

Background

IMPORTANCE OF THE LIVESTOCK SECTOR

Livestock products (meat, milk, eggs, fibres, hides, etc) account for over 40 percent of the value of world agricultural output, and they provide one-third of humanity's protein intake. Worldwide, the demand for livestock products is soaring because of population growth, growing incomes and changing food preferences. The global production of meat and milk is projected to roughly double during the first half of the twenty-first century. This trend, which is facilitated by global trade in livestock inputs and livestock products, has made livestock production the fastest-growing subsector of agriculture in many developing and transition countries (FAO, 2006a).

Raw economic figures do not capture the full significance of livestock production to economies and livelihoods around the world. It is important that sufficient consideration be given to the prevalence of livestock keeping among the world's poor. An estimated 70 percent of the world's more than 1 billion rural people living on less than US\$1.25 a day (UN, 2009) are at least partially dependent on livestock for their livelihoods (LID, 1999). And for about 120 million pastoralists, livestock production is the principal source of livelihood (ILRI, 2002). Animals also provide draught power for more than 320 million hectares of farmland, equivalent to one-quarter of the earth's total area under crop production.

At the household level, particularly in developing countries, livestock perform many important functions including providing transport and draught power for crop production, and manure for fertilizer and fuel. They uphold social networks and cultural activities, and provide an essential means of savings and insurance. It is the ability to perform these multiple functions that make livestock particularly valuable assets for poor people. Local breeds tend to be well adapted to fulfilling these diverse roles.

Many of the functions that livestock perform are difficult to evaluate in economic terms, but some studies indicate that the contribution of non-market functions can be quite substantial. Studies that quantified the value of livestock's financing and insurance functions to households that are unable to access these services from other sources indicate that these functions account for 81 percent of net benefits from meat goat production in southwestern Nigeria (Bosman *et al.*, 1997), 23 percent in cattle production in upland mixed farming systems in Indonesia (Ifar, 1996), and 11 percent in smallholder dairy goat production in the Eastern Highlands of Ethiopia (Ayalew *et al.*, 2002).

It is important to consider non-market values when comparing the value of different production systems within the livestock sector, because otherwise the value of small-scale livestock production and local breeds remains under-represented.

The contribution of livestock production to agricultural gross domestic product (GDP) is especially significant in countries where pastoral systems predominate. For example,



livestock production is reported to account for almost 90 percent of the agricultural GDP in Mongolia and for 80 percent in Sudan.

WHO ARE SMALL-SCALE LIVESTOCK KEEPERS?

There is no internationally agreed definition of small-scale livestock keepers. The term *small-scale livestock production* is often used interchangeably with smallholder, subsistence and family farming, or with resource-poor, low-income, low external input, low-output or low-technology livestock keeping.

Smallholder farms constitute about 85 percent of all farms globally (IFPRI, 2005). A size-based definition of smallholders is, however, of limited use, as it does not take into account many factors that have important implications for farm productivity and efficiency, such as the nature of the production system, the types of crops or livestock raised, regional and national differences, institutional and market arrangements, labour arrangements and access to social services such as health and education.

According to FAO (2009a, b), small-scale livestock keepers include mixed crop–livestock farmers, pastoralists and landless livestock keepers. One option for defining small-scale livestock keepers might be relative to the average livestock keeper in their country rather than by the absolute size of their herds or land holdings. Pastoralists, however, can have quite large herds, because livestock is their main asset and they need a minimum number of animals to resist drought cycles. The International Livestock Research Institute has used generic definitions for smallholders, for example dairy farmers with fewer than six milking animals and/or less than 3 ha of land; pastoralists with fewer than ten mature cattle; farmers keeping fewer than 30 small ruminants or fewer than 200 poultry. Other important characteristics that might be considered in a definition of small-scale livestock keepers include their tendency to operate with limited resource endowments relative to other producers in the sector, and the fact that, in general, small-scale livestock keepers have relatively low-levels of formal education and training. Small-scale livestock keepers often keep their animals on communal rather than private land, or they may be landless.

Pastoralists can be distinguished from other livestock keepers on the basis of the contribution of livestock to their agricultural income and the agro-ecological context in which they operate (FAO, 2002). They can be grouped according to their mobility, ranging from entirely mobile “exclusive pastoralists” to semi-settled “agropastoralists” practising some agriculture (Blench, 1999). But in reality the systems often overlap. Settlement policies, economic development and changing environments further reduce the differences and move the balance towards agropastoralism

Importantly, small-scale livestock keeping is usually a family enterprise that practises subsistence production or a mix of subsistence and commercial production. The family is the major source of labour, and livestock production is often the main source of income. These livestock keepers usually have limited access to input and output markets, and to services and credit. Most of their market interaction is within informal local markets, for which they produce local or traditional products. They routinely face high transaction costs in securing quality inputs and getting market recognition for quality outputs.





PHOTO CREDIT: ELLEN GEEHLINGS

Rural women in Bangladesh depend on dwarf goats for a regular income

Importantly, small-scale livestock keepers tend not to purchase production inputs. The majority of inputs come from within the farm or from local grazing land as part of a closed nutrient cycle. Many small-scale livestock keepers operate at the lower-end of the production curve, where small additional inputs lead to substantial increases in productivity.

