



## **Review of the Dairy Industry in Malawi**

**Final Report**

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**Prepared by**

**Imani Development Consultants**

**Prepared for:**

**RATES Center  
P.O. Box 1325-00606  
Nairobi, Kenya  
[rates@ratescenter.org](mailto:rates@ratescenter.org)**

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## Acronyms

AI	Artificial Insemination
COMESA	Common Market for Eastern and Southern Africa
CREMPA	Central Region Milk Producer Association
DAHLD	Department of Animal Health and Livestock Development
FMD	Food and Mouth Disease
MBG	Milk Bulking Group
MBS	Malawi Bureau of Standards
MDFA	Mpoto Dairy Farmers Association
MDI	Malawi Dairy Industry
ME	Milk Equivalent
MMM	Malawi Milk Marketing
MRA	Malawi Revenue Authority
MoAI	Ministry of Agriculture & Irrigation
NGO	Non Governmental Organization
NSO	National Statistic Office
RATES	Regional Agricultural Trade Expansion Support
SADC	Southern African Development Countries
SHMPA	Shire Highlands Milk Producer Association
WTO	World Trade Organisation

## **Executive Summary**

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The Malawi Dairy industry constitutes a very small proportion of the livestock sub-sector and agricultural sector. Currently, the industry is still in development and undergoing growth. In the formal sector, there are some 4,000 dairy farmers producing around 6,500 tons of milk. The sector is mainly reliant upon smallholders with just a few large-scale farms. There is also an informal market selling raw milk direct to consumers who use it for home consumption. In total, this is estimated at around 27,000 tons or 50% of total milk supply, including imports.

Milk producers are facing constraints at farm level. Overall they have a limited return, which is the result of low productivity and slow herd growth. The smallholder access to knowledge and capital is restricted, which constrains improvements in yields and supply. Moreover, availability of critical inputs to smallholders, such as feeds and AI, are inconsistent and of variable quality. Programs from Land O'Lakes and SHMPA are trying to improve these issues by providing loan schemes, provision of AI services, farmer training, etc.

Five dairy processing plants, situated in the major cities of Blantyre, Lilongwe and Mzuzu, dominate the sector. These plants are mainly supplied by smallholders through Milk Bulking Groups and to a lesser extent by medium and larger size farms. However, local supply of fresh milk only meets around 60% of demand of the dairy processing industry. Due to this, the dairy industry is reliant upon imported milk powder to fulfill their demand. Processing plants in Blantyre import a small percentage of milk powder, whereas the plants in Lilongwe rely heavily on these imports. Apart from those five companies, some smaller scale processing units are active around the major cities. They mostly produce pasteurised milk to sell to urban customers but some process a wider range of value added products such as cottage and cream cheese, yoghurts and cheese. All those small processing companies have their own dairy farm and are therefore assured of milk supply. A few source milk from their region, but normally the processing capacity is too small to buy significant quantities of additional milk.

Due to the insufficient supply of fresh milk the processing plants are under-utilized. On average, production is meeting less than 30% of capacity. This inefficiency is a major burden both operationally and financially for the industry, since they cannot pass on the price burden to the consumers as the purchasing power of the Malawian population is extremely low. In addition to this the industry struggles with the inferior quality of milk as delivered by the farmers. At farm level the Ministry of Agriculture, Department of Animal Health & Livestock Development (DAHLD) holds accountability for quality control but due to a lack of funds they are unable to inspect many of the milk supplier premises and milk bulking groups (MBG's). Poor infrastructure frequently prohibits collecting milk every second day and results in truck maintenance costs for the industry. As utilities such as electricity, water and communication are expensive as well; the net margin for the industry is reported as low.

Consumption of milk products in Malawi is very low, estimated at 4.7 kg/capita/year compared to an Africa average of 15 kg/Capita/year. This is mainly due to the low purchasing power, limited supply and poor distribution beyond the main urban and trading centres. Sale and consumption of the milk from the formal sector is focused on the urban areas. It is estimated that pasteurised liquid milk takes up to 80% of this figure and Chambiko and yoghurt the majority of the other 20%. The demand for value added dairy products such as cheese, cream and butter is very low as only the wealthy can afford them. Due to the low demand, value added products are being imported, mainly from South Africa. However, milk powder and milk in liquid form are by far the major import products in the dairy sector. Imports play a significant role in the market on a milk equivalent basis and exceed the formal local market supply by a substantial margin (75% versus 25%). As a result the self-sufficiency rate of the dairy sector is only 25%.

