

## Livestock

### Continued growth and market-based policies

*In February 2010, the FAO released its annual report “The State of Food and Agriculture”, its major flagship publication, with a special section on the livestock sector (“Livestock in the Balance”). A Summary, by Uwe Hoering*

The livestock sector is one of the fastest growing parts of the agricultural economy, the report underlines. Livestock grazing occupies 26 per cent of the earth's ice-free land surface, and the production of livestock feed uses 33 percent of agricultural cropland: In 2005, a total of 742 million tonnes of cereals were fed to livestock, representing roughly one-third of the global cereal harvest and an even larger share of coarse grains. Livestock contributes 40 per cent of the global value of agricultural production and supports the livelihoods and food security of almost one billion people. Livestock not only provides income and high-quality food, but also fuel, draught power, building material and fertilizer. For many small-scale farmers, livestock also provides an important safety net in times of need.

#### Key messages of “Livestock in the Balance”

The livestock sector ...

- ... is one of the most dynamic parts of agricultural economy, growing rapidly and changing fast,
- ... contributes to food security and poverty reduction, however, it could do more with judicious policy, institutional reforms and significant public and private investments,
- ... must improve its environmental performance, because livestock production is placing increasing pressure on land, air, water and biodiversity,
- ... poses with various livestock diseases systemic risks that must be addressed.

Though the livestock sector is very diverse, there are broadly three systems: extensive and intensive grazing, mixed farming, both rainfed and irrigated, and industrial production systems. Globally it is estimated that 90 percent of milk and 70 percent of ruminant meat is produced in mixed systems, as are more than one-third of pig and poultry meat and eggs.

#### *Demand and transformation*

Central to the report is the „rapid transition“ that has been taking place, mainly

- a move from smallholder mixed farms towards large-scale specialized industrial production systems,
- a shift in the geographic locus of demand and supply to the developing world, so that by 2007 developing countries, notably China and Brazil, had overtaken developed countries in terms of production of meat and eggs and were closing the gap for milk production,

- and an increasing emphasis on global sourcing and marketing.

As the driving force behind a growing demand for meat products in developing countries the report sees rising incomes, population growth and urbanization, which led to large increases in livestock production, supported by major technological innovations and structural changes in the sector. Supply-side factors such as the globalization of supply chains for feed, genetic stock and other technologies, are further transforming the structure of the sector. Supply-side factors have enabled expansion in livestock production too. Cheap inputs, technological change and scale efficiency gains have resulted in declining prices for livestock products. Worldwide, much of the response to growing livestock demand has been through industrialized production.

These changes have implications for the ability of the livestock sector to expand production sustainably in ways that promote food security, poverty reduction and public health.

### *Smallholders and poverty*

Despite rapid structural change in parts of the sector, smallholders still dominate production in many developing countries. The most commonly cited estimate of the number of poor people who depend on livestock for their livelihoods is 987 million or about 70 percent of the world's 1.4 billion „extreme poor“. In all countries more men than women keep livestock, the latter mainly chicken or goats.

But serious questions and policy challenges must be addressed, if the potential of the livestock sector to promote growth and reduce poverty is to be met in a sustainable way. „Many smallholders are facing several challenges in remaining competitive with larger, more intensive production systems.“ A growing divide is emerging: Large-scale industrial producers serve dynamic growing markets, whereas traditional pastoralism and smallholders risk marginalization. “Rapid growth in the livestock sector offers clear opportunities for poverty reduction“, but „the traditional 'ladder', that smallholders once climbed to escape from poverty is now missing several rungs”.

Therefore policy makers need to recognize that not all smallholders will be able to benefit from the opportunities offered by growth, and that men and women may face different risks and opportunities. Most smallholder livestock producers will eventually leave the sector.

FAO recommends that smallholders, „who have the potential to compete as commercial enterprises“, should be supported in taking advantage of the opportunities and in managing the risks. High transaction costs for smallholder producers can be reduced through collective action, such as the setting up of cooperatives and various forms of contract farming. „In the short term, contract farming may benefit smallholders, but over the long term, integrators prefer to deal with a few large producers rather than a large number of small producers”. This is most evident in pig and poultry production, where processors demand large quantities of supply at a consistent standard. Therefore, rural development strategies should create off-farm jobs for those that may be unable to adapt and compete in a rapidly modernizing sector. Thirdly, policy makers need to protect livestock's safety-net function for the very poor.

### *Growth and governance*

In many parts of the world, the transformation of the livestock sector, in the absence of strong governance, is resulting in market failures related to natural-resource use and public health. In some cases, government actions have created market distortions, for example with subsidies.

Besides for substantial investments, the report calls for stronger institutions at global, regional, national and local levels, to ensure that continued growth of the livestock sector contributes to livelihoods, meets growing consumer demand and mitigates environmental and health concerns. There is a need to enhance the efficiency of natural-resource use in the sector and to reduce the environmental footprint. Particularly, „market-based policies, such as taxes and fees for natural-resource use or payments for environmental services would encourage producers to ensure that livestock production is carried out in a sustainable way”. Livestock should also be taxed to reduce the contribution to greenhouse gas emissions and to internalize the costs of environmental damages. Too, new technologies, “encouraged by appropriate economic incentives“, could contribute to livestock helping in both adapting to climate change and mitigating its effects on human welfare, instead of contributing to climate change.

Summarizing, the report identifies three major areas for action:

- Harnessing the potential for growing livestock demand to contribute to poverty alleviation and improved food security, with judicious policy, institutional reforms, and significant public and private investment, for example to ease the transition of many livestock keepers out of the sector.
- Increasing the sustainability of natural-resource use like land, air, water, and biodiversity, corrective action is needed to encourage the provision of public goods such as ecosystem services and environmental protection. The sector can also play a key role in mitigating climate change.
- Improving efforts to manage animal diseases.

The rapid growth of the sector, in a setting of weak institutions and governance, has given rise to systemic risks that may have serious implications for livelihoods, human and animal health and the environment. Investments are required to improve livestock productivity and resource-use efficiency. Policies, institutions and technologies must consider the particular needs of poor smallholders, especially during times of crisis and change.

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