PAPER 5

Policy Issues in Dairy

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The context

Pakistan is the 4th largest producer of milk at 40 million tonnes, of which 49% is produced in Punjab province and 38% in Sindh. Nearly 35 million of rural people are engaged in livestock and milk production, but more than one-third of them are poor.

Pakistan already has the highest level of urbanisation in South Asia, with some 35% of the country's population living in urban areas. By 2030, the share of urban population is estimated to increase to 50% of total population (UNFPA 2007). This means that future prospects for Pakistan's dairy sector are promising if right policies can be put in place to address the multitude of constraints. Already, there has been a rapid growth in peri-urban dairy farming in recent years. Around 30% of household expenditure in Pakistan is estimated to be on milk and dairy products.

Dairying in Pakistan is labour-intensive and engages 6.8 million farmers, and thousands of milk collectors, transporters, processors, distributors and retailers. The input and services industry also provides employment to a large number of workers, including in the feed and veterinary supply chain.

The two provinces of Punjab and Sindh together have some 90% of the buffalo population and over 70% of the cattle population. Over 70% of buffalo and cattle are in herds of less than 10 animals. Also, about 70% of households with large ruminants have herds of less than 5 animals, while a further 20 to 25% of households have 5 to 10 animals.

A Government regulation, under which keeping animals in urban centres is banned has played a critical role in determining the locational dimension of the dairy industry in Pakistan. The provincial Governments have set aside land for peri-urban milk colonies, which have grown rapidly, especially around Lahore and Karachi in terms of milk production and distribution, as well as fodder and feed suppliers. The peri-urban dairy farms operate under intensive production conditions, with herd sizes that are much larger than on the rural farms.

Trade in dairy products

Global milk production in 2013 was estimated at 780 million tonnes, of which developing countries account for 51% (FAO 2013). Trade in milk is dominated by developed countries, which account for 79% of milk exports. The limited availability of milk for exports has been pushing up the international price of milk powder. In October 2013, for example, the FAO Dairy Price Index stood at 252 points – 25% above its level a year earlier.

Demand for dairy products is rising strongly in Asia, due to population growth, rising incomes and urbanisation. Asia is expected to remain the main market for dairy products, accounting for some 55% of world imports, followed by Africa, with 15%. Significant additional demand is expected from China, the Islamic Republic of Iran, Singapore, Saudi Arabia, the United Arab Emirates, Indonesia, Japan, the Philippines, Malaysia, Vietnam and Thailand. Demand for whole milk powder has been rising at 6% per annum over the past three years.

Role of government

Since 2007, the Pakistan government has provided several incentives for the development of the dairy sector, including: regulatory measures for imports of high-yielding animals, semen and embryos for cross-breeding; duty-free imports of veterinary dairy and livestock machinery/equipment (not manufactured locally); zero customs duty on imports of cooling system and milk processing machinery/equipment (not manufactured locally); and exemption from retail sales tax for processed products. The FAO (2011) study draws the following general conclusions about the public programs in Pakistan's dairy industry:

- inadequate farmer outreach;
- short-term focus of initiatives; and
- lack of coordination between federal, provincial and local governments.

The FAO report also points out that due to Pakistan's heavy reliance on donor contributions in dairy development projects, when a project is completed and aid is terminated, the future of the initiative becomes uncertain. A related issue is that the Government loses control over the design of the projects.

The focus of policy in Pakistan, according to FAO, should be on breed improvement over the medium to long-term. The FAO report (2011) reveals that although buffalo and cow milk yields in Pakistan are higher than in India, Sri Lanka, Bangladesh and Nepal, animal productivity in Pakistan has not been growing for the past ten years. Cattle in smallholder systems are predominantly indigenous breeds and milk production is generally less than 1,000 kg/lactation, with lactation lengths between 200 and 260 days. The productivity of dairy cattle cross-breeds is far higher than that of local non-descript or pure breeds, with longer lactation periods, higher milk production per lactation and shorter calving intervals. These advantages make cross-bred cattle highly preferred for intensive and semi-intensive dairy farming systems. An average quality cross-bred animal costs almost 40% more than an average buffalo. Semen for cross-breeding programmes

is imported from countries such as the United States, Germany and Australia by private sector firms.
Some experts add that policy interventions should also be focused on improving availability of balanced feed and water for the animals. Pakistan's formulated feed industry is still underdeveloped. Compared with an estimated annual demand of 40 million tonnes, only about 0.20 million tonnes is produced domestically. This feed is also unaffordable for smallholders, and only used by market-oriented dairies, where it is available.

Policy related constraints

- Poor knowledge of farmers: Poor knowledge of forage production, animal nutrition, health and management, and limited acceptance of better management practices are common. For example, nutritional analyses of local feeds are available and have been used in ration formulation at a research level, but this information is not readily available to farmers. In addition, many farmers have limited knowledge of animal requirements or ration formulation for milk production (Wynn *et al.* 2006).

- Low productivity of animals: In the past ten years to 2011, no change has been observed in annual average yields per cow, although average annual yields per buffalo have increased slightly by 13% (FAO 2011, p. 31). A major cause of the low yield performance is inadequate feeding.

- Limited access to credit: The State Bank of Pakistan has set a quota for agricultural lending from a pool of State and private banks. Although the banks have been exceeding their targets in this, several studies have found that the majority of smallholders are unable to access credit from the banks and have to rely on informal sources. Furthermore, only a small proportion of the bank loans (less than 15%) has been utilised for livestock and dairy (Afzal 2006).

- Poor access to veterinary services: According to an industry estimate, there are only about 5000 veterinarians in Pakistan for serving the entire livestock population, including 53.9 million dairy animals. This shows that the veterinary sector is severely under-resourced.

- Lack of effective veterinary extension services: Skills and motivation of Government extension staff are low. The ratio of households to service providers is extremely high. Mortality rates of animals are high – 20% in rural systems, due to endemic diseases and internal and external parasites, which all present challenges.

- Marketing of milk: The traditional supply chain and the chains developed by milk processors were said to disadvantage farmers. The poor distribution infrastructure is a major constraint for developing alternative market outlets for producers in these areas; the lack of a commercial market outlet through milk companies limits the price received by farmers. Being a perishable commodity, milk requires a good road system and a cold chain system for timely delivery to consumers and processing plants.

- Government policy: For many years, Government policy in dairy at national, provincial and district level has been unstable. Public investment in rural roads and irrigation – the two most essential inputs in dairy sector – has been inadequate.

- The absence of dairy marketing cooperatives in Pakistan is another issue that needs to be properly examined. Producers of perishable products have limited market power in the price determination process and marketing cooperatives can strengthen the bargaining position of producers. Staal *et al.* (2008) argue that development of cooperatives should be encouraged with policy support from the government because it will help the development of a more balanced and equitable growth trajectory for Pakistan's dairy industry by minimising risk, assuring quality, reducing transaction costs of marketing, and paying attractive and stable prices for small farmers. An understanding of the development of dairy cooperatives in India and Australia would be highly beneficial for industry policy makers.

References

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