The Government will strengthen zoo sanitary inspection of livestock and livestock products to check and control introduction of exotic diseases from abroad at major ports and border posts of entry and their spread within the country. This will include strengthening of facilities like zoo sanitary check points and quarantine facilities, holding grounds, stock routes etc.

Regulatory Framework and Institutional Reforms

Since 1980's there have been a number of reforms that have taken place. Those of immediate interest to the livestock sector are the ongoing civil service reforms, local government reforms and the rationalization of functions of the now MWLD. Under these reforms the veterinary staff in the districts are directly under the Local Government Authorities and there fore their day-to-day activities are supervised by the respective LGA's. Under such circumstances the Director responsible for veterinary services has no direct control over the field staff.

The other most important reform is the merger of Pharmaceuticals and Poisons Act and that Food (Control of Quality) Act both of 1978 into a single law. The two separate regulatory bodies will not only form one such body but it will also be an autonomous body to be known as the Tanzania Food and Drug Authority (TFDA). The main objectives of this are to streamline the regulatory functions for food and drugs and also to improve the efficiency of the authority.

Regulatory Framework

Delivery of Animal Health Services and control of diseases

- (i) The Food (Control of Quality) Act is responsible for the control of all foods intended for human consumption including food of animal origin. Although these are under the custodian of the Ministry of Health the veterinary staff are primarily responsible for the quality and freedom from diseases of meat and milk as well as veterinary drugs.

Quality control of Drugs and Animal Products

- (ii) We have two main Laws which govern drugs and food, namely, the Pharmaceuticals and Poisons Act and the Food (Quality) of Control Act. These laws are now being merged to form the Tanzania Food and Drug Authority Act (TFDA).

The “Animal Disease Ordinance” although old is still in many cases valid and it is still in use. It empowers the Minister or Director or any other authorized officer as the case may be to put measures into force for the control of diseases within or from outside the country as the case may be. The law is currently undergoing extensive review so as to reflect a number of changes (technological, economical, sociological political etc) taking place in the country.

The “Veterinary Surgeons Ordinance” is primarily responsible for the regulation of the professional activities of the registered veterinary surgeons in the country. Although not very explicit, the law provides for exempting non-veterinary surgeons to perform those functions, which the Minister may prescribe upon being advised by the Veterinary Board. Again this law is quite old and is also under extensive review. The review will be very clear on the delivery of animal health services of non-veterinary professionals but whose services the farmers require. Such service providers would be under the supervision of registered veterinarians. It is believed that this arrangement will improve the coverage and cost-effectiveness of animal health services delivery in the rural areas where the majority of the livestock is. This system is currently being used by the “Community Based Animal Health Workers” on a pilot basis and so far has shown some degree of success in the areas around Lake Zone (Lake Victoria) and Usangu Plains in Southern Highlands Regions.

Institutional Reforms

As is in many African countries, Tanzania is undergoing many institutional reforms including:

1. The rationalisation of government functions whereby the government retains only those considered essential and cannot be done by the private sector.
2. Downsizing the civil service.
3. Decentralization and empowering the local government authorities.
4. Land ownership.

LIVESTOCK MOVEMENT IN TANZANIA



LEGEND

-  Lakes
-  District boundaries
-  Routes

In view of this situation the Government has enacted the Land and Village Acts, which give legal powers to land ownership to individuals, villages among others.

In order to have effective control over livestock movement as well as knowing as to the origin of these animals the MWLD is currently working on a programme of identification (traceability) of all livestock in the country. This will enable to identify the geographical location of livestock as well as their owners.

Animal Nutrition:

Most activities under animal nutrition are in the private sector. Feed production is private, while research on feeds (pasture management and forage seeds) is a shared responsibility between the private and public sectors. Quality control of feeds, is a public responsibility.

Animal Welfare

Is a complex responsibility but a moral and legal one for the private sector. Regulations on the humane handling, keeping and transport of animals are the responsibility of government in conjunction with bodies such as the Tanzania Society for the Prevention of Cruelty to Animals.

MAJOR CONSTRAINTS TO LIVESTOCK DEVELOPMENT

Despite the large livestock population and vast rangelands resources which Tanzania has the livestock sector's contribution to agricultural GDP and national GDP are relatively low. Similarly per capita consumption of livestock products in Tanzania is equally low (meat:7kg., milk:20litres., eggs:11 per capita per year).

Major Constraints: that prevent the sub-sector from realizing its full potentials are:-

1. Inadequate and poor animal nutrition
2. High prevalence of diseases
3. Inadequate and poor animal health delivery services
4. Seasonal and poorly developed water resources
5. System and security land tenure
6. Lack of suitable credit facilities.
7. Poor farmers skills.

MARKETING

Marketing is a private sector function with some public sector regulatory responsibilities.

Policy:

The development of the livestock industry will only be possible if there are markets for its products. Livestock markets, marketing and infrastructures need to be improved and extended. The internal market has great potential to grow, because the population is growing, but the per capita meat consumption has fallen, PEM-malnutrition is high and the government Agriculture/Livestock Policy (1997) anticipates significant increases in local consumption.

The dairy industry is growing rapidly (the Tanzania Dairy Sub-sector, Rapid Appraisal Report, 1998), and that cooperatives, user groups and NGOs can assist in accelerating this growth.

Export Markets:

The problems in developing export markets in the short term are constrained by the presence of infectious diseases as well as lack of suitable marketing infrastructure in the country.

Recommendations

1. Harmonized legislation pertaining to sanitary measures and livestock trade will facilitate cross border trade and thus control of trans boundary diseases.
2. Facilitate the growth of the private sector e.g. private operators in the delivery of animal health services.
3. Harmonization of the quality control of drugs and food is equally important.
4. The EAC countries should/must make deliberate efforts to facilitate trade in animals and animal products without compromising animal health and peoples health and welfare.
5. Certification and documentation should be harmonized, simplified and only individuals or companies resident in the countries may be allowed to import/export.
6. National Veterinary Authorities should be strengthened to meet minimum OIE guidelines on disease control, surveillance, reporting and quality assurance.
7. The EAC must prepare basic guidelines for import and export of animals and animal products.

8. Since all EAC countries are signatories to WTO and SPS agreements the veterinary personnel must be trained in WTO/SPS issues with particular emphasis in risk analysis and risk management.
9. For a member country exporting imported products (re-exporting) must acquire clearance from the importing country and the exporting country should be responsible for issuing the required health certificates.
10. E. A. C. Member countries should adopt transparency in disease reporting.

Annex 4

UGANDA GOVERNMENT LIVESTOCK SUB-SECTOR POLICIES, STRATEGIES, PLANS TO BUILD AN EFFICIENT AND SUSTAINABLE ANIMAL INDUSTRY.

1.0 BACKGROUND

1.1 The Role of Agriculture in the Economy

The main stay for the Ugandan economy is agriculture and accounts for 43% of the National Gross Domestic Product. It also gives employment to about 80% of the country's 22 million people. Over 85% of Uganda's population lives in the rural areas where agriculture is the main contributor to their livelihoods. Farming is spread over the 12 agro-economical zones in the country that have varied topography, terrain but with largely a conducive climate. The various farming systems evolved as a result of the interplay of various ecological factors, social-cultural-economic factors and demographic pressures.

The agricultural practices in the country are largely subsistence in nature characterised by low input and low output. Transformation of the agricultural sector to more advanced and more developed agricultural systems will require overcoming many hindrances. Broadly and generally, the following hindrances to the agricultural development have been identified in Uganda:

- Inadequate land in certain locations due to increased population pressure;
- Declining soil fertility;
- Insufficient water during certain periods;
- Inadequate or relatively expensive farm inputs;
- Diseases and pest;
- Inadequate skills and knowledge;
- Inadequate capital and access to credit;
- Inadequate markets and market information;
- Poor policies and regulations;
- Poor infrastructure;
- Generally inefficient breeds;
- Inadequate technical staffing for critical disciplines,
- Post harvest losses and inadequate storage and processing facilities.

1.2 Current Status of the Livestock Industry in Uganda

The livestock industry accounts for 17% of the Agricultural Gross Domestic Product and 9% of the National Gross Domestic Product. The main species are cattle, goats, sheep, pigs, poultry rabbits and equidae. Their estimated populations are 6.359m cattle, 6.851m goats, 1.140m sheep, 32.638m poultry 35,000 to 50,000, rabbits and 28,576 equidae mainly the donkeys, some horses and a few hundred camels. The main livestock products include: milk, meat, eggs, hides and skins and their by-products.

The annual livestock production for the year 2001 was estimated at 900 million litres of milk, 107,000 tonnes of beef and 17,000 tonnes of goat meat and mutton, while the hides were 6,778,080 kilograms, goat and sheepskins was 927,000 kilograms and 206,600 kilograms respectively. Uganda earned US \$59.8 million from the export of hides and skins alone in the year 2000. Exports of beef, sausages, milk, offal, hone tips, gall stones, wildlife (cleared with CITES Certificates), day old chicks, some live animals is picking up. The limitations are on the international zoo-sanitary standards that need to be met for the various export countries.

The average *per capita* consumption of milk in Uganda is 22 litres, while that of meat is 5.6 kilograms. This is very low compared to what is recommended by the Food and Agricultural Organisation (200 litres and 50 kilograms respectively). The challenge, therefore, is to create an enabling atmosphere for the various stakeholders in the livestock industry so that the main constraints of animal health, animal production, animal marketing and the enforcement of compliance of the various veterinary standards and regulations are effected. This will lead to efficient production that is also qualitative and quantitative thus satisfying household incomes, Local, National, Regional and International demands.

2.0 . Constraints affecting the Livestock Industry.

These can be categorised functionally as :

- Institutional,
- Animal Health,
- Animal Production,
- Animal and Animal Products Marketing,
- Environmental.

➤ In general, there is still a high prevalence of the major animal diseases and pests due to an interplay of various factors thus leading to frequent outbreaks of diseases. This in addition to other production constraints leads to a low animal productivity / low income generation, low animal origin food security and a reduced opportunity of access to the markets at the local, national, regional and the international levels. The major animal diseases still prevalent here and possibly within the Region are :

Foot and Mouth Disease (FMD), Contagious Bovine Pleuro-pneumonia (CBPP), Lumpy Skin Disease (LSD), African Swine Fever (ASF), New castle Disease (NCD), Rabies, Gumboro, Trypanosomiasis, Brucellosis, Contagious Caprine Pleuro-pneumonia (CCPP).

Other important diseases among others include : the Tick Borne Diseases (TBD), Cysticercosis, Hydatidosis, Tuberculosis, Coccidiosis, Salmonellosis, Fowl pox, Black leg, Helminthiasis which are in the various livestock farming systems and the agro-ecological zones.

The following in summary are among the specific constraints of the livestock sub-sector in Uganda :

- Inadequate policy frame work for the specific prevention, control and or eradication of the major / trans-boundary epizootic, sporadic and or endemic animal diseases and pests as the case may be,

- Inadequate technical infrastructure for animal health, animal production, animal marketing and veterinary regulatory enforcement,
- Inadequate animal health, production, marketing and veterinary regulatory enforcement research,
- Inadequate technical staffing in certain disciplines at the central, local governments and the private sector levels,
- Inadequate advisory information / extension services to the farmers, consumers, processors, traders and other stakeholders,
- Outdated, inadequate, inappropriate and or inability to enforce the veterinary regulations,
- Low awareness of the public on animal disease and pest control strategies and the need for enforcement of the regulations,
- High levels of environmental degradation / degeneration in certain farming systems,
- Inadequate and or low quality feed resource availability during certain seasons (pasture, supplements feeds and water),
- Inadequate knowledge and skills for farming,
- The predominant pastoral and communal farming systems in Uganda and the Region tend to ignore the basic animal health, animal production, animal marketing and the veterinary regulatory principles. These systems among others reserve and spread trans-boundary and or epidemic animal diseases.
- Inadequate access to the feeder roads and modern communication systems,
- Inadequate markets, marketing infrastructure and marketing information,
- Ineffective, poor, low co-ordination / harmonisation of the enforcement of the existing veterinary standards - regulations - measures and or codes Locally, Nationally in Uganda, Regionally (the draft Sanitary Standards, Inspection and Certification Code) and Internationally (OIE, CODEX, WTO-SPS).
- Inadequate funding for the re-investment in the livestock sub-sector at the local government, central, Regional, International and the private sector levels.

