A Living from Livestock
Pro-Poor Livestock Policy Initiative

Developing Countries and the Global Dairy Sector
Part I: Global Overview

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EXECUTIVE SUMMARY

Globally, the dairy sector is probably one of the most distorted agricultural sectors: producer subsidies are in place in many developed countries, encouraging surplus production, export subsidies are paid by governments to place the excess production on the world markets, and tariff and non-tariff barriers are erected both by developed and developing countries to protect their dairy sector from 'unfair' competition. These market distortions are having significant and different impacts on producers and consumers in developing and developed countries, which are however extremely difficult to quantify. Oxfam, in a recent paper, claims that Europe's dairy regime is devastating livelihoods in the developing world, giving Kenya, Dominican Republic and Jamaica as examples where the livelihoods of "thousands of poor small-scale farmers have been destroyed by imports of cheap subsidized EU dairy products".

Dairy Production

Milk has certain features that distinguish it from other agricultural products and shape its production, processing and trade. As opposed to grains, milk is a bulky and heavy commodity which requires high-cost storage and transportation as it spoils quickly without cooling.

Due to the fact that even the largest dairy farms cannot provide adequate quantities to supply a processing plant, but each single dairy farm only supplies a small share of the total milk processed, the dairy industries in many countries are organised along co-operative lines. Milk producer co-operatives bundle the interest and supply of a large number of dairy farmers and strengthen their bargaining power towards processors or even run their own processing plants.

Over the last 24 years, total world milk production has increased by 32 percent, whereas per capita world milk production has declined by nine percent which indicates that world milk production has not kept pace with the increase in world population. The decline in global milk production per capita can be attributed to falling production in the developed countries whereas per capita milk production in the developing countries has slightly risen over the last 24 years. As opposed to the trend towards intensification of milk production in developed countries, production growth in developing countries is to a large part due to increasing numbers of milk animals (and dairy farms) and only to a small part due to productivity gains.

Dairy Consumption

Total milk consumption in developed countries stayed more or less constant over the last twenty years, while significant increases in global milk consumption are due to population growth and per capita income growth in developing countries (see Figure 12). The latter has led to the emergence of an affluent middle-class in many low and middle income countries in Southeast Asia, Latin

America and Central and Eastern Europe. Additional "westernization" trends leading to increasing preferences for new value-added products in many of these economies generate additional dairy market growth.

The composition of dairy product consumption varies across different regions with liquid milk as the overall most important product by volume. However, processed dairy products become more important with increasing incomes and living standards, and in developed countries the trend goes more and more towards high value functional foods that require considerable research investments and sophisticated processing.

The Dairy Industry

Dairy companies all over the world face a number of changes and challenges which are forcing them to reconsider their strategies. The most important challenges are a growing demand for dairy products, with world demand growing by 2 percent a year or a quantity equal to the entire annual production of Australia, coupled with concerns about the milk supply growing at a slower pace than demand.

Furthermore, dairy companies face an increasing number of consumer requirements in combination with increasing customer power. Food retailers, the foodservice industry and the food processing industry are the key customers for dairy products. The leading companies in this sector tend to be significantly larger than the players in the dairy industry and the on-going global consolidation process is further increasing their market power. Consequently, the concentration process by means of mergers, acquisitions and strategic alliances in the dairy industry has been very pronounced and is expected to continue.

As demand in dairy products is not rising at equal rates all over the world but hardly at all in developed and strongly in some developing regions the challenges dairy companies face vary depending on the market they operate in. Companies operating in the big but mature dairy markets of Europe and the US face limited market growth opportunities in volume terms as per capita consumption levels are among the highest in the world and growth can only occur by increasing market shares or switching to higher value-added products. Due to these limited market opportunities in developed countries, multinational dairy companies are often attracted by strong growth markets in developing countries. To benefit from the growth of their own domestic markets, local companies will have to raise product quality and efficiency to be able to withstand foreign competition.

Dairy Trade

The dairy sector is highly localised, as milk is a bulky and perishable product, and dairy products are mostly consumed in the country or region where they are produced. Only a small fraction of global production is traded internationally. Despite the technological developments in refrigeration and transportation only 7 percent of the milk produced is traded internationally if intra-EU trade is excluded.

