

## Pakistan's Dairy Animals Productivity - Islamabad Post



Global milk production was about 887 million tonnes in 2020. The share of cow and buffalo milk was 81 per cent and 15 per cent, respectively, while combined dairy animals (goat, sheep, and camel milk) were 4 per cent. It grew by 1.4 per cent in 2020, projected at 1.7 per cent per annum, producing 1020 million tonnes of milk by 2030. India was the largest milk producer producing 184 million tonnes, while the USA and Pakistan produced 101 million tonnes and 61 million tonnes of milk in 2020. It is expected that India and Pakistan will contribute more than 30 per cent to world milk production by 2030.

Dairy animal population and yield are two foremost factors that play a dominating role in milk production. The world dairy animal population will be 825 million in 2020. The dairy cow population and yield were 268 million and 2.7 tonnes, respectively, while cow milk production was 718 million tonnes. The dairy population and yield were 70 million and 1.9 tonnes, respectively, while buffalo milk production was 134 million. The combined population of dairy animals (goat, sheep, and camel) of 486 million produced 34 million tonnes of milk, yielding 0.07 tonnes in 2020. It is projected that the average world growth of dairy animals and yield will augment 1.1 per cent and 0.7 per cent per annum, respectively, by 2030. Global (cow's) population and yield persisted 3.8 times and one and half times higher than buffalo population and yield. In comparison, cow milk production increased five times higher than buffalo milk production in 2020.

Israel, KSA, Estonia and Denmark have the maximum cow milk yield between 10 tonnes to 13 tonnes, with the dairy cow population ranging between 0.1 million to 0.6 million. But the USA has the maximum number of 9.3 million dairy cows with maximum yields of 11 tonnes in 2020. India has the largest dairy animal population with the lowest milk yield globally. Buffalos and cows are significant milk-producing animals. The dairy cow population and yield were 52 million and 1.7 tonnes, respectively, while the dairy buffalo

population and yield were 44 million and 2tonnes, respectively, in 2020.

More than 38 million dairy animals in Pakistan produced 61 million tonnes of milk in 2020, with buffalos and cows the critical drivers in milk production. The share of buffalo and cow milk was 60 per cent and 37 per cent, respectively, while combined dairy animals (goat, sheep, and camel milk) were 3 per cent.

During the last six decades in Pakistan, the dairy buffalo's population grew from 2.6 million to 15.40 million, while yield increased from 1.6 tonnes to 2.4 tonnes. Buffalo milk production increased from 4 million tonnes to 37 million tonnes during the same period. The number of dairy cows also rose, from 1.9 million to 14.64 million, and their yield increased from 0.9 tonnes to 1.5 tonnes. Cows' milk production increased from 1.7 million tonnes to 23 million tonnes. The dairy buffaloes' population and yield mounted 6 times and 1.5 times, respectively, while the dairy cow population and yield increased eight times and 1.7 times, respectively.

Despite this, Pakistan's cow milk yield is still 6-8 times less than the yields of Israel, Saudi Arabia, Estonia and Denmark. Pakistan's dairy cows and buffalo population growth remained at 3.8 per cent and 3.1 per cent, while cow and buffalo milk yield growth was 1.07 per cent and 0.76 per cent, respectively. Cow milk production growth was 4.9 per cent, while buffalo milk production growth remained at 3.8 per cent from 1960 to 2020. So keeping in view cow productivity, pure buffalo dairy farms are dwindling while mix (buffaloes and cows) and only cow dairy farms are on the rise because the dairy farms housing buffalos only are registering losses in Pakistan. This is due to the increasing cost of feed and fodder and the static farm gate price of milk. Multiple factors, including the low genetic potential of buffalo and cow, lack of healthcare facilities, insufficient/ improper feeding, and lack of research and development (R&D), are responsible.

The dairy sector should be transformed through R&D in the latest modern dairy technology. Genetic advancement in cross-breeding cows with high yielding breeds provides a tremendous long-term potential of raising milk yields by three to four times at the farm level. The small dairy farmers should start switching to cows as dairy animals rather than focusing only on buffalo. They should be financially supported in the short and long term interest-free loans and cow insurance through banking and non-banking channels for purchasing high milking yield cows, fodder production, and animal treatment.

The private sector can also play a decisive role by importing high milk yield cows, Super Bulls and Holstein Friesian cow semen doses from the USA, Netherlands, New Zealand and Australia. The progressive dairy farmers can also import high milk yield dairy cows.

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