2.0. The General national economic legal and policy framework that influences the national development :

Since 1986, Government has been putting in place macroeconomic policies and public service reforms aimed at creating an enabling environment for the general economic development and the improved delivery of public goods and services. These macro-economic policies include the :

- privatisation,
- liberalisation,
- divestiture,
- public service reform to remove duplication, fragmentation, rationalise staffing and improve performance (result oriented)
- decentralisation and the democratisation of society.
- Universal Primary Education (UPE),
- In addition, Government formulated the Poverty Eradication Action Plan (PEAP) aimed at improving the incomes and welfare of the poor, who constitute 70% of the population. One of the pillars of PEAP is the Plan for Modernisation of Agriculture (PMA).
- The PMA is a holistic strategic multi-sector policy framework aimed at poverty eradication by transforming subsistence farming to commercial market oriented farming (at a profit) since 80%

of the population gain their livelihood and 45% of the NGDP is from the Agricultural Sector while 19% of the NGDP is from the livestock sub-sector.

2.1. General legal and policy framework affecting the livestock sub-sector.

As a result of the changes in the national legal and policy framework (New Constitution of 1995) and the Public Service Reforms of 1998, the role and functions of the central, local government and the private sectors in the various Sectors changed. Equally, those of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) have changed. MAAIF, the Directorate of Animal Resources, (the Departments of; Livestock Health and Entomology, Animal Production and Marketing, Fisheries Resources) are no longer involved in direct service delivery. The main roles are to create an enabling and conducive environment so that other players participate in the provision of the various service to clients in the livestock industry. MAAIF, the Directorate of Animal Resources and its Departments mainly policy formulate, plan for the nation, set standards, control epidemic diseases and pests and enforce the compliance of regulations. Subsequently, some functions of MAAIF, the directorate are now divested to other appropriate institutions, decentralised to local governments, and other private sector establishments.

2.2.1. Summarised main functions of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) as related to the Directorate of Animal Resources.

The Mandate of the Directorate is **“to support, promote and guide livestock production, processing and marketing to enable the country achieve and maintain quantitative and qualitative self sufficiency in animal products and by-products for domestic consumption, food security and export”**.

The Directorate of Animal Resources is responsible for the following functions as interpreted for the animal sub-sector:

- i. Policy formulation for the sub-sector,
- ii. Planning for the sub-sector,
- iii. The setting of the animal standards,
- iv. The control of animal epidemic diseases and pests,
- v. The enforcement of veterinary laws and regulations in the country,
- vi. Technical backstopping; support supervision; monitoring and evaluation; training of the local government and other service provider personnel in animal health, animal production, animal marketing and veterinary regulatory enforcement.
- vii. Coordination and harmonization of the National Livestock Development Projects and Programs.

The Directorate is composed of the following Departments and their Divisions :

i. Department of Animal Health and Entomology :

- The Division of Animal Disease Control,
- The Division of Veterinary Inspection and Regulations,
- The Division of Entomology.

ii. Department of Animal Production and Marketing :

- The Division of Animal Nutrition,
- The Division of Dairy and Meat,
- The Division of Public Health and Marketing,

iii. Department of Fisheries Resources :

- The Division of Fisheries Production,
- The Division of Fisheries Regulations and Control.

2.2.2. The following agro-related functions have been divested to the National Agricultural Research Organization (NARO) under MAAIF:

The research identification, development / generation and dissemination of technologies in animal, crop and fisheries.

2.2.3. The following functions have been decentralized to be implemented by the Local Governments for the Agriculture Sector in general ;

- i. Agricultural extension for crops, animals and fisheries under coordinated by MAAIF based National Agricultural Advisory Services (NAADS),
- ii. Entomological services and vermin control,
- ii. Design of development plans,
- iii. Land administration and surveying,
- iv. Management of forests and wetlands,
- v. Control of soil erosion, bush fires, local hunting and fishing, and
- vi. Licensing of produce buying (including animals and animal products).

2.2.4. The Private Sector, Non Governmental Organizations' and the Private Sector oriented Development Partners role :

Some functions that were previously undertaken by the animal related public sector have been privatised. At present the private sector is playing a leading role in undertaking most commercial activities including:

- production, processing and marketing of livestock and livestock products and inputs
- production and distribution of stocking materials including artificial insemination.
- investment in water harvesting technologies
- delivery of veterinary clinical and advisory services.

3.0. Specific Animal Industry Policies in Uganda (livestock, pets, birds, zoo animals).

3.1. The general, direct Animal Resource Legal framework :

The following legal framework in addition to the general ones indicated earlier govern the animal industry :

All the existing veterinary regulations however old they are were formulated to address certain constraints through specific strategies. Some of the policies and or regulations have been reviewed and amended while others have not thus leading to problems in the animal industry. Most of the old regulations do not reflect the progressive world wide related policies, regulations, codes and measures that aim at efficient production for safe and qualitative regional and world markets.

The existing legal framework is as follows ;

- i. The Animal Diseases Act, 1964
- ii. The Rabies Act , 1964
- iii. The Hides and Skins Trade Act, 1964
- iv. The Veterinary Surgeons Act, 1970
- v. The Animal (Straying) Act, 1964
- vi. The Animal (Prevention of Cruelty) Act, 1957
- vii. The Cattle Traders Act, 1964
- viii. The Cattle Grazing Act, 1964
- ix. The Dairy Industry Act, 1998
- x. The Public Health Act, 1970
- xi. The Uganda Code of Meat Inspection, 1973
- xii. The Agricultural Chemical Board Statute,
- xiii. The Uganda National Bureau of Standards Statute,
- xiv. The Pharmacy and Drug Act 1970 and its amendments,
- xv. The National Drug Policy and Authority Statute, 1993
- xvi. The Animal Breeding and Policy Act, 2001
- xvii. The Uganda Trypanosomiasis Control Statute,
- xviii. The Draft Bill of the Animal Feeds,
- xix. The Draft East African Sanitary, Inspection and Certification Code, 2000
- xx. The Office International des Epizooties – International Animal Health Code,
- xxi. The World Trade Organization’s Sanitary Phytosanitary Measures,
- xxii. The Codex Alimentarius,

3.2. The current policies that influence the animal industry in Uganda.

3.2.1. Animal Disease Control Policy :

After the New Constitution and the Civil Service Reform, MAAIF and thus the Directorate of Animal Resources remained with the roles and functions as identified in Section : 2.2.2.

The central government remains with the control of animal epidemic diseases and pests and veterinary regulatory enforcement. Under this existing policy, Central Government is responsible for the control of :

- Rinderpest Disease,
- CBPP,
- FMD,
- Rabies Disease,
- Lumpy Skin Disease was incorporated recently due to its epidemic nature.

Here, the government is responsible for the mandatory reporting, field investigations, laboratory diagnosis, quarantine imposition and enforcement, surveillance, vaccinations and the general animal and animal products movement control. However, the ideals of the Animal Diseases Act are not fully met due to policy, old and inapplicable regulations, inadequate investigative and enforcement technical infrastructure, low awareness by all stakeholders and inadequate funding.

Other than **Rinderpest disease**, no other Disease has as yet under going the **eradication / disease free zoning policy**. The current policy on major diseases aims at prevention and control. FMD and CBPP are candidate diseases which are being lined for eradication through Regional approach like for Rinderpest.

Bovine Spongiform Encephalopathy (BSE) Disease is also formally under surveillance since 1996 . If by the end of 7 year, they're in no indigenous case of BSE, and as long as we maintain the other restrictions related to BSE, we shall achieve an BSE free status.

The Directorate is formulating a new Animal Disease Control Policy / strategy that will identify which diseases will be prevented, controlled or eradicated (Disease Free Zoning or Regionalizing). This strategy will need backup legal framework, technical infrastructure, financial, emergency preparedness contingency plans and an effective veterinary regulatory enforcement system. Regional co-operation through harmonisation of similar animal disease and pest control policies for : mandatory notification, field and laboratory investigations, animal quarantine set up and movement control, surveillance, awareness, inspection and certification, vaccinations, test slaughter, pest control etc.

The Directorate is also responsible for the investigation and control of new and emerging diseases as seen for BSE.

The local governments are responsible under the support supervision of the Directorate for the control of the sporadic and endemic diseases and pests. The private sector has its roles too as defined by the National Policy for the Delivery of Veterinary Services ;

3.2.2. The National Policy for the Delivery of Veterinary Services :

The purpose of the Policy :

To improve the delivery of veterinary services with an overall goal to increase production and productivity of livestock on small holder farms in Uganda.

The Policy clearly spells out the roles of Central Government, Local Government and the Private Sector in the delivery of veterinary services.

Important issues in the livestock sub-sector related to this policy :

- Inadequate delivery of livestock health services including access to supply of veterinary drugs, credit and marketing outlets for livestock products,
- Inappropriate and ineffective veterinary legislation (and enforcement),
- Inadequate government budgetary provision to cater for operational costs including staff allowances,
- Consequent to the Decentralisation Act 1997, administrative linkages between the central government (ministry headquarters) and local governments (districts) weakened. It is difficult to enforce legislation governing livestock movements and the reporting and monitoring of Notifiable diseases.

Outputs of the Policy :

- Provision of adequate and effective veterinary services national wide including remote areas,
- The establishment of an effective private sector for the delivery of veterinary services,
- Effective delivery of public good services,
- Establishment of appropriate public and private sector roles,
- Development of appropriate legislation and veterinary service standards.

The legal frame work expected to be amended to implement the above policy is :

The Veterinary Surgeon Act 1970 is expected to be converted to the *Veterinary and Para-veterinary Professions Act* thus legalising veterinary private practice, also to formally recognise the para-veterinarians.

The Animal Diseases Act 1964 to strengthen penalties and also uplift veterinary inspection fees for self-sustenance.

The Cattle Traders Act 1964, to incorporate the decentralised powers for licensing and the fees.

The Animal (Prevention of cruelty) Act 1957, to introduce a wider scope on animal welfare.

3.2.3. The National Tick Control Policy ;

As part of the Animal Diseases Act rules, it aims at setting strategies, standards and regulations for the control of ticks and tick borne diseases in a rational manner. It takes on board new technologies involved in the control of ticks and tick borne diseases.

3.2.4. The Draft National Veterinary Drug Policy :

This will ensure that the generation and implementation of the veterinary drug policy and the medical drug policy are by the respective Ministries in a participatory manner. Each respective policy will be resident in the parent ministry but regulated by the National Drug Authority (NDA). The veterinary national drug policy in general aims at the manufacture and availability of adequate; cheap; safe; efficacious drugs that shall be used in a rational manner.

The veterinary policy areas in the draft policy are :

- Animal Drug Supply,
- Quality Assurance,
- Safe Disposal of Expired or Unwanted Veterinary Drugs and Materials,
- Research in Veterinary Drugs and Ethno-veterinary Medicines,
- Veterinary Drug Information Management System,
- Correct Usage of Veterinary Drugs,
- Licensing of Persons Handling Veterinary Drugs.