Although the domestic market is not yet being fully supplied locally, some companies are expressing interest in exporting dairy products. In the immediate future the focus is on exportation opportunities to nearby countries such as Zambia and Mozambique and only for limited volumes of long life shelf products such as UHT milk, which do not have to be transported by refrigerated truck.

Malawi's commitments under the World Trade Organisation (WTO), Common Market for Eastern and Southern Africa (COMESA) and Southern Africa Development Community (SADC) have implications on the country's dairy trading policy. In addition to these trade blocks, Malawi has a bilateral agreement with Zimbabwe and Botswana, which entails freeing regional trade through progressive reduction in tariffs and elimination of non-tariff barriers. As Malawi hardly exports dairy products at present, these regional trade blocks only really affect imports. Duty payable varies for each trade block with the COMESA membership offering the lowest import duties. Imports from Zimbabwe and Botswana are duty free for all dairy products. This has resulted in strong competition from Zimbabwean products, especially for liquid milk, as local producers have to pay surtax on inputs that is not recoverable, such as packaging.

In order to minimise the spread of disease all livestock imports require a permit from the Ministry of Agriculture. This does not hamper trade, as the procedure is straightforward and not very costly. Most dairy products do not need a permit except for manufactured milk, which is obtained from the Ministry of Commerce & Industry, but these are not always issued due to attempts to protect local industry. Raw milk imports are banned due to the health risk. All imports are subject to inspection by the Malawi Bureau of Standards (MBS). These are reported as costly but in general no further problems are experienced with these checks.

Routine checks are performed at the processors premises by MBS three or four times a year. The purpose of this is to inspect whether the processing establishment fully complies with the hygiene standards and to test the products according to the standards. The MBS is a member of the International Bureau of Standards and they base their standards on Codex Standards. Where there are no standards issued by the MBS, for

example for cheese, international standards are used. Most of the Milk & Milk Products Standards were defined and published 1980's although they are still generally applicable. Apart from MBS, the City Councils also visit the processors regularly, inspecting the premises on hygiene. In addition, the Department of Animal Health and Industry (MoAI) takes samples from the processors and send these back to their laboratory in Lilongwe. The frequency of the visits seems to vary per processor.

## **1.0 Introduction**

One of the key objectives of the trade integration program, which Malawi has been pursuing under the aegis of COMESA and SADC, and at multilateral level under the WTO and ACP/EU arrangements, is to provide market export or import opportunities. Evidence shows that while implementation of the trade integration programs has been at top gear, with the launch of the COMESA FTA in 2000 and imminent launch of the Customs Union in 2004, this is not a panacea to increased trade. Beyond the macro provisions of the regional integration programs, there are pertinent provisions at commodity level, which are crucial to enhancing commodity trade. This poses as a challenge that requires urgent attention, at least for commodities deemed to have a potential to be traded regionally. One such commodity is a dairy product.

Regional Agricultural Trade Expansion Support Program (RATES), in collaboration with Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA)<sup>1</sup> Program COMESA, SADC and EAC is carrying out targeted baseline studies which are addressing issues relevant to regional and extra regional trade in dairy products. Malawi is among 8 countries which have been sampled for the study on account of its meeting the criteria of being a principal importing country, with potential for exporting in the regional market. Other countries that are being covered by the study include: Ethiopia, Kenya, Tanzania, Rwanda, Uganda, Zambia and Mauritius. The thrust of the studies will be identification of national and regional policies and regulatory requirements in the dairy sector that may be impeding intra and extra regional exports of dairy products, as well as inventories of dairy sector players in the region. The analysis is expected to provide in a concise manner issues that will need to be discussed by national public and private foray for the purpose of increasing efficiency and effectiveness within countries and also for increasing trade of dairy products across national boundaries.

