

Assessing the Contribution of the Dairy Sector to Economic Growth and Food Security in Malawi



Cesar Revoredo-Giha (Coordinator)

Scotland's Rural College
West Mains Road
Edinburgh, EH9 3JG, Scotland, UK
E-mail: cesar.revoredo@sruc.ac.uk



www.sruc.ac.uk

Rationale

Fractured supply chains have been identified as a barrier to growth for the agricultural sector. In this regard, African agriculture is particularly handicapped. Hence, the purpose of this project is to address some of the key challenges through an assessment of the current and potential contribution of the dairy sector to economic growth and food security in Malawi.

Dairy is considered a key investment sector for the Government of Malawi and donors such as USAID, JICA, FICA, DFID have focused part of their development aid on the sector. Despite this, domestic production response has been unimpressive.

This situation is not surprising since the dairy sector in Malawi is complex and a number of factors have been hampering its development. These include (based on the literature):

1. A processing sector of four major firms using only a limited part of their full capacity;
2. Part of the milk domestically transformed into processed products has been, in the past, made from imported reconstituted milk powder;
3. The processing sector makes profits, despite its high costs, by targeting the affluent part of the urban population;
4. A high percentage of the milk sent to the processing companies is rejected due to quality (estimated at 17%);
5. Only a relatively small percentage of the milk produced domestically is sent to formal channels (i.e., the domestic supply of milk to processors is limited), the rest is sold unpasteurised through informal channels to the rural population and less affluent urban segment;
6. Malawi has the lowest consumption of milk per capita in Africa (estimated at 4.7 kg/capita/year compared to an Africa average of 15 kg/capita/year).

Methods

The approach being used in the project draws on economics and marketing, involving elements of value chain analysis together with industrial organisation analysis. In addition, the project methodology comprises the complementary application of qualitative and quantitative methodologies.

The first stage, qualitative approach, consists of a number of small studies, using secondary information and semi-structured interviews with key informants in different parts of the entire dairy supply chain; whilst the second one will combine quantitative analysis (modelling) and qualitative analysis.

The project involves the multidisciplinary interaction of SRUC and Malawian researchers.



Herbert Chagona, Manager of the Malawi Milk Producers Association presenting the association's work to Charles Jumbe and Philip Leat. (Photo: C. Revoredo-Giha)



Andrew Barnes and Steven Thomson with Jonathan Kaphela, Manager of the Central Malawi Milk Producers Association and member of Chitsanzo Milk Bulking Group. (Photo: Rollins Chitika).

Objectives

The main objective of this research project is to assess the current and potential contribution of the entire dairy sector to Malawi's economic growth and food security. A number of objectives by project stage provide the questions explored in the project.

Objectives of the first stage of the project are:

- **Dairy producers:** (1) to identify productive capacity; (2) the constraints they face in expanding their production; (3) the constraints to improving the quality of the milk they produce; (4) the factors explaining the importance of the informal market.
- **Milk Bulking Groups:** (1) those barriers that affect their normal operation; (2) reasons behind the presence of different transaction costs (e.g., delay in payments to producers).
- **Dairy processors:** (1) whether there are elements of imperfect competition (i.e., oligopoly and/or oligopsony) in their operation, or alternatively, reasons explaining large unutilised capacity in the dairy plants; (2) their willingness to fully substitute imported powder milk by domestic supplies if the latter become available in sufficient quantity.
- **Consumers:** (1) the main products consumed by different population segments (e.g., rural/urban and by socioeconomic group); (2) consumers accessibility and affordability towards dairy products by different population segments; (3) consumers willingness to pay for safe dairy products.
- **International donors:** (1) the purpose of donor investment in the supply chain and potential impact in terms of income generation, economic growth and food security; (2) whether aid operations are consistent with investments in international development; (3) whether there are other areas of the supply chain where donors should focus their investment.

The objectives of the second stage are:

- **Modelling:** to integrate the different parts of the supply chain into a supply chain model.
- **Simulation:** to quantify the impact of alternative measures applied to different stages of the supply chain.
- **Assessment:** to assess impact in terms of growth and food security of the different strategies for the sector.

Acknowledgements

This research is part of the DFID-ESRC funded project "Assessing the Contribution of the Dairy Sector to Economic Growth and Food Security in Malawi" (ES/J009202/1), which runs between 2012-2015.