3.2.5. The Control of Epidemic Diseases and Pests under the PMA.

Policies and constraints are being examined and strategies and work plans put in place for Agricultural Sector Development.

3.2.6. The Animal and Fisheries Regulatory Services under the PMA.

Policies and constraints are being examined and strategies and work plans put in place for Agricultural Sector Development.

3.2.7. The animal and animal products residue monitoring and control plan.

Being developed to quality assure for domestic and export purposes.

3.2.8. Animal Feeds Policy

A policy on the animal feed industry has been formulated. Its main objective is to promote and regulate the production, manufacturing and marketing of animal feeds. It also defines the roles to be played by different stakeholders in the animal feeds industry. The major function of the public sector will be regulation through setting standards. It will be the responsibility of the department of Animal Production and Marketing and National Bureau of Standards to monitor the quality of compounded animal feeds.

3.2.9. The Meat Policy

Whereas MAAIF has had several programmes for the development of the meat industry in the past, there has been no clear policies to guide the production, processing and marketing of meat and meat products. To revive the development of the meat industry, a Meat Production master Plan Study was undertaken and as a result of its recommendations, a Meat policy has been developed within the broad framework of PMA.

The major objective of the policy will be to provide for sustainable development of the meat industry to satisfy the national meat requirement and for export. The policy will provide for guidance on production, processing and marketing of meat and its products.

The implementation of the policy will be the responsibility of both the public and private sectors. The government will play facilitating and regulatory roles and the private sector will be a major stakeholder of developing the industry.

3.2.10. Animal Breeding Policy and Act (2001)

In the past, efforts in the livestock sector were biased towards milk and beef production from commercial purposes, without taking into consideration the need to improve and conserve animal genetic resources. The animal breeding policy to guide the sustainable utilisation of livestock genetic resources (including conservation and improvement) was formulated.

The Animal Breeding Act has been enacted. It provides for the promotion of sustainable animal and fisheries genetic improvement and regulations, control, marketing, import, export and quality assurance. It offers guidelines in breeding strategies.

Under the Act, the Artificial Breeding centre will become an autonomous body called the Animal Genetic Resource and Data Bank, and some government farms under its jurisdiction will be utilised for breeding, selection and conservation of animal genetic material.

3. 2.11.The Dairy Industry Act (1998)

In 1993 a Dairy Master Plan was completed and one of its recommendations was that government should withdraw from direct participation in milk production and commercial processing and marketing. To streamline the liberalised milk marketing, the Dairy industry Act of 1967 was revised, and a new one, The Dairy Act of 1998 drawn. The act provided for the Dairy Development Authority which is a regulatory and development arm of the industry while Dairy Corporation became a limited liability company to operate as a commercial company dealing in milk processing and marketing.

3.2.12 Improvement on the Delivery of Agricultural Advisory Services

A policy on the delivery of veterinary services has been formulated. In addition, National Agricultural Advisory Services (NAADS) has been introduced. Both are to cater for appropriate advisory services to stakeholders.

3.2.13. Policy on Marketing Livestock and Livestock products.

One of the major constraints to livestock development is marketing and lack of storage and agro-processing facilities. To improve farmers' access to local and international markets, there is need to formulate appropriate marketing policy. It has been identified as one of the priority areas for immediate intervention under PMA. A committee has been constituted to develop strategies for marketing and processing agricultural produce and products.

3.2.14. Pasture and Range lands Policy

Pastures and Range lands are essential factors for livestock production. However, their productivity is declining due to improper utilisation and management. In the cattle corridor area, land degradation has occurred due to overgrazing. PMA emphasises sustainable utilisation and management of natural resources through increasing and sustaining the productivity of land under livestock production. The range land policy will entail sustainable management practices including measures to reverse land degradation, control of bush burning, weed encroachment.

4. Programs currently running in the Directorate in addition to the recurrent budget to fulfil its aims and objectives :

In addition to formulating policies MAAIF retains support services to the Local Governments. MAAIF Plans and coordinates projects within the country. Currently, the following Projects support Livestock Health Initiatives.

- Pan Africa Control of Epizootics (PACE)
- Farming in Tsetse Controlled Areas (FITCA)
- Tsetse Fly Eradication In Buvuma Islands
- Foot and Mouth Disease (FMD) Control

Under these Projects the following are being undertaken.

4.1. Pan African Control of Epizootics (PACE):

- Efforts to eradicate Rinderpest and declare Uganda Free of the disease. This is the most feared disease in Livestock history.
- Control of Epidemic diseases like CBPP and other Epizootics.
- Support to Privatisation of Veterinary Services.

➤ Enhancement of Disease surveillance, Diagnosis and reporting.

4.2. Farming in Tsetse Control Areas (FITCA)

The FITCA Project supports farming in Tsetse infested areas of South eastern Uganda. The Project aims to:

- Control tsetse flies
- Reduce sleeping sickness in humans
- Reduce prevalence of animal trypanosomiasis
- Optimise use of reclaimed land
- Undertake research in tsetse and trypanosomosis control.

4.3. Tsetse Control in Buvuma Islands:

MAAIF is currently running a project aimed tsetse control in Buvuma Islands. This effort will not stop in Buvuma Islands but is to spread to other areas of Uganda.

4.4. Emergency FMD Control Project:

Following an outbreak of FMD MAAIF launched an emergency FMD Control. It will see vaccinations against FMD undertaken in the country.

4.5. Animal Health Research Centre Project :

Reporting, the investigation and surveillance on animal health.

4.6. Strategic Interventions to promote export of livestock and livestock products

Government is concerned that, despite the natural resources and potential Uganda has, the country remains a begging nation due to low foreign exchange earnings. Therefore, GOU has identified some strategic interventions to promote export of selected enterprises. The objective is to improve peoples' income and welfare by increasing Uganda's production, processing and marketing of a number of commodities so as to increase the country's export opportunities which have been created through the Africa Growth and Opportunity Act (AGOA) of the United States, the ACP-EU trading arrangements, World Trade Organisation (WTO), the Middle East and other trading arrangements. In the livestock sub-sector, the following are the priority enterprises:-

- i. Goat production
- ii. Beef production
- iii. Milk production and processing
- iv. Hides, skins and leather products.

The following strategies will be implemented:

(i) Address production constraints by;

- Improving breeding through use of improved germ plasma and breeding technologies
- Increasing herd off-take by improving feed resources (range and pasture, fodder conservation)
- Zoning (stratification) of beef production operations based on feed resources
- Increasing availability of water for livestock by constructing at least one valley tank per parish in the drought prone cattle keeping areas, and one strategic reservoir per sub-county.
- Intensifying disease control programme by effective surveillance and diagnostic services, vaccination programmes, control of movement of livestock and its products and control of tsetse flies and ticks.
- Establishing of disease-free zones, for specific diseases like Foot and Mouth Disease, Rinderpest and Contagious Bovine Pleuro pneumonia (CBPP), targeting production for the export market.

(ii) Address marketing constraints by:

- Establishing appropriate infrastructure for processing and marketing of meat and its products (in markets, slaughterhouses, abattoirs, stock routes, quarantine centres) in collaboration with private sector and local governments.
- Strengthening sanitary regulations and veterinary inspection
- Formulating and implementing a meat policy to guide livestock development and marketing

The target of strategic interventions is to increase export volumes and value of meat, milk, hides, skins and leather products to a combined export value of US \$282 million per annum by 2006.

Target Production and earning

Item	Current Production	Targeted Production per year	Target for Export	Expected Earnings ('000')US \$
Beef	106,000 MT	150,000 MT	30,000 MT	60,000
Goat Meat	17,000 MT	26,000 MT	8,000 MT	16,000
Milk	700 million litres	1.4 bn litres	400 million Ltrs	120,000
Hides	6.7 Million KG	15 Million KG	10 million KG	80,000
Skins	1.1 Million KG	2 Million KG	1.5 million KG	6,000
Total				282,000

MAAIF will be responsible for the overall co-ordination of this programme. However the key players during implementation will include the private sector, Local governments, Extension staff, Chiefs and Local Council . The private sector will include farmers, processors and traders.

4.7 Capacity Building for High Yielding Livestock Germ plasma Project

The major objective of this project is to create capacity in Uganda to produce, high yielding animal breeding materials locally, cheaply so that they are affordable by the rural farmers. This will save the country from expenditure of its scarce foreign exchange resources. In 1998, as an example, importation of day old chicks was worth US \$3 million while current demand for importation of Improved goats and pigs is of similar values annually.

The Project shall be run under the following components.

- (i) Cattle Improvement Component, with the following sub-components:
 - Artificial Insemination services
 - Multiple Ovulation and Embryo Transfer Scheme
 - Village Bull Scheme
 - Pasture Seed Production
- (ii) Improved Pig Production
- (iii) Poultry Production, and
- (iv) Goat Production.
 - Goat semen collection and breeding does.
 - Support to the private sector.

This project is financed by the KRII Japanese fund in Bank of Uganda. Uganda Shs. 2.49 billion has been provided. The private sector, National Animal Genetic Resources Centre, Research and Training Institutions will play a leading role.

4.8 Provision of Water for Livestock

Water is a major resource for livestock production. Although Uganda is endowed with both surface and underground water resources, of recent availability and distribution of water for production has become unreliable and erratic. MAAIF is collaborating with the Ministry of Lands, Water and environment in developing strategies that will provide adequate water for livestock, especially in districts that are prone to prolonged drought.

4.9 Bull Scheme

The bull scheme was a strategy introduced under the Forage Development component of the Livestock Services Project (LSP) and continued with funds from the Poverty Eradication Action programme (PEAP). The main objective of the Bull scheme is to avail quality dairy bulls to organised livestock production farmers' groups in order to upgrade their animals through cross breeding especially those farmers in areas where it is not possible to use artificial insemination

Under the PEAP eleven districts have benefited and these include Masaka, Sembabule, Luwero, Mbale, Iganga, Tororo, Hoima, Soroti, Masindi, Kamuli and Kibaale .

4.10. Restructuring of Government Stock Farms:

As a result macroeconomic and civil reforms, a policy was proposed for the sustainable and efficient utilization of the government stock farms. Some farms (Njeru, Kasolwe, Nshaara and Rubona) have been divested to the National Animal Genetic Resources Centre and Data Bank to be used for breeding technologies. Some farms such Mbarara Stock Farm and Nakyesasa have been divested to NARO for undertaking livestock based research. Also some farms have been divested to districts to carry out demonstrations on livestock production. For the private sector to undertake extensive production to target the export market, some ranches have been privatised. For example, Lusenke Stock farm has been given to Uganda Beef Producers Association. The remaining farms have been vested in the hands of the Land Commission. A one-stop centre has been established in the Office of the Prime Minister for easy access of information by interested investors.

5. FUTURE LIVESTOCK DEVELOPMENT PROGRAMMES.

5.1. The East African Control of Epizootic Diseases (Under drafting)

For FMD and CBPP control and eventual eradication.

5.2. The Livestock Development Project

Arising from the Meat Production Master plan Study (MPMS) OF 1998, several investment proposals were formulated and prioritised. MAAIF, with support of African Development Bank, is formulating a Livestock Development Project. The key objective of the project is to rehabilitate and develop infrastructure for production, processing and marketing of livestock, meat and meat products.

