

The Asian Dairy Challenge

Importance and opportunities

1. Dairy is the third most economically important agricultural commodity in Asia and the region accounts for more than 35 percent of global milk production. World milk production is projected to increase by 175 Mt (23%) by 2024 compared to the base years (2012-14), the majority of which (75%) is anticipated to come from developing countries, especially from Asia. This will drive the growth in dairy's share of agricultural GDP while food crops decline in relative economic importance.
2. Dairy cows are an efficient converter of human inedible plant material into high-quality milk and are net contributors to the human food supply. When efficiencies of nutrient conversion are calculated on a human-edible basis, dairy clearly adds to the total human food supply because of the ability of cows to convert human-inedible inputs (cell-wall-rich plant material such as grass, crop residues and agro industrial by-products) into milk.
3. Millions of smallholder producers, including women and the landless produce 80 percent of milk in Asia and depend on dairy for their livelihoods. In addition to regular income, the dairy enterprise offers inflation-proof cattle assets for insurance and financing. Other benefits include draft power, contribution to meat supply, soil fertility and fuel from manure. The dairy value chain generates large scale employment, particularly in rural areas.
4. Farmers, especially women, are empowered through enhanced sustainable livelihoods, cooperation and participation in organization and community activities resulting in strong leadership development.
5. Milk is a nutritious food, rich in Proteins, Calcium, Vitamin A, D, and E, and micronutrients and can make a significant contribution towards healthy nutrition and development, especially for children. This is particularly true for countries where diets lack diversity and consumption of animal-source foods is limited, as is the case in a number of countries in Asia. Globally, 52 million children under five are estimated as wasted and 70 per cent of them live in Asia, mostly in South Asia. Such children are at higher risk of acute malnutrition and death.
6. Globally, dairy has a favorable water footprint compared to other livestock products due to its heavy reliance on agro and forestry by-product based feed resources and nutrient recycling.
7. School milk programs in rural areas linked to local dairy development holds significant opportunities for enhancing food security and nutrition in rural areas.
8. Investing and capacity building in dairy development offers multiple social, economic and environmental benefits.

Challenges

1. Growing demand and production could lead to increased pressure on land resources and ecosystems services, and the associated possible consequences in terms of social structures and public health.
2. Productivity enhancement offers substantial potential to contribute to enhanced profitability and reducing the potential negative impacts of rapid growth in the production of milk and milk products. Considerable scope exists for yield and efficiency gains in much of Asia. Underlying low productivity is the interaction of factors including feeds, breeds, animal disease and husbandry practices, all of which are linked to access to technology and human capacity.
3. Support for development of delivery systems for minimizing animal disease burden is another area that deserves focused attention. This requires large and consistent investment in building animal health capacity and promoting dialogue towards identifying and implementing options for the control of diseases.
4. Inclusive market development is needed to ensure that the dairy sector continues its role in promoting rural livelihoods and poverty alleviation. Increasing standards for quality in modernizing markets can threaten market participation of those producers who cannot easily comply. Economies of scale in marketing and processing also favor larger and more concentrated production.
5. It is important to address food safety and quality issues along the dairy value chain and provide solutions to perishability, product inconsistency, and applying standards for milk quality and hygiene. The quality and safety assurance systems should be based on scientific knowledge related to producing a safe product and other socio-economic factors, including the consumer demand for food safety.
6. Environmental issues on dairy involve land and water scarcity, soil degradation, pollution of the waterways, greenhouse gas emissions from rumen fermentation and waste management. Responsible and efficient utilization and management of these resources will facilitate sustainable growth of the dairy sector.
7. Sustainable dairy development requires enabling policies including producer and other support institutions, enhanced access to credit, technology and information.

Asia has a rich diversity of experiences and models to address these challenges. Dairy Asia aims to foster coordinated regional collaboration and cooperation to capitalize on these experiences and to promote regional and national multi-stakeholder partnerships in pursuit of our joint vision.

A Socially and Environmentally responsible Asian Dairy Sector that enhances rural livelihoods, improves nutrition, and contributes to economic prosperity

