



## SMALLHOLDER DAIRY IN THE FACE OF GLOBALIZATION - THE CASE OF SOUTH ASIA

Between one third and half of the world's poor population live in South Asia and many of them rely on dairy farming for a part of their livelihood. Even though South Asia is one of the world's major milk producing regions - with India having become the world leader in milk production in 1998 - milk production remains predominantly a smallholder business.

Low production costs ensure South Asian farmers' global competitiveness. This applies particularly to Pakistan and India whereas in Bangladesh total production costs for milk lie slightly above the world market price. In particular if the cost of family labour on small farms is discounted (opportunity cost of labour is very low) South Asian dairy farms are highly competitive in comparison with those in other regions. Furthermore, South Asian dairy farms have large productivity potentials that have not been tapped so far and offer the opportunity to further improve on competitiveness.

By far the major part of the milk in South Asia flows through informal marketing channels. This is due to the poor willingness of consumers to pay for the extra costs of formal processing and packaging as well as the absence of formal marketing channels in remote and poor areas. The predominance of informal marketing need not be an obstacle to dairy sector development. Prices offered to farmers are at times higher than in the formal sector and informal small-scale credit provision by middlemen, even at high interest rates, can be crucial in areas where formal credit sources are not available. Issues of milk quality and public health in informal channels however still need to be systematically analysed.

Dairy farms in North America and Europe have higher production costs than South Asian milk producers and are dependent on export and production subsidies for competing on the global market. Due to these regions

governments' resolution to protect the domestic dairy sectors they might become serious competitors when selling excess produce on the world market. However, as those countries have strongly reduced overproduction since the mid-1980s and have become less disposed to selling their excess milk supply on the world market this danger is gradually diminishing. More real competition stems from producers in Oceania and Latin America that have very low production costs. But even these countries are unlikely to meet the strongly growing demand for dairy products in South Asia and South-East Asia.

### ● Milk Yields

Globally, milk yields per cow range from 960 to 10,000 kg per year. These wide differences are due to differences in production systems, genetic potentials and farm management. Only the larger Indian farms, which are very well managed and rely on European dairy genetics reach milk yields around the 4,000 kg mark, equal to the yields achieved in grassland-based New Zealand farming systems.

Within South Asia, two interesting trends and opportunities for development appear to exist: firstly, lactating animals in small farms in Pakistan yield around 40 percent more than those on small farms in India and Bangladesh. And secondly, milch animals in 'large' farms in Haryana, India, reach yields that are 70 to 100 percent higher than those on large farms in Pakistan and Bangladesh

### ● Returns to the Dairy Enterprise

Milk prices range from a low of 10 US\$ per 100kg in Pakistan to a high of 29 US\$ per 100 kg in the USA. Within South Asia, Bangladesh dairy farmers receive the highest prices for their milk - over 23 US\$ per 100kg - which is 1.28 times what New Zealand farmers get. This high price



seems to stem from a high demand for milk opposed to relatively low volumes of production and limited availability.

With some exceptions, returns from cattle sales are more relevant for small farms than for the large ones. 'Other Returns' which include milk and manure utilized on the farm are very important for all South Asian farms, but particularly for small dairy farms.

## ● Cost of Milk Production

The cost of milk production determines the long-term competitiveness of milk producers. Comparison of South Asian dairy farms with those in other regions shows that:

- In all small farms the main cost component are the opportunity costs of family labour.
- The Indian and Pakistani milk producers are more competitive than those of Western Europe (Germany) and the USA. The cost difference is more than 10 US \$ per 100 kg milk.
- The small scale farmers in South Asia are more competitive than their small scale counterparts in Poland and presumably other EU accession countries.
- Average sized farms in South Asia have higher production costs (by 20 to 50 percent) than New Zealand dairy farms.
- Large dairy farms in Pakistan and India have lower costs than New Zealand farms and can be competitive milk producers in the future on the world market provided a competitive dairy chain.
- Farms in Bangladesh will have difficulties to compete against imports from the world market and also from other countries in South Asia such as India and Pakistan.

## ● Recommendations

Taking into consideration both the fact that South Asian dairy production, though still mostly small-scale, is highly competitive and that regional demand for dairy products is expected to continue expanding there is a strong rationale for the South Asian countries to promote small-scale dairy production and if need be protect their dairy markets from unfair and harmful competition.

To further enhance productivity of milk production and make South Asian dairy farmers fit to meet international competition, farmer organisation has to be strengthened to ensure that their interests are better represented on a national scale. Additionally, considerable gains in productivity are to be reaped through improved dairy management.

As a final measure the South Asian countries' governments should resort to applying the safeguards provided in the WTO legislation to protect their dairy markets against subsidised imports from the European Union or North America.

### Policy Brief based on:

*A review of milk production in India with particular emphasis on small-scale producers.* PPLPI Working Paper No. 2

*A review of milk production in Pakistan with particular emphasis on small-scale producers.* PPLPI Working Paper No. 3

*A review of milk production in Bangladesh with particular emphasis on small-scale producers.* PPLPI Working Paper No. 7

*The economics of milk production in Orissa, India, with particular emphasis on small-scale producers.* PPLPI Working Paper No. 16

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