It will have the following components / sub components :

- Livestock Health,
- Tsetse control,
- Tick and Tick Borne Disease Control,
- Veterinary and regulatory support,
- Livestock restocking and genetic improvement
- Development of livestock data base
- Rehabilitating the livestock markets infrastructure
- Water for production
-
- Pasture improvement

5.3. The Strategy for Development of Small Ruminants and Rabbits

The Arabic Bank for Economic Development of Africa (BADEA) funded a strategy study of the Development of small Ruminants and Rabbits in Uganda. It identified 10 investment proposals for funding at a cost of US \$ 17.7 million. GOU is expected to finalise the negotiations with BADEA.

The overall objective of the programme is to increase income from small ruminants and rabbits through caring and trade as well as improving nutritional status of resource poor households while ensuring sustainable use of the environment. It is in form of 4 investment proposals/programmes

5.4. Pan African Tsetse and Trypanosomosis Eradication Campaign (PATTEC):

Uganda will soon launch the Pan African Tsetse and Trypanosomosis Eradication Campaign (PATTEC).

Under this programme, Uganda expects its rid itself of the menace of tsetse flies which is responsible for Nagana and Sleeping sickness. Reclaimed areas will be available for crop and livestock farming.

5.5. Veterinary Diagnostic and Quarantine Centre :

Negotiations are ongoing with the Government of Japan (through JICA) to build a modern National Referral Veterinary Diagnostic, Analytical Laboratory and an International Animal Quarantine Centre. This facility will provide part of the necessary technical infrastructure required to facilitate Uganda's access to Regional and International markets with regard to animal trade.

5.6. Apiculture:

Uganda's Bee Farming Industry has very higher potential. However, shortcomings which can be overcome still prohibit access to trade in honey. Efforts to Standardise and certify Uganda Honey have been taking place. These efforts are ongoing. In the near future Uganda Honey should enter the World Market competitively.

5.7. Sericulture:

This Industry had earlier on set up enters in S.W and S.E which were serving farmers. The Centres collapsed. However, a new initiative has been under taken. Eight centres have been revived.

Capacity to produce silkworm eggs has been developed. Farmers are currently provided with eggs that are produced locally. A Silk processing factory is being constructed near Kawanda.

6.0 CONCLUSION

The livestock industry has the potential to increase its contribution to Uganda's economic development and poverty eradication. If the constraints are addressed, the export market will readily be available. This calls for concerted standardised - harmonised – co-ordinated livestock policies and regulations for national, regional and international purposes in liaison with all stakeholders at the donor level, the public and private sectors. When all this is done, the sky is the limit!

Annex 5

POLICY HARMONISATION ON LIVESTOCK IN THE EAST AFRICAN REGION

Kenya Report

Introduction/Background

- Kenya covers 587,000KM²
- Land area is 57.6 million hectare
- High and medium potential land (HMPL) covers about 17% of the land
- The arid and semi arid semi arid lands covers about 84% of the land and support about 17% of the population
- Prior to 1980's, the Government highly subsidized the delivery of animal health services. After 1980 agricultural sector and overall economy was performing poorly.
- Studies on agricultural sector review was carried in mid 1990s to underscore the factors leading to the observed poor performance of the agricultural sector.
- Structural adjustment programmes were introduced from mid 1990s through advise of world bank and IMF

Current situation

East African Community has harmonized sanitary and phytosanitary measure (SPS) and institutional framework for animal health and production in line with guidelines of World Trade Organisation (WTO), recognized international standards setting bodies, namely OIE, codex alimentarius commission and IPPC.

- The measures include
 - standards for trade facilitation in animals, animal products and plants within and outside E.A
 - harmonized regulations for livestock breeding and multiplication covering semen production, livestock multiplication Centres and hatcheries
 - standards for farm inputs (in progress)

A subcommittee within the EAC's committee on agriculture and food security (AFS) consisting of Directors of Veterinary Services, Livestock Production and Fisheries and relevant institutions of the partner states has been proposed with the following mandates/terms of reference

- Oversee implementation of EAC SPS measures and articles 107 and 108 of the EAC treaty
- Formulation of EAC regional policies for the surveillance, control and eradication of transboundary livestock diseases
- Approve and monitor regional transboundary livestock diseases control programmes
- Develop mechanisms for regular exchange of information of the status of livestock diseases and vectors in the EAC region

- Regular review of the zoo-sanitary measures to ensure effective disease prevention and control in the region
- Needs identification and modalities for research and development with respect to animal diseases and livestock breeding
- Formulate policies for surveillance and control and eradication of fish diseases and promotion of research and development in fishing industry in the EAC region.

2.0 Lessons learnt to date:

2.1 General issues:

- The beneficiaries were not involved in the decisions on reforms.
- The government was not able to absorb the personnel trained on animal health services delivery.
- There is inadequate capacity to implement sanitary and phyto sanitary measures

2.2. Policy and Legal framework:

- Policies, legal frameworks and regulation mechanisms were not suitable for private sector participation in services delivery.
- The reforms were hurriedly done and the private sector was not adequately developed to undertake services delivery. Liberalization of the industry has not gone hand in hand with improved provision of related services. In addition, the economy is not growing adequately to be able to absorb the resultant demands such as high costs of services.
- There is inadequate capacity to deal with calamities such as droughts and floods.
- There is inadequate capacity to deal with price distortions arising from liberalization of marketing of various livestock products.

2.3 Management of Livestock

- Over 60% of each of the livestock species are in the ASAL areas, except the pigs while the rest are in the medium and high potential areas.
- Decreasing land ratios are a major challenge; it has led to trend where farming systems are changing from extensive to intensive
- Deficiencies in the quality and quantity of available feed as well as high cost due to imported ingredients used.
- Difficulties in the access to and high cost of A.I. services to small-holders following privatization of the services. This has led to some inbreeding.
- In some cases, use of improperly selected bulls for breeding purposes.
- Shortage of breeding stock. Current policy is inadequate to address all aspects of livestock breeding.
- Increasingly, non-conventional livestock are gaining importance towards domestication and these include ostrich, crocodiles, guinea fowls and quails.

2.4 Management of Diseases:

- Institutional effectiveness to prevent, survey, diagnose and control animal diseases and pests decreased resulting in resurgence of notifiable transboundary diseases such as foot and mouth disease (FMD), Contagious Bovine Pleuropneumonia (CBPP), Rinderpest, Rift Valley Fever and pests.
- The government could not deliver animal health services efficiently as a result of poor performing economy necessitating reduction in budgetary allocations to the agricultural sector.
- High cost of drugs, vaccine and sera and inadequate disease control
- Improper use of veterinary drugs, vaccines and sera, leading to residue levels in meat, milk and milk products and resistance.

2.5 Trade (Livestock marketing):

- Trade in livestock and their products was severely hampered as a result of presence of animal diseases and pests.
- Information management systems were inefficient for effective participation by the stakeholders in animal health and marketing
- National committee that deals with World Trade Organization Agreements and representation by livestock experts on that committee is inadequate leading to distortions arising from liberalization of marketing of various livestock products.
- Liberalization had a negative impact on the livestock and livestock products marketing systems.

2.6 Transboundary animal diseases

- Include FMD, Rinderpest, CBPP, Rift Valley Fever, Lumpy Skin Disease, Tsetse flies and trypanosomiasis
- The transboundary diseases control has been hampered by inadequate resource allocation and ineffective harmonization of their control in E.A.C. region.
- This impacted negatively on food security and livestock trade within and without the country
- Kenya is participating in PACE programme which aims to enhance animal health delivery services

3.0 Current situation

3.1.1 Milk

- Prior to liberalisation K.C.C. dominated market
- Other firms have come up
- They process about 12% of milk produced

3.1.2 Red meat industry fully liberalised

- Red meat industry fully liberalised
- Government role is regulatory

3.1.3. Poultry meat and eggs, pork and pork products

- There are marketing problems among non ruminant livestock

3.1.4. Hides and skins

- Hides and skins industry is fully liberalised
- Government have regulatory role

3.1.5. Bee-keeping industry

- The market is liberalised
- Honey and bee wax are the main byproducts.

3.1.6. Emerging livestock

- Ostriches and crocodile are the main in this subsector

3.1.7 Livestock feed industry

- This industry is fully liberalised
- The market is marked with high prices and poor quality

3.2.0 Livestock diseases

3.2.1 Policy and legislation development

As a result of the lessons learnt, the government together with the relevant stakeholders has initiated review, harmonization and documentation process of various policies and legislation, which will effectively serve the interests of stakeholders in the delivery of animal health services.

The policies under review include:

- **Disease and vector control:**

The focus is on-prevention, control and eradication of livestock diseases and pests involving participation relevant stakeholders.

- **Hides and skins improvement and leather development:**

Value adding of hides, skins and leather

- **Veterinary public health:**

Provision of quality assurance and safety in foods of animal origin in collaboration with relevant stakeholders

- **Laboratory services:**

The focus is on capacity for diagnosis, quality assurance of products and regulation of services delivery.

- **Kenya Veterinary Board:**

To regulate veterinary education and services delivery

- **Animal welfare**
The emphasis is on – responsible and humane care, use and management of animals with the involvement of relevant stakeholders.
- **Animal identification:**
Use of appropriate technologies for animals' identification
- **Veterinary projects planning and management:**
The thrust is to strengthen project cycle management and institutionalize impact assessment with active involvement of relevant stakeholders
- **Animal breeding:**
The policies are focused on strengthening management and regulatory framework, delivery of breeding services, training and extension and establishment and use superior bulls
- **Veterinary training and extension:**

Thrust is to develop human resources for services delivery to enhance livestock production.

3.2.2. Legislation on animal health services delivery

- Review and harmonization of the statutes that are relevant to animal health services is on-going.
- This will include Animal Diseases Act, Pharmacy and Poisons Act, Rabies Act, Veterinary Surgeons Act, Animal Welfare Act, Meat Control Act, hides and Skins Improvement Act, Cattle cleansing Act and others.

4.0 Human Resource Development

- There are various institutions offering certificate, diploma and degree level of training in the country after the initial twelve years of formal primary and secondary education.
- Training for animal health, husbandry and dairy technology is offered in these institutions.
- Other animal health services providers such as NGOs CBOs train community based animal health workers using varying curricula.
- There are also farmers training centers that are spread throughout the country to cater for all farming systems in place.
- There is need to harmonize curricula standardization of training

5.0 Livestock trade

5.1 Trade

- Poorly managed farmers organizations and poor infrastructure hampers trade.

5.2 Livestock inputs

- High quality farm inputs are vital for production, health and trade.

- Basically the feed ingredients such as vitamins, minerals, amino acids, fish meal, oilseed cakes and meals as well as probiotics are imported from the East African regional block, India, Canada, South America and Europe.
- Some veterinary inputs such as vaccines are produced in the country while others are imported under certificate of veterinary authority.
- The potency, efficacy and assurance of the products are indicated by the manufacturer or local testing before use.
- Importation of live animal and livestock products has to meet international standards based on SPS requirements
- EAC partner states are participating in drawing up harmonized standards for farm inputs in order to ensure provision of quality products for animal health services delivery and promotion of trade within and without the region.