The overall goal of the study is to facilitate harmonization of regional and national dairy sector policies and regulations within the region and to identify the dairy sector network of traders and stakeholders whom RATES can work with in promoting regional trade in the dairy produce.

### **1.1 Framework of Tasks**

1. Briefly describe the structure of the dairy sector in terms of the size of the dairy farming industry and production of raw milk, types of processed dairy products and installed capacities of the processing industries, source of primary raw material for the processing industries (distinguishing between regional and extra regional sources), production in volume and value of the processed products for the period 1997-2003, number of processing historical trends of dairy production and development;

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<sup>1</sup> ECAPAPA is a program of the Association for Strengthening Agricultural Research in Eastern and Central Africa

2. Review and document current marketing structure and develop a Value Chain (showing linkage of national and intra/extra-regional markets) for the dairy sub-sector, highlighting volume and prices along the chain. Create an inventory of processors, distributors and producers of dairy products, showing the following details: types of dairy products they are handling, their capacity for each of the products, their markets, and their contact details (physical address and telephone etc.);
3. Review and quantify formal imports and exports of dairy products by type (as defined in the tariff book), sources and destinations for the period 1998-2003;
4. Review and quantify formal imports and exports of animal genetics (Bovine Semen and Live Bovine-Pure bred breeding animals) sources and destinations for the period 1997-2003;
5. Through interviews with exporters/importers of dairy products, animal genetics and livestock feeds, determine constraints faced in accessing regional market. Categorize these constraints into two i.e. (i) policy and regulatory provisions in destination or source country (ii) other forms of constraints (specify them showing linkage to regional trade in dairy produce);
6. Review and document the evolution of dairy sector policies, with particular emphasis on trade (exports and imports);
7. Document and analyze (showing underlying rationale) of the current dairy sector trade policy and regulatory environment, covering production, collection, processing and marketing (domestic trade and export and imports of dairy products). This to include all legislations touching on traded dairy products and the effectiveness of their implementation or enforcement, licensing requirements and procedures;
8. Identify key stakeholders and key players<sup>2</sup> and their respective roles within the policy and regulatory environment;
9. Review and document grades and standards for traded dairy products, including sanitary<sup>3</sup> standards and critically examine how the enforcement procedures may be impeding or facilitating trade in dairy products;
10. Review and document a) how the standards are derived, whether based on international standards or local/regional analyses, and b) whether they are performance or process (e.g., HACCP) based;
11. Identify specific policies, procedures, regulations, rules, standards and grades for national rationalisation;
12. Identify specific policies, procedures, regulations, rules, standards and grades for regional harmonisation;
13. Organize a National Consultative Meeting, where findings of the study will be discussed. The major discussion points that were pointed out during this meeting

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<sup>2</sup> Identify stakeholders key players in production, marketing, regulation (market, health), standards setting, export trade etc

<sup>3</sup> Animal and human/public health

are included in Annex 5. The presentations are not attached as an annex but can be provided on request.

The scope of analysis is limited to bovine milk and milk products and animal genetics (hereafter referred to as the 'Dairy Sub-sector'), therefore excluding milk from goats and sheep. Although taken account of in this report, milk being produced in the informal sector has not been extensively researched. This milk does not enter the formal marketing channels as the producers or local households consume it.

## **2.0 The structure of the dairy sub-sector**

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### **2.1 Production**

Intensive smallholder dairy production in Malawi commenced in 1969. Processing plants were installed in Blantyre (1969), Lilongwe (1973) and Mzuzu (1974) to collect and process milk and meet growing urban demand. This activity was organised by Government under Malawi Milk Marketing (MMM). Farmers were organised into milk producer groups (MBG's) to operate collection and checking centres. In 1985, under a structural adjustment programme MMM was reorganised and a statutory body Malawi Dairy Industries (MDI) took over the three MMM dairy plants and three dairy farms and given the mandate to operate on commercial lines. MDI served as a treasury fund with the overall purpose of improving and multiplication of livestock for the production of milk and the manufacturing, processing and distribution of milk products. In 1997 the three MDI factories and farms were privatised, representing a significant change from Government to private sector control of the industry. Since that time two new private investors started up in the dairy industry. In the meantime, various other small dairy plants have commenced operation as well.

