The Global Livestock Sector – a Growth Engine

During the past three decades, a rapid global expansion in production and consumption of animal products has led to a so-called “livestock revolution”, driven by population and income growth coupled with urbanization. Cheap, often subsidized feed grain, cheap fuel and rapid technological change, particularly in poultry, pork and dairy production, have accelerated the sector’s growth to such an extent that it is expected to provide 50 percent of global agricultural output in value terms in the next ten years.

Rapid structural change has been associated closely with this growth process in developed and rapidly growing developing countries. Large-scale commercial production, based mostly on feed grain and often globally connected, has emerged to provide growing urban markets with produce. Yet, an estimated 70 percent of the world’s rural poor, whose livelihoods depend on livestock, have not benefited from this growth in the livestock sector. In fact, on the contrary, many have been and are being marginalized and excluded from the growing markets.

However, other factors are now starting to contribute to slowing demand for livestock products, such as growing concerns for health, environmental and animal welfare issues and increasing prices for feed grains, water, energy and labour. In addition, extensive land-based livestock production is being challenged severely by the vagaries of climate change.

IDENTIFYING CHALLENGES TO TODAY’S LIVESTOCK SECTOR
The livestock sector’s vigorous growth and its concomitant structural changes have resulted in a range of significant challenges that require governance by the international community. These challenges relate to the role of the global livestock sector in economic development and rural poverty alleviation, the accelerated (re)emergence of diseases affecting animals and humans and thus economic and social development and, in areas related to the environment, the climate and the natural resource base used in animal production.

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Recognizing livestock’s effect on the environment
Environmental issues related to livestock have been largely ignored by policy-makers, often because of the large role that livestock play in sustaining livelihoods and rural life. However, the impact of livestock on the environment is substantial:

- pasture – 26 percent of the earth’s terrestrial surface is used for livestock grazing;
- feed – 33 percent of global arable land is used to grow feed grain.

This pasture use and the production of feed grain are associated with substantial greenhouse gas emissions, and with land and habitat degradation. For example, the expansion of pasture is a major factor in deforestation in Latin America. In addition, livestock contribute to water pollution, particularly in areas of high animal densities.

Recognizing family farms under pressure
In the absence of viable economic alternatives, traditional livestock systems sustain a large number of poor rural farmers. They provide their families with essential food, income, fodder, and some off-farm employment. But the increasing demand for agricultural products and the shift to large-scale commercial livestock production means that many smallholder and pastoralist producers are finding it ever more difficult to sustain their livelihoods. Yet, their ability to adapt to change and provide for the food needs of their families is severely constrained by the growing demand for food and livestock products from the growing urban markets, the increasing demand for feed grains, and the growing pollution and environmental degradation associated with large-scale commercial livestock production.

Livestock production on two levels
The global livestock sector is characterized by a pronounced dichotomy of two disparate but co-existing systems:

- smallholder and pastoralist production – supporting numerous family livelihoods and household food security and contributing to rural food security; and
- commercial production – supporting the global food supply system and providing employment to producers and others in associated processing, distribution, marketing and support services.
fao’s Livestock Sector Strategy

Taking the Broad View

fao’s Livestock Sector Strategy addresses sectoral challenges and ensures that safe, sustainable and affordable livestock products and services contribute equitably to human development and well-being. This is done using a well recognized professional core at fao’s headquarters and in the regions, capable of addressing the livestock sector’s role in its context and of establishing effective linkages with partners. The strategy also clarifies, informs and facilitates the contribution of livestock to household and national food security, to overall rural economic development and poverty reduction, to the provision of safe food for consumption, and to national, regional and international livestock commodity trade while safeguarding environmental sustainability and agricultural biodiversity.

Specifically, it provides support to fao member countries for:

• managing global animal health threats;
• advising on the role of livestock in economic growth and poverty reduction;
• managing livestock in view of its effects on climate change and natural resources;
• supporting a field programme on livestock sector development and emergency management.

Dealing with Animal Disease and Public Health

With more than 70 percent of all emerging infectious diseases of humans stemming from the animal kingdom and with global livestock production gradually shifting from North to South and into areas of high human density, animal-related public health risks are being viewed with increasing urgency and importance. This disease emergence is very closely linked to changes in the livestock production environment and in sector structure, including:

• increased animal densities in warm, moist and changing climates,
• increased mobility of people,
• increased movements of animals and animal products, and
• inadequate public investments in services and institutions.

Maintaining Animal Genetic Diversity

Breeds of domesticated farm animal species are the primary biological capital for livestock development. Livestock output growth in the past century has concentrated on a very small number of breeds worldwide, a process associated with significant erosion of existing biological diversity. Such diversity loss, if left to continue its course, will seriously reduce options to respond to changing requirements of the sector.

households. In contrast, the growth of large-scale operations with sophisticated technology based on internationally-sourced feed caters to the rapidly growing markets for poultry, pork and milk. The “middle-ground” of mid-size market-oriented family farms is still growing in importance in many places, but many are also being gradually squeezed out of markets and are particularly vulnerable to disease shocks.