5.3 Domestic V/S exported in the livestock industry

5.3.1. Domestic meat marketing constraints

- Lack effective market information system
- Poor physical infrastructure

5.3.2 Export meat marketing constraints

- With closure of KMC , no meat especially beef is being exported.
- Export of meat will require establishment of disease free zones

5.3.3. Export of livestock and livestock products

- KMC was the only export standard abattoir in the country.
- A few commodities are exported to COMESA member countries and Arab countries

5.3.3 Aspects of animal diseases that affect livestock trade

- Prevalence of notifiable, transboundary diseases and pests has contributed to curtailing of international and national trade in livestock and livestock products
- Enforcement of SPS measures as elaborated by international standards setting bodies such as OIE, WHO, IPPC in guidelines and recommendations will entail inspection and certification procedures

6.0 Future Issues

6.1 Animal health services

- The government's role will entail facilitation, rationalization, harmonization and operationalisation of a functioning marketing entity.
- Implementation of the reviewed policies and legislation

- Development of modalities for harmonized control of transboundary diseases.
- Quarantine stations and disease free zones to be established.
- Implementation of SPS measures
- Completion of work on standards for farm inputs
- Livestock emergencies preparedness

6.2 Information management

- Promotion of information exchange on the status of animal health, production, markets and marketing

7.0 Suggested harmonized areas

7.1 Feeds and Feeding:

- Quality standardization, availability and cost of feed ingredients and commercial feeds

7.2 Breeding:

- Access to and cost of A.I. services
- Quality of breeding stock
- Characterization and conservation of genetic material
- Breeding policy and institutions
- Progeny testing programmes

7.3 Diseases and Disease Control:

- Policies, legislation and strategies on animal health and production services
- Harmonization of drugs, vaccine and sera standards.
- Modalities for surveillance, control and eradication of transboundary diseases
- Policies and legislation of professions regulating bodies.

7.4 Environmental Issues

- Standards to ensure proper use of veterinary drugs, vaccines and sera, to control residue levels in meat, milk and milk products and the environment.
- Recycling of farm and industrial waste where possible

7.5 In Arid and Semi Arid Lands

- Address the cyclical recurrent droughts in the region.
- Address insecurity and Trans-boundary conflicts
- Need for increased relevant research in animal health and production

7.6 Infrastructure:

- Infrastructure development to cater for all seasons especially in rural settings.

7.7 Others

- Address wildlife human conflict
- Training curriculum development

Annex 6

REPUBLIQUE RWANDAISE



**MINISTRE DE L' AGRICULTURE,
*DE L'ELEVAGE ET DES FORETS***

DIRECTION DE L'ELEVAGE
P.Box 621/Tél :84649/08503589

PROGRAMME DE DEVELOPPEMENT DE L'ELEVAGE

1.CONTEXTE GENERAL DE L'ELEVAGE RWANDAIS

Le Rwanda héberge actuellement 815.898 têtes de bovins, 756.581 caprins, 306.875 ovins, 278.018 porcins, 229.399 lapins et 2.043.077 volailles. Avant les événements de 1990 à 1994, les effectifs bovins étaient en constante régression et étaient condamnés à se stabiliser autour de 500.000 à 600.000 têtes compte tenu de la raréfaction des ressources fourragères (disparition des pâturages et des jachères), d'une démographie galopante, etc.. Les petites espèces, par contre, étaient supposées croître de manière significative pour répondre aux besoins de la population en fournissant l'essentiel des produits d'origine animale (viande, lait, œufs, etc..).

Le sous-secteur de l'élevage est sensé apporter 10% des besoins protéiques de la population soit 6 grammes/personne/jour (selon les normes de la FAO/OMS calculés pour le Rwanda). Il faut noter que cette norme n'a jamais été atteinte et que la réalisation la plus significative a été atteinte en 1989 où l'apport de l'élevage était estimé à 4 grammes/personne/jour.

La part de l'élevage dans l'économie nationale est insignifiante. En matière de contribution au Produit Intérieur Brut, les produits d'élevage représentaient 3,5%, 3,7% , 4% et 5,7% respectivement pour les années 1988, 1989 ,1990 et 1999. L'apparente évolution constatée cependant dans sa participation au PIB ne doit pas leurrer puisque cette augmentation ne reflète pas celle des productions mais plutôt l'évolution des coûts d'acquisition des denrées alimentaires d'origine animale (viande essentiellement).

Sa participation aux importations, par contre, traduit une dépendance croissante du pays vis-à-vis de l'extérieur. Les importations des produits d'origine animale représentaient 4,5% des importations des biens de consommation en 1989 et elles étaient montées à 6,3% en 1990 et à 8% en 1991. Par rapport aux importations des produits alimentaires, les importations des produits animaux ont manifesté la même tendance c'est-à-dire qu'elles sont passées respectivement de 14,6% à 15,4% puis à 19,7% pour la même période.

Quant à la part des produits d'élevage dans les exportations, la tendance est plutôt inverse, traduisant ainsi le marasme de plus en plus inquiétant dans lequel l'élevage est entrain de sombrer. C'est ainsi que les exportations du sous-secteur représentaient 4,10%, 4,30%, 4,10%, 2,20% et 1,65% par rapport aux exportations totales du pays de 1987 à 1991 tandis que par rapport aux exportations du secteur agricole durant la même période elles sont passées de 4,2% en 1987 à 1,80% en 1991.

Tout ceci s'explique en réalité par le fait que l'environnement macro-économique ainsi que les programmes de développement mis en place n'ont pas toujours tenu compte de l'importance de l'élevage dans l'économie nationale et ne lui ont donc pas réservé les moyens tant humains, matériels que financiers indispensables et dont il avait besoin pour tenir son rôle à l'instar des autres secteurs économiques du pays.

La mise en place d'une nouvelle politique agricole devrait cependant inverser les tendances observées et améliorer la part de l'élevage dans l'économie nationale en général et dans l'économie agricole en particulier. Le point 3 ci-dessous présente l'essentiel des principes directeurs de cette politique.

2. Objectifs

L'ensemble des stratégies du secteur visent trois grands objectifs. Il s'agit de :

- contribuer à la sécurité alimentaire de la population ;
- augmenter les revenus des populations et contribuant ainsi à la réduction de la pauvreté;
- contribuer à la protection de l'environnement par la conservation et la fertilisation du sol .

Pour atteindre ces objectifs, des orientations suivantes ont été données en matière des productions animales :

Sur le plan technique :

- la réhabilitation des infrastructures d'appui à la production ;
- l'intensification de la production par une « approche filière » et sa spécialisation régionale des spéculations ;
- l'intégration de l'agriculture/ élevage pour contribuer à l'amélioration du potentiel « sol » et la gestion de sa fertilité ;
- la promotion de l'utilisation des intrants d'intensification zootechnique ;
- la diversification des productions animales pour une meilleure intégration de l'élevage à l'économie de marché ;

Sur le plan institutionnel

- le renforcement des capacités du Ministère de l'Agriculture, de l'Elevage, de l'Environnement et du Développement Rural en vue d'améliorer les performances du développement et de la gestion du secteur agricole;
- le désengagement de l'Etat des fonctions de production, de commercialisation et de transformation au profit des secteurs privé et associatif, son rôle se limitant aux tâches de planification, de suivi, d'évaluation, de promotion, d'information, de sensibilisation et de formation ;
- la réforme du cadre réglementaire afin de faciliter les investissements privés à tous les niveaux du secteur agricole ;

3. ACTIONS PRECONISEES

Le Rwanda a une vocation pastorale. Il présente des potentialités en matière d'élevage qui varient en fonction des ses microclimats et de la nature de ses différents sols. Cependant, le développement durable du secteur passe partout par la valorisation optimale de la ressource terre qui, en raison de la forte pression démographique et de la concurrence rude entre les diverses spéculations agricoles, demeure la ressource la plus rare. L'intensification de l'élevage est donc non seulement une condition essentielle de survie du sous-secteur mais la seule voie susceptible d'assurer sa participation à la satisfaction des besoins de la population dans le cadre de la sécurité alimentaire.

1. Le principal facteur limitant de la production animale au Rwanda reste **l'alimentation** tant sur les plans quantitatifs que qualitatifs. Ainsi, des programmes spéciaux doivent être entrepris pour lever cette contrainte et permettre une augmentation de la productivité du sous-secteur. Pour améliorer les conditions alimentaires des animaux, on devra intervenir à quatre niveaux au moins :

- (i) - gestion et amélioration des pâturages,
- (ii) - intensification des cultures fourragères,
- (iii) - production de concentrés à des prix abordables et

(iv) - abreuvement.

2. L'**amélioration génétique** est un passage obligé pour améliorer le rendement des différentes espèces animales vivant au Rwanda. Cependant, les stratégies à adopter varient selon les espèces. En effet, certaines d'entre elles n'ont même pas besoin de programmes spéciaux puisqu'il existe de par le monde des sujets parfaitement capables de s'adapter aux conditions locales moyennant des adaptations mineures. C'est le cas de tous les monogastriques (porcs, volailles) et les lapins. Par contre, les bovins et les petits ruminants exotiques ne s'accommodent pas toujours des conditions tropicales et doivent pour être élevés en races pures, être tenus dans des conditions particulières. Pour rencontrer les besoins de la majorité des éleveurs, on proposera des schémas qui mettent à leur disposition des animaux qui allient une meilleure productivité à une certaine résistance aux maladies communes au Rwanda.

3. En matière de **santé animale**, le contrôle des principales maladies dites épizootiques et enzootiques est incontournable si on veut promouvoir l'élevage d'animaux très performants, misant sur l'amélioration génétique ou sur l'exploitation des races exotiques en races pures. En effet, les animaux sont d'autant plus sensibles qu'ils sont plus productifs et la perte de l'un d'entre eux constitue un important manque à gagner. Des maladies comme la fièvre aphteuse, la péripneumonie contagieuse des bovidés, la peste bovine, la brucellose, les maladies transmises par les tiques (thélériose, piroplasmose, anaplasmose), la peste porcine africaine, les charbons, la tuberculose, les maladies des volailles (maladie de Gumboro, de Newcastle, la typhose et la bronchite infectieuse, etc.) sont souvent redoutables en ce sens qu'elles provoquent des mortalités élevées ou une débilitation grave qui entraîne une chute de production spectaculaire. Des programmes de lutte contre toutes ces maladies doivent être mis en œuvre pour protéger le cheptel et améliorer sa productivité. Ces programmes comprendront l'organisation de campagne de vaccination, la mise en place de couloirs d'aspersions, la structuration d'un réseau de pharmacies vétérinaires, la création de poste de quarantaine et le renforcement du Laboratoire Vétérinaire de Rubirizi, ainsi qu'un appui à la privatisation de la médecine vétérinaire.

l'intégration de l'élevage à l'économie

4. La viabilité des mesures d'intensification préconisées n'est possible que dans le cadre de **de marché** et donc, de la présence de **réseaux de commercialisation bien structurés**. Ces réseaux existent déjà pour toutes les filières animales, à l'exception du lait où le regroupement de l'offre primaire demeure problématique. Pour la viande et les œufs, ils assurent sans difficulté une bonne adéquation entre l'offre et la demande solvable. Pour le lait, il faudra mettre en place des centres de collecte et de refroidissement facilement accessibles à la majorité des producteurs et faciles à gérer. Ces centres serviront également de point d'ancrage pour la mise en place des services aux éleveurs en amont, comme la distribution des intrants et l'insémination artificielle. La structuration des éleveurs sera également organisée autour de ces centres, non seulement pour les producteurs laitiers mais également pour d'autres types d'éleveurs dans les zones où il seront mis en place.

Pour rendre pérennes les actions préconisées, il est urgent que le **milieu soit structuré** afin de créer progressivement des organismes partenaires en charge de la promotion de telle ou telle activité. Ces organismes (ou groupements d'intérêt économique) pourront être le point focal de toutes les actions liées aux programmes d'alimentation animale, d'abreuvement du bétail, d'amélioration génétique,

de distribution d'intrants comme pour la diffusion des technologies nouvelles auprès de leurs membres. Ces organismes ou leurs membres seront appelés à jouer un rôle (gestion) au niveau des structures d'accompagnement à mettre en place comme les centres de collecte du lait, des points d'abreuvement et des couloirs d'aspersions pour les bovins.

