

Raising Livestock Production in Africa

Carlos Serè, Director General, ILRI

1. The Role of Livestock

Livestock production currently accounts for about 30% of the gross value of agricultural production in Africa. Seventy percent of the rural poor in Africa own livestock, including pastoralists living in arid and semi-arid zones. Of these, over 200 million rely on their livestock for income (sales of milk, meat, skins) as well as draught power and fertiliser for crop-growing. A key means of making an income for women and the landless, livestock also provide high-quality nutrition for families suffering from AIDS.

2. Dynamics of Rapid Changes Within the Livestock Sector

Livestock production in Africa is struggling to keep up with the demands of expanding human populations, the rise in urbanization and associated changes in dietary patterns of urban dwellers. The demand for monogastrics (such as pigs and poultry) is projected to grow at even higher rates than those for ruminant animals. There are opportunities to commercialise livestock production to target regional deficits in livestock products where they can be produced competitively. As shown in the table below, this growing demand for livestock products in the developing world is reflected in the rapidly declining net trade balance of livestock products for Africa, as imports continue to outpace exports in order to meet demand.

Net trade in livestock products in Africa (1000 tonnes). *Negative figures imply imports.*

	1970	1980	1990	2000	2015	2030
Beef	119	63	-32	52	-5	-109
Eggs	0	-3	-5	-17	-9	-22
Meat	142	50	-110	-80	-283	-744
Milk	-913	-2,496	-1,785	-1,971	-3,605	-5,226
Mutton/ goat	29	40	29	59	73	80
Pig Meat	-4	-9	-21	-42	-71	-108
Poultry	-2	-43	-86	-149	-280	-606

Source: FAOSTAT, 2002.

This rising demand for livestock products has significant implications for the economic, institutional and policy environment along the entire consumption/production value. Demands for compliance with the safety requirements for the different markets have increased. Supermarkets, which serve the middle class, are now demanding standards that require the smallholder to change production methods. The export markets, on the other hand, demand greater control of trans-boundary diseases such as the Rift Valley fever and foot-and-mouth disease. Food security in Africa increasingly requires that productivity is raised while food safety standards are met. To meet this challenge, we must prioritise actions, strengthen the actors and facilitate partnerships involved along the entire value chain - all factors highlighted in the theme of this conference.

3. Facing the Challenge

a) Prioritise actions

Include livestock in poverty reduction strategy papers (PRSPs). The government agencies that produce these documents are generally not familiar with the critical role livestock can play in poverty alleviation. Explicit inclusion of appropriate instruments to enhance livestock development is critical to attract both domestic and Overseas Development Aid (ODA) resources to ensure livestock is utilized to its full potential to reduce poverty.

Understand the value chain from producers to consumers and identify key entry points to enhance overall efficiency and opportunities for increasing profitability to smallholder livestock producers. For example, a study by CILS/ILRI undertaken in West Africa showed that informal "taxes" on livestock movement across national borders represented a significant cost wedge between producers in the Sahel and consumers in the major coastal cities in West Africa. Eliminating these "taxes" could increase prices for Sahelian livestock producers.

Enhance capacity of the public sector to develop and enforce policy and regulatory frameworks for livestock.

Many countries have policy frameworks inherited from colonial times or taken from Western countries without adaptation to local conditions. Banning trade in raw milk is an example. Studies have shown that while consumption patterns of poor people (who in Kenya, for example, almost always consume boiled milk in tea) imply that there is limited value added and reduced health risk through pasteurization, an expensive enterprise. A common policy of banning trade in unpasteurised milk severely limits smallholder milk production and marketing.

Many policies regarding handling of public slaughterhouses also require reform. Government staff trained in livestock policy analysis are needed to promote the appropriate reforms.

Expand the options for service delivery to poor livestock keepers. Agricultural extension and related services have declined over the last decades in Africa. Regarding veterinary services, important experience has been gained in the use of community animal health workers and similar institutional arrangements. However, the regulatory framework has frequently inhibited these developments. ILRI is looking into the role of Livestock Farmer Field Schools as a model for knowledge sharing among poor livestock keepers. Private-sector solutions, such as the delivery of artificial insemination in the Kenyan highlands or a 'live vaccine' for East Coast fever in Tanzania, are expanding in the more intensive systems.

A key service to develop is access to credit. The Grameen Bank in Bangladesh, which provides credit to the poor, who often use it for livestock purchases, shows that the provision of credit can make a significant difference in reducing poverty. Farmers in West Africa benefit from "in-kind" credit that enables them to increase food and feed production, raising levels of small ruminant productivity and manure. Many NGOs provide livestock credits in cash or in kind and Heifer International has been very successful in its "Passing on the Gift" model.

b) Strengthen actors

Strengthen the regulatory capacity of livestock authorities. To increase livestock productivity we must reduce risks such as livestock diseases. Regulations must be enforced to reduce perceptions, both domestically and of trade partners, of such risks. This would enhance trading options and prices, hence providing incentives to the livestock keeper for increasing productivity.

Strengthen collective action among smallholders. Economies of scale in production, processing and marketing give commercial livestock producers an advantage over small-scale livestock producers. The success of dairy development in India shows one pathway to achieving smallholder competitiveness. Vertical integration in the poultry and pig industry presents another private-sector approach to increasing smallholder competitiveness. Community-based management of common property, such as rangelands, water-points and dipping facilities, can be a successful solution.

c) Facilitate partnerships

Private-public-NGO partnerships to deliver livestock services. Delivery of cost-effective services to smallholder livestock keepers is a major challenge. Innovative institutional arrangements combining elements of public service regulation and quality control, private-sector provision of inputs and use of NGOs and CBOs to deliver livestock services are required. Significant experimentation is presently taking place in this field.

Demand-driven agricultural research embedded in an effective innovation system. The evolving context for livestock production increasingly requires adaptation in production technology to increase productivity. This requires knowledge in the hands of those managing the production system and the related support services. Much of this knowledge exists but is neither available where needed nor in the appropriate form. Other knowledge needs to be created through research. A close partnership between farmers, government agencies, input suppliers, marketing agents, post-harvest processors, consumers and researchers is required to cost-effectively meet these knowledge needs.

Regional cooperation in policy design, research. Given the public-good nature of research, most knowledge needs are met through research partnerships. Similarly, given regional trade patterns and ecosystems, many policy issues require regional coordination. Control of diseases such as foot-and-mouth is an example of such need for regional partnerships.

4. Conclusion

Smallholder livestock productivity in Africa can be increased significantly given the growing demand for livestock products, the low productivity levels in small-scale African livestock enterprises and the existing resource base. There will be no "silver bullets" for accelerating livestock development by the African poor. Governments, NGOs, agribusinesses and farmers who understand the complexity need to work together to raise Africa's livestock production levels. Research has a central role to play in enhancing the learning process needed for such co-ordinated actions.