#### **Informal Sector**

The milk produced by the informal sector is mainly produced from Zebu cattle and either home consumed or sold as raw milk to local consumers. The amount is very difficult to estimate in the absence of reliable data on cattle numbers and rural production/consumption habits. It is generally accepted that the present total cattle population is about 800,000 cattle, of which 25% (200,000) are cows. The performance of Malawian Zebu cattle indicates an average lactation yield of 450 litres with an average calving interval of 600 days to give a production per cow per year of 275 liters, or an average of 0.75 liters per day. Out of this half is for human consumption which results in total informal milk supply of around 27,000 tons for consumption a year (DANIDA Dairy Report, 1997).

#### **Formal Sector**

Currently, there are an estimated 4,000 smallholder dairy farmers in the formal sector and around 5 medium or large-scale producers with 12,000 cows. Total formal milk production is estimated at 6,500 tons, based on information from the processors and the Milk Bulking Groups (MBGs). Around 80% of this is produced in the Blantyre milk shed area (MSA) in the Southern Region. Malawi is divided into three milk shed areas of Blantyre, Lilongwe and Mzuzu.

In the **Blantyre Milk Shed Area**, 20 MBGs are registered and all are organised through SHMPA (Southern Highlands Milk Producers Association). Altogether 2,700 smallholder farmers are registered into 21 MBG's. The average MBG delivers around 528 litres of milk per day equal to 12,157 liters per day in total. Average total milk collection per day in Blantyre MSA has been increasing from 9,201 to 12,157 liters per

day from 1998 up to now. Present milk collection is usually once every two days and sporadically less frequently.

The dairy industry is better developed in the South of the country because of the small land holding size Dairy production offers a higher return on the size of land compared to alternative options. Moreover, the Shire Highlands area is particularly suitable for smallholder dairying with good feed resources, a favourable climate and a relatively low disease challenge to dairy cattle. The milk collection network is also well developed in this area and it provides farmers with a convenient selling point and therefore a valuable asset.

**Table 1 Smallholder milk delivery to Processing Industry, 1999-2003**

	1999	2000	2001	2002	2003
Average daily collection	8,192	10,145	11,835	11,539	12,157
Total annual collection	2,990,080	3,702,925	4,319,775	4,211,735	4,437,305

Source: SHMPA

In the **Lilongwe Milk Shed Area** 18 MBGs are registered and all are organized as CREMPA (Central Region Milk Producers Association). However, out of the 18 MBGs registered, only 10 are in operation. The other eight had to stop because of no electricity, due to diesel engine break down and theft of parts for generators/cooling facilities. The average size of the remaining MBGs is regarded as too low to operate in an economic way both in terms of chilling and transport costs. Milk collection should be every second day but sometimes it is only collected every third or even fourth day, which results in souring losses.

In the **Mzuzu Milk Shed Area**, 6 MBGs are registered and are all organised as the MDFA (Mpoto Dairy Farmers Association). All six are operational but the average size of the MBG is again too small to operate in a commercially viable way.

Through Lilongwe and Mzuzu Milk Shed Area combined, a total of 1,345 smallholder farmers are registered in the MBG's, producing approximately 1,160,000 liters of milk in 2003<sup>4</sup> primarily sold to the processors in the Northern and Central Region.

### Breeds

The total cattle herd of Malawi is estimated at around 800,000 mostly Malawi Zebu for beef production. The dairy herd only comprises an estimated 15,000 head. These are mostly Friesians and crossbreeds, of which 50% are adult milk cows. For smallholders producing for the formal market, the Friesian breed in the North and South mainly dominates the dairy herd composition, whereas in the Central Region the local breed is still most common.

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<sup>4</sup> Land O'Lakes

The use of Artificial Insemination (AI) remains the lowest in the Central Region where the local bull is still the main mode of insemination. In the North and South AI is common, mainly using frozen sperm. However, AI services offered are inefficient due to lack of transport for AI technicians, lack of resources such as liquid nitrogen, lack of operational resources, insufficient government AI technicians and lack of training in AI and in related performance improvement fields. The liberalization and privatisation of the government breeding farms in 1997 have resulted in closure of livestock breeding farms and these farms were not replaced. Some organizations, such as Land O'Lakes and SHMPA have been distributing frozen sperm and taking over insemination practices.