Enfin, la mise en place de l'ensemble des mesures préconisées exigera de la part de l'Etat un encadrement adéquat, en particulier de la Direction de l'Elevage du MINAGRI chargée de la planification et du suivi des interventions en matière de production et de santé animale. Il faudra donc envisager le renforcement de cette Direction, qui souffre d'un manque chronique de personnel compétent et d'équipements adéquats pour remplir sa mission. Les appuis nécessaires concernent le diagnostic et le contrôle des maladies animales à caractère épizootique, la refonte de la législation actuelle pour le rendre plus conforme aux pratiques et aux conditions actuelles, le contrôle de la salubrité publique, la mise en œuvre des projets préconisées en matière de vulgarisation, de structuration des éleveurs et se mise en place des centres de collecte et de refroidissement du lait, et le suivi général du secteur.

4. CHOIX STRATEGIQUES

Dans un contexte de libéralisation économique, il revient au premier chef aux éleveurs et aux autres opérateurs économiques du sous-secteur de lever les contraintes auxquelles il sont confrontés. Cependant, la politique de privatisation dans laquelle l'Etat est engagé ne saurait éluder sa responsabilité envers le développement de l'élevage qui, dans les conditions de développements actuelles, déborde la simple mise en place d'un environnement législatif favorable. Il serait en effet irréaliste de penser que compte tenu de leur situation, les éleveurs puissent entrer dans l'économie de marché sans un appui substantiel de la part de l'Etat. L'Etat doit encore jouer un rôle majeur auprès des populations paysannes, en vulgarisant les pratiques indispensables à l'accroissement de la production et en appuyant la mise en place des infrastructures nécessaires à la production et à la commercialisation.

Au vu des ressources disponibles dont il dispose, l'Etat doit concentrer ses efforts à lever les goulots d'étranglements majeurs qui affectent le développement du secteur et sur lesquels il peut agir efficacement, plutôt que de chercher à intervenir indistinctement sur toutes les contraintes identifiées. Dans cette optique, il est essentiel non seulement que les interventions envisagées s'inscrivent dans un cadre national, mais également que les moyens mobilisés soient suffisants pour induire les changements souhaités.

Le programme de développement de l'élevage défini est guidé par le souci d'assurer la cohérence et la complémentarité des interventions au niveau national. Il s'inscrit dans le cadre de la politique de spécialisation et de régionalisation des productions préconisée par le MINAGRI qui, en matière d'élevage, attribue aux différentes espèces animales un rôle déterminé dans les apports à la sécurité alimentaire. Dans les faits, l'application de cette politique ne signifie pas que toute autre pratique est interdite mais simplement que l'Etat concentrera ses appuis selon les choix dictés par les priorités établies.

C'est ainsi que la spécialisation dicte que l'élevage bovin devra s'orienter vers la production laitière, les monogastriques vers la production de viande avec, en prime, des œufs pour les volailles

tandis que les petits ruminants seront préférentiellement destinés à la production de la viande. Pour ces deux dernières espèces, l'introduction de nouveaux produits nécessitera une promotion plus ou moins longue et devra être modulée en fonction de leur adoption par les consommateurs Rwandais. De même, la régionalisation indique les zones les plus propices à chaque spéculation animale en tenant compte des disponibilités fourragères, de la qualité des sols, des habitudes d'élevage et des autres particularités régionales.

Selon les calculs de charge admissible, le Rwanda peut élever jusqu'à 600.000 bovins améliorés, 400.000 Ovins et 1.300.000 Caprins améliorés. Or, pour respecter cette charge admissible à l'horizon 2013, les effectifs bovins devront diminuer de 2% par an tandis que les Ovins et les caprins auront atteint la limite en l'an 2004 et 2010 respectivement si les effectifs croissent au rythme de 6% par an.

En ce qui concerne les volailles et les porcins, la seule limite à leur accroissement numérique est liée aux disponibilités de concentrés, ou plus généralement à la capacité du pays à produire ou à importer des céréales et des oléagineux principalement. Cette capacité revêt une importance particulière si l'on retient que ces espèces devraient fournir une part importante dans les approvisionnements du pays en viande.

Il faut signaler bien sûr que, indépendamment des potentialités des différentes régions, des adaptations technologiques seront indispensables pour modifier les pratiques d'élevage des rwandais pour passer progressivement vers des systèmes de plus en plus intensifs.

5. LES RACES A PROMOUVOIR.

D'une façon générale un programme de sélection avait été mis en place pour toutes les espèces. Pour les bovins, on proposera un croisement d'absorption des races exotiques (Frisonne, Brun suisse et Jersey) et le croisement qui aboutit à la création d'une race synthétique, à savoir le triple croisement Jersey x Sahiwal x Ankolé qui, par ailleurs, on proposera des races exotiques pour diversifier la production ovine, notamment Mérinos et le Boer Goat pour la production caprine. Pour le porc, le croisement avec le Landrace et le Piétrain par insémination artificielle sera suggéré pour les éleveurs attirés par la production industrielle.

Pour les volailles, il faudra continuer à exploiter des poules et des poulets hybrides pour la production d'œufs et de viande, et éventuellement introduire des races pures pour améliorer la poule locale par croisement, notamment des races avec tendance à couvrir comme la Rhode Island Red. Enfin pour les lapins, on pourra introduire des races lourdes comme le Géant de Bouscat, le Géant des Flandres pour améliorer le gabarit des lapins élevés dans le pays

1 INTRODUCTION

1.1 Background

Rwanda is a land locked, mountainous country, with an area of 26,338 sq. Km. and a population of 8.100.000 inhabitants (Déc 2001), It has a density of 328 persons per sq. Km, and an annual population growth rate of 3.3%. It is situated on the Central African plateau, between Central and East Africa.

It is a country with a long tradition history of livestock keeping, where cattle in particular has been an important source of livelihood for her people. Most of the land was reserved for livestock during pre-colonial era. During the colonial period, the administration discouraged livestock, in particular cattle keeping by imposing tax on it and by reducing grazeable land in favour of crop production. In addition, political and social upheavals of 1959 worsened the situation with most of the cattle keepers running out of the country with their herds. This led to an apparent predominance of small ruminants, pigs, rabbits and poultry. Subsequent Governments made it a policy to encourage this type of livestock farming while marginalising the remaining few cattle.

From independence to the most recent times, a new approach of farming, which integrated livestock and crop production was adopted to produce manure and maintain soil fertility for higher crop yields. As result, the protein requirements of animal origin (0.7 g gm per person per day) has never been met. During the war and the 1994 genocide, the few large animals that existed were reduced by 90%, thus aggravating the situation. Even those that were brought into the country by returnees were of low productivity.

1.2 Present situation.

The current number of livestock is estimated at 815.898 cattle ; 756.581 goats ; 287.672 sheep ; 229.399 pigs; 229.399 rabbits and 2.043.077 poultry.

Total annual milk and meat production estimated at 62,852 tons and 52,516 tones respectively represent 24% for milk and 79,4% for meat in terms of the country's requirements.

The livestock sector is charged with providing to the population protein requirements of 10% or 6 gm per person per day, according to the FAO/WHO norms. It is worth noting that this target has never been realized except through an attempt during 1989 when only 6gm per person per day was realised.

The majority of the national herd are indigenous breed whose production in both milk and meat is very low. The low production is compensated by farmers keeping large numbers of cattle resulting in overstocking and environmental degradation especially in the drier areas of East and North Eastern Rwanda. In order to bridge the gap in production and conserve the environment, there is need to increase the number of high grade cattle while reducing the less productive indigenous. This requires intensification of cross breeding programs of the indigenous and exotics. Though more

productive, the crossbreed and pure-bred cattle are more susceptible to diseases than are the indigenous. This calls for improved animal health services and nutrition.

The national herd of both large and small ruminants has and still suffers a number of health problems ranging from viral, bacterial, parasitic and nutritional to tick borne diseases (TBDS). The estimated level of infection by diseases of economic and public health importance, is indicated below:

DISEASES	ESTIMATED RATE OF INFECTION (%)
Contagious Bovine Pleuropneumonia (CBPP)	10
Brucellosis	14
Tuberculosis (TB)	12
Anthrax and Black Quarter	Sporadic
Foot and Mouth Disease (FMD)	Under control in the eastern area

Unfortunately the capacity and capability by Rwanda Central Veterinary Laboratories to conduct a full epidemiological survey of the above diseases is still limited in both personnel and equipment. As a result of the above situation, the livestock sector still contributes very little to the national economy (5.7% of the GDP).

1.3 Livestock Farming Systems

Livestock farming systems in Rwanda can be grouped in three categories, namely; traditional, improved and modern type of farming.

By and large, indigenous cattle are raised under the pastoral system, while the improved breeds are either on permanent or semi- permanent zero grazing. Small ruminants on the other hand are raised by farmers with low income, while pigs are generally under a semi- stable system.

For poultry, it is the traditional system that has been in practice
Rabbits are found in small units of up to 10 females.

Lastly, fishing is done at individual level to meet the family requirements.

1.4 Constraints

There are four major constraints to the development of the livestock sector, namely, poor animal nutrition, inadequate health facilities, low level of genetic improvement and poorly organised extension services.

In general, animal nutrition problems are both qualitative and quantitative where the required levels in both cases are very much below the needs.

From the point of view of animal health, the country is infested with many enzootic and parasitic diseases, and the picture is complicated with important epidemic diseases such as Foot and Mouth Disease, Lumpy Skin Disease and Contagious Bovine Pleuropneumonia.

With regards to productivity, most breeds existing in the country are of low genetic potential. Initially, most of our animal products are highly perishable because conservation and commercialisation mechanisms are either lacking or are poorly developed.

The above constraints which may look insurmountable at first site should not be a big worry to the development of the sector, because it possesses necessary human resources and enjoys a cultural and social climate that are favourable.

2 GOAL AND OBJECTIVES

2.1 Goal

The global goal will be to contribute to alleviation of poverty and consequently to raise the standard of living of the population.

2.2 Objectives

- 1) To contribute to National food security.
- 2) To increase earnings of rural people.
- 3) To contribute to activities of environmental protection through soil conservation and fertility.

In order to achieve the above objectives, there will be intensification and specialisation of production by various sub-sectors of the Livestock Department.

3 STRATEGIES

Strategies to be adopted will fall under two categories; institutional and organisational strategies.

a) Institutional and organisational strategies

In order to improve the performance of the Department, the Ministry will focus its efforts on : planning, developing legislation governing the Livestock sector, sensitisation and

training of personnel and farmers and follow up and constant evaluation. Specific steps to be taken will be :

- i) Revision of legislation governing the Livestock sector.
- ii) Disengagement of the State from production, commercialisation and processing activities in favour of the private sector.
- iii) Promotion of private veterinary practice.
- iv) Support credit schemes to livestock farmers.
- v) Support close collaboration with research institutions in matters of production, of dissemination of new techniques, of financial and economic feasibility studies.

b) *Technical strategies*

i) *Animal health.*

- (1) Rehabilitation of existing infrastructure and setting up new ones: The central Veterinary Laboratories will be rehabilitated and adequately equipped to meet its obligations. It will be supported by satellite veterinary laboratories.
- (2) Control and eradication of major livestock diseases of economic and public health importance: It will be necessary to set up an efficient system of surveillance, control of animal movements and products of animal origin, prophylactic and vaccination campaigns.

ii) *Introduction of performing breeds of animals.*

- (1) Importation of exotic breeds: In order to bridge the deficit gap in animal products, livestock of high genetic potential will be imported for the short and medium term objectives : bovine for milk production, small ruminants for meat and poultry for eggs and meat.
- (2) Genetic improvement of local breeds: This will be implemented by existing institutions : the National Artificial Insemination Centre and IZAR. Both institutions will be reinforced to carry out this function. A particular emphasis will be laid on the technique of artificial insemination and embryo transfer in zones favouring dairy farming. Parallel to this strategy, a diffusion of heifers in other zones will be a complementary approach.

iii) *Management.*

In order to achieve the best results, it is necessary to intensify on management practices that include pasture establishment and conservation, water development in areas of scarcity and the encouragement of the use of concentrates for dairy farmers. There will be a particular emphasis on training of farmers and their farm managers in modern techniques of animal husbandry and production.