Trade in dairy products is very volatile, as dairy trade flows can be affected by (a) overall economic a situation in a country, (b) fluctuations in supply and demand, (c) changing exchange rates and (d) political measures. Additional volatility is introduced by the fact that the global dairy market is extremely concentrated in terms of buyers and sellers; hence, supply or demand shocks are not easily absorbed.

With demand for dairy products most rapidly rising in regions that are not self-sufficient in milk production, volumes of dairy trade are growing. Also the share of global dairy production that is traded will increase as trade will grow at a faster pace than milk production.

Since 1990, a shift in world dairy exports from high export subsidizing countries, e.g. EU and US towards non-subsidizing countries, e.g. New Zealand and Australia has been taking place. The developed countries account for 62 percent of the world's dairy imports (measured in milk equivalents) and 93 percent of the exports, showing clearly that the major part of the global dairy trade takes place among developed countries.

Dairy Policies

In many, and predominantly in developed countries, the dairy market is one of the most heavily regulated agricultural markets. Government interventions in the domestic dairy market are most commonly aimed at controlling quantities of production, establishing minimum prices and guaranteeing farmers' incomes. Frequently, governments also intervene through public purchases and storage of oversupply or apply policies to foster dairy consumption.

In countries where domestic prices for dairy products are supported well above world market prices, as a consequence, the domestic market has to be protected against foreign competition in order to ensure the market outlet for domestic farmers who would otherwise have difficulties to sell their overpriced products. The major policies countries put in place to limit imports are tariffs and tariff rate quotas (TRQs) and other non-tariff barriers. Globally dairy products are among the agricultural commodities with the highest tariff protection with an average protection level of over 80 percent (the average over all agricultural commodities being 62 percent).

The most important measure promoting exports are export subsidies. Under the WTO Agreement on Agriculture, countries that used export subsidies on agricultural products were required to set commitment levels on the volume and value of export subsidies that could be provided. The most significant user of export subsidies on dairy is the European Union, accounting for over 80 percent of the total value of export subsidies on dairy granted during the period 1995-2001. Over the same period values of export subsidies have been reduced considerably, and in the case of the EU, subsidies for dairy exports in 2001 were only slightly more than 40 percent of those in 1995.

International Standards for Dairy Products

Though standards were initially developed by the public sector to reduce transaction costs and ensure product quality and safety they have become a strategic instrument of competition of differentiated product markets. Especially in developing countries, but not exclusively there, it can be very difficult for farmers to meet private standards for milk quality and safety which might require investment in mechanical milking, on farm cooling, new feeds and genetic improvement. Apart from the initial investment cost a dairy farmer faces to meet those standards, also high operating costs might render small and even medium-scale units unprofitable in the long run.

Conclusion

Different developments are occurring in the global dairy sector at the moment: Production in developed countries is falling (together with the number of dairy cows and farms), while productivity is rising. Simultaneously milk production in developing countries is growing strongly and numbers of cows are increasing. This development is mirrored in consumption. Dairy consumption levels in developed countries are constant or falling, whereas in many developing countries, foremost in East and Southeast Asia and driven by population growth and growing per capita incomes, dairy consumption is rapidly increasing. With consumer demand in developing countries rising faster than domestic production, global dairy trade volumes are increasing as well with import demand of developing countries being the major driver.

OECD dairy policies mainly result in a financial transfer from consumers in OECD countries to producer and processors. Actually, some benefits of the OECD dairy policies, through the depressed world market prices to which they lead, probably also accrue to consumers in developing countries in terms of increased supply of dairy products predominantly in urban centres – especially considering that many developing countries are not expected to be self-sufficient in dairy production in the future and therefore will have to import increasing amounts of dairy products. However, the artificially low world market price for dairy products, and here especially milk powder, might have negative impacts on dairy farmers in developing countries who have to compete on their local markets with imported milk powder. The extent to which this is the case will be examined in detail in a companion paper by means of dairy sector country studies for Bangladesh, Jamaica, Peru, Senegal, Tanzania and Thailand.