### Feeding

The feeding regime for dairy animals in Malawi is characterised as pasture with complementary stall feeding of concentrates. Dairy farmers with no land prefer to either buy feed for their cattle, obtain their roughage from the dambo's (all year round wet areas), communal lands or simply let their animals graze and browse on residues after harvest. On-farm pasture production remains low due to the small plot sizes with pasture utilization dominated by cut and carry. Moreover, on-farm pasture production is limited by not only small plot sizes but also the customary land tenure system which predisposes established pasture to communal/uncontrolled grazing. Supplemental feeding is becoming more common among dairy farmers with bran as the most common supplement. A very small proportion of the households use minerals or molasses. The price of dairy mash and other supplements as well as the availability of molasses are possible factors that constrain farmers from using them regularly.

### Milk Production and Milk Quality

The average milk production per day is estimated at 5.7 litres per cow<sup>5</sup>. Different breeds of animals have a different production level with the Friesian cows being most productive, but this also depends heavily on the management quality. Smallholder productivity is still very low mainly because of lack of good animal husbandry practices, long calving intervals, lack of good quality feed and insufficient veterinary, AI and extension services.

The quality of the milk is reported by processors as relatively poor. The bacteriological level of raw milk is generally high and as a result the milk sours quickly. It is reported by Land O'Lakes and processors that the premises of many farmers are often unhygienic for milk production as are the cows and the milkers. Before milking, the udder and teats are generally not cleaned thoroughly or a dirty towel is used. Farmers often use poor quality water to clean and dirty containers to carry the milk to the MBG's. Although the quality of the milk is inspected when delivered at the MBG's, the latter only check for adulteration of milk with water (with a lactometer) and the acidity (with a alcohol test) for sourness. The MBG's cannot carry out a bacterial count and their staff are often not sufficiently trained. The processors have some basic equipment with their collection vehicles to carry out some tests before accepting the milk. They verify the density, the

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<sup>5</sup> Land O'Lakes, Farmers Survey Report (Draft), November 2003

acidity (alcohol test) and the fat content. But again, these checks are not sufficient to assure quality.

The majority of the milk is collected and then distributed through Milk Bulking Groups (MBGs). Each is equipped with cooling facilities and act as buying centers for the milk. Because of their nuclear nature, they are often used as focal points for contacting dairy farmers to provide extension services and most other activities related to the dairy enterprise. However, their main objective is to gather milk from the smallholders, store this for a short period of time and sell it to the processors. Farmers bring the milk to the MBGs by pushbike or by foot. From there the processors pick it up by refrigerator truck. The processors should pick it up every second day, but in some areas this seems to be a problem especially in the rainy season.

In the Southern Region there are 20 MBG's within an 80 km radius of Blantyre from which milk is collected by one or two local dairy companies. Daily collection ranges from 9,000 lt to 16,000 lt. In 2003, in the Central and the Northern Region 67% of the milk produced was sold through MBGs, 15% through local sales, 13% is consumed by the household and 5% is used to feed the calf. In comparison with 2002, MBG sales have gained importance as in that year only 46% was sold through MBG<sup>6</sup>. This development is mainly due to higher prices paid by the processing industries. However, local sales still are an important outlet because of immediate cash receipts compared to MBGs where farmers have to wait for longer periods before they get paid.

## **2.2 Processing**

In 1997, the six MDI production units were privatised through management buy-outs as individual entities. Three dairy processing enterprises emerged, one in each region of the country:

- Dairibord in Blantyre, owned 60% by the Zimbabwe Dairibord and 40% by the Malawi Government.
- New Capital Dairy in Lilongwe, owned 60% by former management and 40% by employees and farmers.
- Northern Dairy Industries in Mzuzu, a private sector company.

In addition, two private companies invested in milk processing at the end of the 1990s, Suncrest Creameries in Blantyre and Lilongwe Dairy in Lilongwe.