4 EXPECTED RESULTS

- a) Interventions by the Ministry will be limited to planning, establishment of laws and regulations governing the Department, sensitisation, training, monitoring and evaluation.
- b) Existing infrastructures will be rehabilitated while new ones will be established.
- c) Major diseases of economic and public health importance will be controlled and eventually eradicated.
- d) 13.000 exotic breeds of cows will have been imported and each year about 20% of females of reproductive age will be inseminated.
- e) A sustained programme of heifer diffusion will have been developed and operational.
- f) Animal nutrition will have been improved both quantitatively and qualitatively and water points will have been assured in areas of scarcity.
- g) Livestock farmers will have acquired necessary techniques in animal husbandry.

CONCLUSION. PROGRESSIVE REQUIREMENTS OF LIVESTOCK PRODUCTS

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Population	8.430.003	8.708.193	8.995.564	9.292.417	9.599.067	9.915.836	10.243.059	10.581.080	10.930.255	11.290.954	11.663.555
Number of Bovines	675.022	661.291	648.291	635.325	622.619	610.166	597.963	586.004	549.284	562.798	551.542
Needs (tons)											
Milk requirements	264.960	273.703	282.736	292.066	301.704	311.660	321.945	332.569	343.544	354.881	366.592
Gross production	49.920	41.737	43.382	45.129	46.877	48.830	50.783	52.736	54.895	57.054	59.316
Net requirements	-	-	-	-	-	-	-	-	-	-	-
	215.040	231.966	239.354	246.937	254.827	262.830	271.162	279.833	288.649	297.827	307.276
Number of cows to be inseminated	12.000	15.000	20.000	25.000	30.000	35.000	40.000	50.000	50.000	50.000	50.000
Number of cows to be imported	1.000	3.000	3.000	3.000	3.000						
Quantity of milk from inseminated and imported cows (tons)	41.988	68.708	97.211	129.330	155.500	179.308	217.912	267.179	286.091	403.380	399.734
GENERAL REQUIREMENTS	-	-	-	-	-	-	-	-	-	-	-
	173.052	163.258	142.143	117.607	99.327	83.522	53.250	12.654	2.558	105.553	92.458

Annex 7

POLICY ISSUES RELATED TO CONTROL AND ERADICATION OF TRANSBOUNDARY ANIMAL DISEASES

G R Thomson¹

Background

In discussing this issue there are a number of factors that have a bearing on the way in which such diseases are perceived and reacted to in different regions of the world. These factors can essentially be divided into three groups: (1) economic/trade-, (2) socio-political- and (3) technical factors relating to the way in which transboundary diseases behave and alternative strategies that can be used effectively against them.

First, however, it is essential to have a common understanding as to what transboundary diseases are. This is not as easy to achieve as it may seem. How, for example, do transboundary diseases differ from "epizootic diseases", "OIE List A diseases" and "foreign animal [exotic] diseases", i.e. terms that abound in documents and publications relating to "important" diseases of animals? It is contended here that terms such as "transboundary"², "List A"³ and "epizootic" are essentially synonymous. These terms usually intend to convey the idea that such diseases (more properly infections - see below) are capable of spreading rapidly thereby infecting large numbers of animals in a short period of time over a wide geographic area and inflicting economic damage to livestock owners and industries. Increasingly, the zoonotic potential of animal infections is also used to determine their "importance" and therefore inclusion in such groups of diseases. It cannot be denied, for example, that bovine spongiform encephalopathy (BSE) – which is exceptionally slow spreading with a long incubation period and therefore essentially non-epizootic – has a greater impact on trade with the developed world than all transboundary diseases of animals with the possible exception of foot and mouth disease (FMD). This results in confusion as to which diseases exactly can or should be included among transboundary animal diseases.

Furthermore, because people writing on animal health matters frequently would like have their pet disease included among the "important" animal diseases, there is a tendency to include diseases that have long been considered erosive, i.e. non-epizootic, in the "transboundary" group. As an example, can the assertion that bovine brucellosis is a transboundary disease be refuted on a rational basis?

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² Transboundary livestock diseases are "those that are of significant economic, trade and/or food security importance for a considerable number of countries; which can easily spread to other countries and reach epidemic proportions; and where control/management, including exclusion, requires co-operation between several countries." Food & Agriculture Organization (FAO) of the UN

³ Diseases in this "list" are given in the International Animal Health Code, 2001 of the *Office International des Epizooties* (OIE)

It seems therefore that with the exception of "List A" diseases which are clearly indicated individually in the OIE's International Animal Health Code (2001)⁴, the composition of other groupings is a matter of debate and will be dictated by the perspective of the country, region, organization or even individual concerned.

A further complicating issue is the increasing realization that in some circumstances the presence of infectious agents that cause transboundary or List A diseases does not always result in the occurrence of the diseases concerned. In such circumstances it becomes difficult to know whether the infectious agent is present or not. There are three circumstances that may give rise to this situation:

- Where the population concerned has a degree of herd immunity conferred by vaccination;
- Some variants of the causative agents of a number of diseases cause inapparent infection or unusually mild disease (e.g. classical swine fever, swine vesicular disease and, perhaps, rinderpest⁵);
- In some diseases a proportion of animals that recover from infection become carriers (e.g. FMD and contagious bovine pleuro-pneumonia [CBPP]).

For these reasons and especially for trade purposes, it may be important to prove that an infection is not present in a particular locality even though there is no clinical evidence for its presence.

The eastern African perspective

Currently, from the animal disease perspective in eastern Africa, the two major issues that concern livestock owners and the livestock industries of the region in general are:

- Minimizing the impact of diseases that cause mortality or reduce the productive capacity of livestock;
- Gaining access to export markets by ameliorating the effect that the presence of transboundary infections have on trade.

As far as individual diseases are concerned, some have an effect in both these areas. Furthermore, it needs to be recognized that as far as gaining access to export markets in the developed world is concerned there are other animal health issues aside from infections, *viz.* proving absence of residues of chemicals (such as pesticides), hormones and other potentially biologically active substances in export products. Genetically modified organisms (GMOs) and exposure to ionizing radiation are less troublesome issues in this region but also need to be considered.

⁴ Note: The OIE does not define the characteristics required of diseases to be included in "List A". This is something that it continues to work on but repeated attempts to define the criteria over a period of more than 8 years have not borne fruit.

⁵ Report on the "Workshop on mild rinderpest", OAU-IBAR, Nairobi, June 2002

Minimizing the impact of transboundary diseases on the productive capacity of livestock

In dealing with this issue it is recognized that erosive or enzootic diseases can be vital in determining whether livestock production in a given locality is sustainable or profitable.

Amongst the commonly recognized transboundary diseases that currently actually cause significant mortality and production losses or threaten to do so in eastern Africa in the future are:

- Rinderpest
- CBPP
- Lumpy skin disease (LSD)
- Haemorrhagic septicaemia (HS)
- Peste des petits ruminants (PPR)
- Sheep and goat pox (SGP)
- African swine fever (ASF)
- Newcastle disease (NCD)

All these diseases are well recognized and their effects, while not accurately quantified in most instances, are understood in relative terms with the exceptions of PPR and HS. Their effects frequently vary in different eco-systems. As far as control or eradication of these diseases is concerned there is little new and these diseases together with endemic diseases such as trypanosomosis, East Coast fever and other tick-borne diseases have been a severe problem for decades. Many different initiatives relating to these diseases are on-going in different countries of the region and it serves little purpose to try to summarize these here.

However, one policy-related problem in respect of these diseases (rinderpest is an exception) is precisely that very few countries in the region have clearly defined objectives and strategies (i.e. policies) for individual diseases. Without clear policies for specific diseases the veterinary services of the various countries cannot focus their efforts and, similarly, donors find it difficult to understand clearly how they can complement the activities of the country concerned. This can lead to situations where donors are tempted to determine policies themselves. This may lead to the tail wagging the dog. A classic example of where policies are mostly either non-existent or inappropriate is CBPP where considerable sums of money have been spent on vaccination campaigns without there being a clear and achievable objective.

It is therefore a recommendation that for each of the major transboundary diseases the official veterinary services of each country should develop a clear policy which is available not only to the relevant officials of the country concerned but also other organizations operating in the animal health sphere. Regional organizations could help greatly in this process by promoting complementary approaches between countries. This is particularly important in eastern Africa where there are very few effective country borders.

Gaining access to export markets through ameliorating the effect that the presence of transboundary infections have on trade

There is a strong move on the part of individual countries in eastern Africa, regional and international organisations (including AU-IBAR, the European Commission [EC] and FAO) as well

as trade groupings to embark upon initiatives in this connection. So far, however, little is being implemented. This is mainly because ideas and possibilities in this connection are still evolving.

Zoning for disease control and facilitating trade is a well established concept within the OIE and the guidelines developed by that organization. However, there are difficulties for African countries in delineating borders for zones. On the other hand, the concept of compartmentalization, also propagated by the OIE (whereby production processes can be isolated from infectious agents in the surrounding environment), is not yet fully developed.

One issue that is, however, becoming increasingly clear is that addressing conditions that affect trade (whether they be infectious, non-infectious contaminants or even environmental or socio-economic issues of production in developing countries) cannot be solved on a piece-meal basis because importers need to have all these issues under control at the same time. For this reason the idea of developing "export zones" from which products certified to the satisfaction of the importer can be accessed is gaining acceptance.

Because this matter is still evolving it is difficult at this stage to be clear on what policy issues need to be addressed to facilitate progress. This workshop could provide valuable inputs by deliberating on this issue.

Annex 8

EAST AFRICA LIVESTOCK SECTOR: INFORMATION NEEDS AND MANAGEMENT

Dr. Delia Grace, AU-IBAR

Information revolution in the livestock sector

A quiet revolution has taken place in the last half a century – the telematics revolution. For the last 40 years the cost of processing, storing, and transmitting information has been decreasing at the rate of 50 percent every 18 months. If salaries had declined at a similar rate, someone earning a million dollars a year 40 years ago would be earning 97 cents a year today. There is an unprecedented amount information available, in all sectors, supplied through a wide range of media and channels. To give just one example, three important web-based information sites, with a special focus on pastoralism in East Africa have recently come on line, namely Arid Lands Information Network (www.alin.or.ke), Famine Early Warning Systems Network (www.fews.net) and Community Animal Health Network (www.cahnet.net).

Death of the digital divide?

With the growth in information capacity a digital divide has developed between the information rich and the information poor. Tokyo has more telephones than the whole of Africa and Africa with 1/6th of the world's inhabitants has 2.6% of the world's internet connections. But the digital divide is narrowing. Moroto is a small town in the heart of the Karamoja. It now has a high speed satellite internet link, through which it is possible to surf the net at a similar cost to that charged in Kampala. Mobile phone networks are rapidly expanding across the region. They have reached Lockichoggio in Turkana and a mobile phone can now be used for voice communication, text messages, or sending e-mails. In Somalia a network of radios is used to transmit marketing information and place pharmaceutical orders. With relatively inexpensive technology radios can also be used to send e-mails. In Uganda information on livestock is provided in alternative adult education programme, and songs in local languages on animal disease control are being recorded and broadcast on local radio stations. In Turkana community video is used to communicate peace messages. In West Pokot pharmaceutical firms are carrying out with field days with a private veterinary practitioner linked to CAHWs.

