

Policy brief:

Poverty reduction through commercialization of the dairy sector: the importance of farming systems analysis and dairy production systems analysis for development interventions in the dairy chain.

A case study from Ethiopia.

Introduction.

The choices that farming households have and are able to make, are strongly determined by the conditions in which they live: ecological, geographical, distance to markets, available infrastructure, and available support services amongst others. These conditions are seen by policy makers and development organizations, government and non-government the like as important criteria for determining the nature, extent and priority of development interventions. The importance hereof is however not always understood by the same.

This policy brief describes the currently applied confusing mix of poverty alleviation and economic development strategies for dairy development in Ethiopia. If dairy development is to be a means of poverty reduction, development interventions need to be addressed to those that are produce under circumstances that meet the basic criteria for improving their production: market access and adequate technical and financial support.

Background of the problem in Ethiopia.

Milk is an essential commodity, in short supply in many countries. In the view of the Ethiopian government, dairy products form a critical part of the protein provision to the young, old, pregnant and immuno suppressed. Market orientation of dairy production in Ethiopia can be classified as follows: traditional production and marketing (mainly subsistence farmers), informal liquid milk market (farmers sell directly to consumers in rural and urban centres or to traders) and an formal liquid milk market (farmers sell directly to processors or to cooperatives/associations which market the milk via shops and supermarkets). Dairy production in Ethiopia however does not meet the demand of the formal urban market. Although processing capacity is adequate and access to markets is being organized through private and cooperative collection centers, the total market potential is not met. Small scale milk producers are only responding in a limited manner to interventions aimed at improving milk production, and there are few medium or large scale milk producers in the country. This results in often empty shelves in the shops and supermarkets of Addis Ababa and other large and medium towns in the county. Fluctuations in supply (dry/wet season) and demand (religious fasting periods) increase the irregularity of supply.

Current development policies in Ethiopia

Poverty alleviation through economic development, is seen as a viable strategy, also for the dairy sector in Ethiopia. The overriding goal of the Ethiopian national economic policies is the transformation of smallholder agriculture from subsistence production to market orientation. This aim is supported by many government and NGO programmes, with poverty reduction through increased market orientation as a major strategy focus. This however often leads to rather one-size-fits-all development policies, denying the diversity in production systems and farmers' decision priorities.

Dairy development.

Ethiopia has the largest number of cattle in any Sub Saharan country, held under various different circumstances, leading to a variety of geographically?? differentiated production systems according to agro-ecological conditions. Development policies however hardly take these differences in production systems into consideration when determining support policies. These are usually rather broad, targeting all cattle owners without recognition of the prevailing different spatial characteristics. In the case of dairy development in Ethiopia, this has led to disappointing development interventions such as low responses to training programmes, inadequate use of inputs provided. Despite many investments, there is no increase in production and the average consumption per head is falling as a result of the rapid population rise and shelves often remain empty.

The importance of production systems analysis.

Livestock production systems differ as per the opportunities of the area where the production occurs. Ecological circumstances, infrastructure, distance to markets, type of produce (perishable or not) socio economic and cultural ??determine the most profitable production systems.

The most commonly used classification systems for dairy production are built on criteria such as integration with crops, relation to land, agro-ecological zones, intensity of production and participation in formal markets.

These criteria lead to the following classification in Ethiopia:

- 1) Pastoralists and agro-pastoralist, in the lower drylands.
- 2) Rural small scale mixed crop-livestock producers, non market oriented.
- 3) (Semi)commercial dairy production, small to medium scale farms with (some form of) specialization in dairy production: mainly the (peri)urban farmers.
- 4) Large commercial farms, fully specialized in dairy production. This type of dairy keeping requires high level of inputs and managerial skills. Only a handful of such farms are operational in Ethiopia.

Various studies describing the Ethiopian dairy sector confirm this basic classification. Most of the currently applied economic support programmes focusing on dairy production improvement in the more densely populated areas (excluding the pastoralist areas), are usually broadly based poverty alleviation programmes. Hereby the large number of cows available in the rural areas of the country is considered as the base for policies aiming at alleviating poverty through creating improved cash income from dairy production. Virtually without exception, all these programmes have failed in improving the supply of milk.

Criteria determining suitability for dairy production.

In 2008, a study was undertaken¹ to identify constraints faced by dairy farmers in Ethiopia, preventing them from further investing in and increasing their milk production, despite the fact that the ecological circumstances are favorable for dairying. The study concluded that farm strategies applied by farmers in the rural small scale mixed crop-livestock production system did not allow for involvement in market oriented fluid milk production for sale in urban areas. For reasons that farm sizes are small (0,5 to 1,5 ha on average), the priority is food production for self sufficiency, animals are kept for draught purposes, distance too markets are large without adequate infrastructure to reach those markets, and input supplies (credit, feed, veterinary services, AI) are grossly inadequate. Whenever necessary, farm income is supplemented from trade and employment, not from risky investments such as dairy production. The milk that is being produced by the draught animals though, is not sold for fluid milk consumption but turned into traditional butter and cheese products. Due to the high fat content of the milk of the local breeds, the income per liter is higher in this way, making this kind of dairy production a very sensible and sound economic decision, unfortunately understood neither by most researchers nor by development planners. Farmers interviewed who have become involved in commercial dairy production, also on small scale levels, gave as their main reason for investing in commercial dairy production the nearness to markets, a constant market available throughout the year, some basic form of technical support available, as well some availability of the most necessary inputs, be it not yet in sufficient quantities and qualities, such as fodder. All these farms were without exception in the peri-urban and urban areas.

Relevant policy choices for support to the dairy sector in Ethiopia.

The main conclusion reached by the research is that the approach should be to define dairy development intervention policy choices that are based on key elements of diversity that determine comparative advantages of different geographical areas, including agricultural,

¹ Bekamp, Herjan, 2008: *Research into the reasons for underinvestment in de dairy sector of Ethiopia. The case of smallholder dairy farmers in the regions of: Debre Zeit, Sululta en Ziway.* Van Hall Larenstein Institute, Wageningen University.

ecological, geographical, distance to markets, available infrastructure and available support services.

Development interventions should abandon broad based, non focused, target group oriented poverty reduction programmes and apply more specific/targeted, area based economic and social development programmes, also for dairy production support. Adequate use should be made of zonal and area based characteristics and the potential of specific areas to determine the appropriate strategies. Base development interventions on the context/farming system and apply an integrated approach and not a single sector approach