Apart from those five companies, some smaller scale processing units are active around the major cities. They mostly produce pasteurised milk to sell to urban customers such as the companies MAFE, TAWA and Katete Farm. Some process a wider range of products such as cottage and cream cheese, yoghurts and cheese. Good examples of the latter are Nature's Gift in Lilongwe and Satemwa Tea Estate in Thyolo. They sell off-farm and in the nearby urban areas. All those small processing companies have their own dairy farm and are therefore assured of milk supply. A few source milk from their

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<sup>6</sup> Land O'Lakes, Farmers Survey Report (Draft), November 2003

region, but normally the processing capacity is too small to buy significant quantities of additional milk. The five main processors will be further described.

## **2.2 Marketing**

Within Malawi, it is not allowed to sell raw unprocessed milk due to the health risk involved **in the four main urban areas** (Blantyre, Lilongwe, Mzuzu and Zomba). All the milk sold in the market must be pasteurized. However, vendors do sell raw milk in the early morning in other areas.

The dairy industry focuses its marketing activities on the local urban market where most of the products are sold through wholesalers and retailers. Some processors sell countrywide, for example Suncrest and Dairibord have depots in Lilongwe.

The majority of milk consumers purchase milk from supermarkets and small shops. Price is reported to be the most important factor in milk brand selection. Taste, freshness, pack size, colour, manufacturer, availability and packaging are other aspects<sup>7</sup>. Referring to packaging variations, these include 250 ml and 500 ml plastic pouches (most common), tins, plastic bottles, glass bottles and the more expensive tetra pack.

Dairy processors do use advertisements to promote their brands. A recent study<sup>4</sup> states that the awareness of dairy products advertisements is generally very high. Radio was the most mentioned source of awareness of the adverts.

## **2.4 Donor Involvement**

Donor support has come in handy as a means of assisting the government meet the following stated objectives of development of the dairy sector:

- To promote dairy production so as to achieve self-sufficiency in dairy and dairy products;
- To exploit export markets when surpluses arise;
- To contribute to welfare of Malawians by providing dietary animal products;
- Income generating activity through higher levels of production and competitive marketing systems;
- To achieve the country's Vision 2010, it has the following targets:
  - Increase milk drinking/intake of the Malawi population from the current level to 10 liters/person/year;
  - Significantly improved income levels of dairy farmers and milk processors;

The following sections profile two of these projects.

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<sup>7</sup> Consumer Insight (Kenya). Results of the Qualitative Study on Dairy Projects Usage and Attitudes, January 2004

#### ***2.4.1 The Land O'Lakes Dairy Sector Development Program***

USAID is sponsoring Land O'Lakes' dairy sector development program, which started in 1999. According to Land O'Lakes', the goal of this project is to increase rural incomes by increasing the number of rural poor households deriving their main livelihood from dairy business through managing high productivity enterprises, while delivering improved quality and affordable dairy products to the market. Their key project components are formulated as follows:

- Development of Efficient Milk Producer Organisations
- Development of Efficient Dairy Processing and Marketing
- Expansion of Effective Industry Support Services.

The priority activities of Land O'Lakes include:

- Development of private Artificial Insemination and improved genetics delivery services, with support from LO'L subcontractor, World Wide Sires.
- Development and strengthening of a variety of dairy associations, bringing together dairy industry interest groups such as producers, processors, input and service providers, consumers, etc.
- Promotion of the dairy industry facilitated by dairy stakeholder associations or interest group associations.

In order to develop a sustainable dairy sector support system, Land O'Lakes states its intention is 'to source local and regional training and technical providers to assist in the development of the sector including a strong emphasis to be placed on the integration of the current local dairy service providers into the project'.

Respondents were positive about the goals of the Land O'Lakes program. However, some also mention that although the efforts of the program are very good, the full impact of livestock investment in large stock such as cattle arise in the long term, typically 5 to 7 years. Based on the success or not of the third phase of the Land O'Lakes program, which ends in 2006, the project will be terminated or continued.