Cost of information

Information has a price. Radio and film are expensive to produce they have wide reach. Printed material remains an important medium but poor infrastructure adds to the cost of printed material and material is often not accessible to people who need it most. With a computer, a solar panel and a world space receiver someone in the middle of the Serengeti or on a boat in the middle of Lake Victoria can surf the net and download information. The cost of the complete package is around \$1000, putting it out of the reach of individuals but not organisations. Although there has been increasing liberalisation and privatisation in what was for most countries a highly controlled and inefficient sector, the use of innovative communication technology is still constrained by imperfect markets.

Cost of ignorance: disease

But though information is not cheap, ignorance is more expensive. Livestock disease is estimated to cost sub-Saharan Africa \$2 billion USD – that is twice what is earned by export of livestock and livestock products. But most livestock disease is predictable, preventable and curable as following examples from CAPE supported activities show clearly.

Tick Born Diseases	1
Trypanosomosis	2
Anthrax	3
Foot and Mouth Disease	4
Helminthosis	5

Diseases ranking by herders during PRA

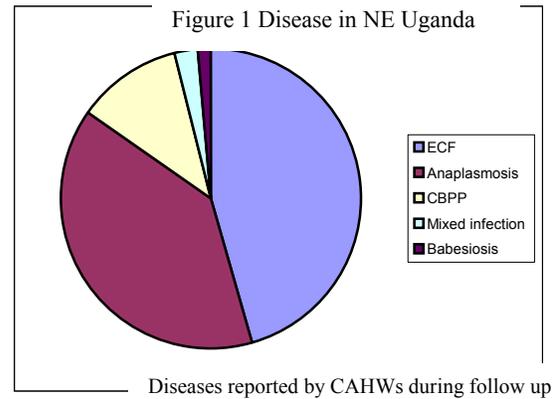


Table 2 – Disease in W Kenya

TBD	Fertility		Calf		Other		
ECF	1104	RFM	69	Worms	49	Eye inf	158
Anapl	438	Mastitis	88	Scour	16	Resp inf	135
Babes.	154	Metritis	20	ARI	10		
Cowdr.	280	Dystocia	37				

Diseases reported by private veterinary practitioner linked to CAHWs

And the problem is not one of unavailability of inputs. A recent survey carried out by CAPE in Tanzania, Uganda and Kenya found that all livestock keepers interviewed used modern medicines. Another study of 214 households in different areas of Kenya found 100% of farmers used antibioticsⁱ. The market survey carried out as part of the business feasibility study discussed in this paper found that all livestock keepers interviewed used modern drugs. A cohort monitoring study in Wajir suggested over 90% of sick animals were treated by modern drugsⁱⁱ. A study in Kathekani, Kenya found that over 90% of livestock owners used modern medicines, and less than 10 % traditionalⁱⁱⁱ. Another study in pastoralist areas of Kenya found that use of traditional medicines varied from 0-15% and use of modern from 80% to 90%^{iv}. The very large number of veterinary drug sales outlets (most of these illegal) is also an indicator of high use of modern drugs^v.

It is clear the problem is not so much disease or lack of inputs to treat/prevent diseases but lack of knowledge on how to use the inputs properly. Animals are not dying not from disease but from ignorance, and information is the cure.

The proof of this is that by training farmers to do well, what we cannot prevent them from doing badly a dramatic improvement in livestock health and livestock keeper livelihoods is seen. A typical study in Malawi showed that saving from increased livestock production in areas where paravets were active was \$57 000 per year.^{vi} A study we carried out recently in Mandera shows how lack of knowledge translates into livestock loss. When farmers treated animals with drugs bought from dukas (informal sector providers), outcomes were poor and side effects high. But by giving pastoralists 2-3 weeks training in basic animal health, this loss could be prevented.

Table 3: Quality of information provided by different service providers

<i>Service provider gives information on:</i>	Vet	CAHW	Duka
Withdrawal period and contraindications	100%	80%	37%
What to do if animal doesn't respond	50%	20%	6%
How to prevent the disease recurring	25%	20%	6%

Table 4: Outcome of treatment by different service providers (n=45)

	Good	Fair	Poor	Bad
Farmer	26%	37%	18%	18%
CAHWs	80%	0%	0%	20%
Vet professionals	75%	25%	0%	0%

Table 5: Side affects after treatment by different service providers

	Farmer	CAHWs	Vet professionals
Abscess	14%	0	0
Over-dosage / toxicity	9%	0	0
Shock, convulsions or death	9%	0	0
Total side affects	32%	0	0

Cost of ignorance: Exclusion from markets

Lack of information also excludes East Africa farmers from domestic and international markets. Livestock is the fastest growing agricultural sub-sector and over 90% of the predicted growth will occur in developing countries. In the next 20 years meat consumption will increase by one third - 220 million tonnes in 2001 to 310 million tonnes in 2020.^{vii} Improved information systems allow disintermediation – that is producers link more directly to consumers, and by decreasing the number of middlemen increase their share of the final product value. For example a West African women's fishing cooperative has set up a web site to enable its 7,000 members to monitor export markets and negotiate prices with overseas buyers. Is this the future for the livestock sector in East Africa? Perhaps not.

Global markets for livestock market are skewed, some say rigged. – OECD countries spend 360 billion dollars a year subsidising their agriculture – all development aid for all sectors is just \$50 billion. The amount America spends on supporting its dairy industry works out at \$600 per cow – more than the average person in East Africa has to live on. And the situation is not improving. EU's final tariffs for the year 2000 are almost two-thirds above the actual tariff equivalent for 1989-1993. For the US, they are more than three-quarters higher. The US Farm Bill signed in May 2002 gives \$45 billion to the US farm industry. With the money US farmers get from the tax payer they will be able to sell farm goods at lower prices, undercutting more efficient producers in developing countries. Cotton farmers in West and Central Africa would gain USD 250 million a year if the US stopped subsidising domestic cotton. Tom Harkin the Chair of the Senate Agricultural Committee and a major proponent of the new bill said “*This bill.... is not for European farmers and South American farmers. This is for our farmers.*”^{viii}

This inequitable system is maintained partly by the lobbying of powerful interest groups in OECD countries. The lack of effective and co-ordinated counter lobbying by developing countries is one of the factors allowing it to persist.

Cost of ignorance: Models of worst practice

Information can help prevent spending money on things that don't work. Many years of development interventions have generated large amounts of information on what works and what doesn't and why. For example, community run dips are rarely successful in pastoral areas. Of the 48 cattle dips build in North East Uganda in 1995, only one was functional in 2002^{ix}. Community drug users associations run on a volunteer basis (as opposed to business principles) rarely work. In northern Kenya more than 3/4 of the community drug shops have failed to deliver profits and been plagued by mismanagement and poor performance. History is not destiny but understanding the past is essential to avoid an endless cycle of repeating mistakes.

But even worse than spending money on things that don't work, is spending money on mutually destructive strategies. Schizophrenic development is still too commonplace in the East African Livestock Sector. In Kenya and Uganda some development agents are providing subsidised drugs while others in the same area are supporting privatisation. In one pastoral area the local government is trying to develop the local economy at the same time as the army is closing livestock markets.

Regional information management – creating an enabling environment

Regional organisations have a key role in information management. Chief of these is the creation of an enabling environment for the knowledge economy. This entails reducing tariffs and non tariff barriers to the information sector, provision of public good information and providing incentives for private good information, investment in education and infrastructure, encouraging competition and decreasing entry barriers to the information sector.

Regional information management – encouraging information exchange

The rules that govern movement of livestock and livestock products are increasingly evidence based and information needs to flow both between members and from the East African Bloc to external markets. Water does not flow up hill and information does not move where there are no incentives. Indeed for much disease information there may be perverse incentives not to exchange information. Producers are tempted to ignore problems hoping they will go away rather than inform customers and regulators there is a problem, this was a factor in the ban on exports from Africa to the Middle East as the result of Rift Valley Fever, which cost exporters in Africa millions of dollars. Regional organisations can facilitate the setting up of simple, workable, evidence based systems for information exchange, and perhaps more importantly by building trust between members and markets both internal and external.

Regional information management – promoting members interests

A regional organisation can also build strong platforms for promoting members interests. Over 80% of the population of the East African Community are farmers and the majority of these keep livestock. Livestock provides food, income, fertiliser, draft power and status. Livestock is a major contributor to GDP, and in many African countries to export. However partly through lack of understanding of the significance of livestock it receives little funding from central government. A regional livestock

desk would be well placed to take on PR and marketing role explaining to member governments and donors the importance of livestock.

The GATT accord of 1947 allowed the use of minimum standards to protect human, animal and plant health, but expressly stated that standards should not be used as covert forms of protectionism. However GATT jurisprudence shows that it is not easy to prove that a minimum standard has a protectionist aim. The Uruguay round of 1995, which saw the birth of the WTO also adopted a landmark agreement on Sanitary and Phytosanitary rules (SPS). This requires that the Member States send notification of any sanitary or phytosanitary problem that could put public health or agricultural health at risk to the appropriate institutions – OIE and the Codex Alimentarius. In May 2002 a chapter was passed on the Evaluation of Veterinary Services – which may prove an open door for blocking developing country products.

There are three possible responses to this. The first is to find other less demanding markets or make country-to-country agreements. However this is limited by the obligation of WTO members not to trade with any WTO member on more favourable terms than are offered to other WTO members. Another option is to use information and linkages to lever resources to meet these obligations. The WTO has committed to provide technical support to developing countries to help them meet international rules and standards, and although delivery has so far fallen short of promises it is likely that more technical assistance will be available. The final option is to change the rules. Rules are necessary but SPS rules often seem arbitrary and excessive. For example the EU aflatoxin regulations will keep out \$670 million dollars of agriculture products while reducing risks by only 1.4 in a billion^x. SPS rules are based on out-dated and regulatory concepts such as centred regulation⁶ and process control. In other sectors outcome (product) control are seen as more effective, efficient and relevant. After all the consumer is not interested in the number of sinks per veterinary laboratory or the educational qualifications of vaccinators – they want to know is the product safe to eat. Developing countries form the majority in both WTO and OIE, there is no reason why they should not lobby for SPS regulations that are more in line with current regulatory thinking and which are achievable for developing countries while meeting market requirements.

Conclusions

Information is power and as we move from material-based to knowledge-based economies, the importance of information systems increases. In the East African livestock sector information can prevent losses, maximise productivity, make internal markets function and open doors to external markets. Regional organisations such as the East African Community have a key role to play in this both through facilitating

⁶ Centred regulation assumes that states can and should regulate all processes by command and control systems (legal rules backed by sanctions). Widespread problems with centred regulation include knowledge failure (lack of information on the nature of the problem or how to solve it); instrument failure (regulatory mechanisms are inappropriate and unsophisticated); implementation failure (regulations are widely ignored, circumvented or have perverse and unintended effects); motivation failure (regulators are not motivated to regulate or the regulated to be regulated); and capture (those being regulated gain control of the regulators). In a de-centred paradigm, regulation is seen as an emergent property, arising from norms agreed at different levels with different actors (regulation occurs in many rooms). No single actor has enough information, objectivity or legitimacy to control the process - instead stakeholders come together to create regulation.

information systems that meet members' needs and by promoting members interests internally and externally.

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