

Livestock play a major role in sustainable food systems. For example, manure is a critical source of natural fertilizer, while livestock used as draft animals can help boost productivity in regions where there is low mechanisation. Livestock are important assets for vulnerable communities, where sustainable production systems have the potential to contribute to the preservation of biodiversity and to carbon sequestration in soils and biomass<sup>9</sup>. In harsh environments, such as mountains and drylands, livestock is often the only way to sustainably convert natural resources into food, fibre, and work power for local communities. Increasing incomes, changing diets, and population growth have led to increased demand and made the livestock sector one of the fastest growing agricultural sub-sectors in middle- and low-income countries. This represents a major opportunity for smallholders, agribusiness, and job creators throughout the livestock supply chain. However, if not properly managed, this growth risks accentuating sustainability issues that span equity, environmental impacts, and public health<sup>10</sup>.

Poverty in Pakistan is primarily a rural phenomenon where livestock husbandry is considered a key component in alleviating poverty<sup>11</sup>. The rapid growth in demand for livestock products in Pakistan is viewed as a ‘food revolution’<sup>12</sup>, as the structural shifts in world agriculture being brought about by shifts in developing-country demand for foods of animal origin will continue. Livestock products are costly in relation to staple foods, so Pakistan’s consumption levels are still low, but increasing with rising incomes. Goat/sheep and particularly poultry meat consumption are growing fastest. The need for increased livestock production is pressing, given the rapidly growing demand for animal products and the important contribution of livestock to the incomes and welfare of the rural poor.

The flooding affected the livestock sector and an estimated 1 million livestock have perished<sup>13</sup>. The consequences are not only at farmers’ level, but the local food processing and slaughtering industries will be negatively impacted by the expected reduction in food harvests and reduced supply of livestock. This is also translated in an unprecedented food and malnutrition crisis.

In particular, in Balochistan the provincial government estimated a loss of around 900,000<sup>14</sup> of small ruminants and almost 750,000<sup>15</sup> poultry. The province has a huge livestock resource-base, sharing 46% of national sheep, 41% of camel, and 23% of goats’ population. The climate in most of the areas of Balochistan province is arid and conducive for the sheep and goat production. The migratory sheep and goat composes almost 90% of the livestock population, moving from uplands to lowlands in winter and back in summer. Since the value of small ruminants is around the 38.3% of the entire economic value, the losses are deeply affecting the Balochistan population.

Long-term policies, genetic improvements, diversified and open marketing system, credit and insurance, sustainable rangelands productivity, and proper vaccination drives are needed to enhance livestock productivity and export<sup>16</sup>. In addition, there are several factors, which constrain the productivity of animals in the province, i.e. diseases, scarcity of vegetation/forage on ranges, conservative practices by livestock farmers, and poor marketing facilities. One of the most important constraints in production has been long lasting drought that caused feed scarcity. This scarcity badly affected fertility, weight gain of animals and caused diseases and production losses. It also increased cost of production and decreased breeder’s interest.

According to the EU Gender Gap Analysis of Pakistan, in 2020, 67.2% of the women workforce were employed in agriculture. The sub-sector of agriculture, livestock, poultry and dairy are the prime responsibility of rural

<sup>9</sup> <http://www.fao.org/animal-production/en/>

<sup>10</sup> <https://www.worldbank.org/en/topic/agriculture/brief/moving-towards-sustainability-the-livestock-sector-and-the-world-bank>

<sup>11</sup> Economic Survey of Pakistan, 2021-22

<sup>12</sup> Christopher Delgado, Mark Rosegrant, Henning Steinfeld, Simeon Ehui, Claude Courbois, *Livestock to 2020 The Next Food Revolution*, International Food Policy Research Institute (IFPRI)

<sup>13</sup> Pakistan Floods 2022 Post-Disaster Needs Assessment <https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna>

<sup>14</sup> Including the nonproductive animal due to flooding/starvation/restlessness, source the Animal Health&Production Extension Department Balochistan Government (21/02/2023)

<sup>15</sup> Including the nonproductive animal due to flooding/starvation/restlessness, source the Animal Health&Production Extension Department Balochistan Government (21/02/2023)

<sup>16</sup> Dr. Afzal, et al, Food & Agriculture Organisation