#### ***2.4.2 The Shire Highland Milk Producers Association***

The Shire Highlands Milk Producers Association (SHMPA) is a farmers' organisation established in 1985 to look after the interest of smallholder dairy farmers in the Southern Region. It has a membership of 2900 dairy farmers who sell their milk through the SHMPA managed milk collection network. This network consists of 20 milk bulking groups within an 80 km radius of Blantyre. SHMPA's activities include:

- Milk collection centre maintenance
- Establishment of new collection centres
- Provision of AI services
- Election and training of MBG committees
- Auditing of MBG accounts
- Advocacy for smallholder dairy farmers – especially concerning milk marketing, input supply and field services
- Farmer training in dairy farm management

- Operating a heifer loan scheme
- Heifer breeding for new farmers
- Provision of sustainable farmer-managed animal breeding and health services.

All farmers pay a small levy on milk sold to cover the costs of SHMPA's activities. In addition, various donors have supported the organization. The main donors in 2003 were Oxfam and the EU.

SHMPA's activities have had a positive influence on dairy farming in the Southern Region. Since 1999 the organization has assisted 390 farmers to establish dairy farms under the Heifer loan scheme and they plan to help 600 more farmers to get cows by 2006. For the last five years, SHMPA also took a bigger role in the provision of field extension services.

The other regions also have a regional body e.g. the Central Region Milk Producers Association and the Mpoti Dairy Farmers Association. These three regional organizations are organized into the national Milk Producers Association. At the time of writing, this organization was inactive.

### 3.0 Supply and Demand Analysis

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#### 3.1 Supply

Total milk supplies comprise formal and informal milk production, plus imports of milk and milk products.

There is no up to date census data on the number of dairy cattle, average milk yields or total production but as described above, the total informal and formal production in 2003 is estimated at 33,500 tons. The majority (27,000 tons) is produced by the informal sector and consumed locally whereas processors mostly buy the formal sector's 6,500 tons fresh milk. A further breakdown of this last figure will be given in table 2. Based on data gathered, the total milk supply in the country is summarised in the following table.

**Table 2 Estimated Total Milk Supply (tons)**

Source	Total Quantity tons	%	Litres/day equivalent
Formal milk	6,500	13	17,808
Informal	27,000	50	73,972
Imports	20,000	37	54,794
<b>Total Supplies</b>	<b>53,500</b>	<b>100</b>	<b>146,752</b>

Source: Own Research and DANIDA Dairy Report

Imports include all dairy products, such as milk liquid, powder, yoghurt, butter and cheese. Out of these products, the dairy industry only imports milk powder to use this in their production process whereas wholesalers and retailers directly import the other dairy products for direct sales. Please see the following table for the Milk Equivalent Imports.

**Table 3 Import of Dairy Products in 2003 and Milk Equivalent Imports (tons)**

	Import in 2003 (tons)	Conversion Rate	Milk Equivalent Imports (tons)
Milk liquid	4,357	1	4,357
Milk powder	1,619	8	12,952
Sweet condensed	507	2	1,014
Yoghurt	50	1	50
Butter	105	6.5	682
Cheese	118	10	1,180
<b>Total Milk Equivalent.</b>	<b>-</b>	<b>-</b>	<b>20,235</b>

Source: NSO and Own Research

Table 2 shows that Malawi's self sufficiency rate for formal sector supply is only 25% taking into account all the dairy products. The processing industry takes a substantial part of milk powder imports but currently some companies report that they cannot afford it. According to the respondents, the processing companies currently process 35,000 litres daily of which around 55-60% is supplied locally. Therefore 40-45% of the milk requirement of the processing companies is being imported, which represents around 600 tons of milk powder per year.

### **3.2 Demand**

It is likely that the population growth rate and per capita income are the major determinants of the consumption of milk and dairy products. According to the demographic health survey, the population in 2001 was estimated at 11 million people. If it is assumed that the population has an average growth rate of 2%, the estimated population in 2003 was 11.44 million.

Given the 2003 milk production levels of 53,500 tonnes and with a population of 11.44 million people, the per capita consumption is estimated at 4.7 kg (4.7 litres) per year. In other documents reviewed, the estimates of the consumption vary from 2-6 kg/capita/year. The Malawian mean average consumption level is therefore far lower than the recommended 200 litres/capita/year by FAO and also below the average African consumption figure of 15 litres/capita/year.

Milk, either pasteurised or sterilized, is by far the most commonly used dairy product because of the relatively low cost, availability and its readiness to drink. Respondents estimate that 80% of the total dairy products consumption is pasteurised or sterilised liquid milk. Yoghurt and Chambiko<sup>8</sup> are also frequently consumed, taking up at least 15% of sales by volume. Sales of butter, cheese, ghee, ice cream and powdered milk are very low mainly due to the low purchasing power in Malawi. With an average income of less than 1 USD per person per day, the majority of the population cannot afford these luxury products and already experiences difficulties to buy liquid milk. Due to this, the processing industry packs milk in quantities as little as 0.25 litres.

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<sup>8</sup> Cultured milk

## 4.0 The Processing Industry

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The number of large-scale processors is limited as only five companies are active in this sub-sector. Two are based in Blantyre, two in Lilongwe and one in Mzuzu. Their production capacity in total is 126,000 litres daily (based on a single 8 hour shift). However, capacity utilization is currently only around 26% due to a shortage of raw milk. All the processing plants are therefore heavily under-utilized, as shown in Table 4. This is transmitted to consumers as it partly accounts for the high consumption prices of dairy products and a large price spread between producer and consumer prices. Currently, producers receive on average 20 MK/litre whereas the consumer pays 60-62 MK in a retail or wholesale outlet.

**Table 4: Production Capacity and Utilization Major Dairy Processors**

	<b>Situated in:</b>	<b>Production Capacity</b>	<b>Production Utilization</b>	<b>Main Dairy Products</b>
Dairibord	Blantyre	40,000	12-13,000	Pasteurized Milk, Flavoured Yoghurt and Chambiko
Suncrest	Blantyre	25,000	8-10,000	Pasteurized and Steri Milk, Drinking Yoghurt
New Capital Dairy	Lilongwe	32,000	3-4,000	Pasteurized Milk, Yoghurt, Chambiko, Ice Cream
Lilongwe Dairies	Lilongwe	20,000	7,000	Pasteurized Milk, (Flavoured) Yoghurts
Northern Dairies	Mzuzu	9,000	1,000	Pasteurized Milk, Yoghurt, Ice Cream
<b>Total</b>		<b>126,000</b>	<b>31-35,000</b>	

Source: Interviews.

The various companies are described briefly below:

### Dairibord

This business is jointly owned by Zimbabwe Dairy Board (60%) and the Malawi Government (40%). The processing volume is currently approximately 13,000 litres a day. The product range includes pasteurised milk, flavoured and plain yoghurt, chambiko, cream, butter and cheese. Butter is produced sporadically due to the lack of raw material. Surplus milk that is not processed is periodically sold to New Capital Dairy, however this does not seem to occur often. The equipment of the plant was installed in the 1980s and is probably in need of further investment. Dairibord is only

importing milk powder if local supply is not sufficient. Throughout the year they import small quantities to use in various other products.

#### Suncrest

Suncrest started operations in 1998 producing fruit juices. Around three years later, they diversified and started in dairy processing. The plant produces sterilized and pasteurized milk, yoghurt, yoghurt drinks, juices and carbonated sodas. The production equipment is reported to be up to standard and in good condition. Milk is being delivered from the MBGs nearby Blantyre and from some large estates. If there is more milk than required they will sell to New Capital Dairy in Lilongwe, but again this happens only sporadically. The company imports milk powder in small quantities throughout the year and in larger quantities when supply of local milk is not sufficient.

#### New Capital Dairy

This plant was installed in the 1970s and is a manual plant. Operations have not been upgraded much since that time. The plant produces pasteurised milk, natural and flavoured yoghurt and fruit juices. Fresh milk is delivered from MBGs around Lilongwe. The company is currently only using a small percentage of their total capacity as a result of limited raw material supply. They do not seem to be able to import milk powder due to a lack of funds and generally buy in small quantities from Indian traders in town. They plan to buy raw milk from the MBGs in the North and the South in the near future.

#### Lilongwe Dairies

Lilongwe Dairies started in 2001 and relocated in 2003 to new premises. This is a state of the art location with newly purchased high-end equipment, sourced from leading manufacturers. The company produces pasteurised drinking milk, fruit juices, ice cream and will install a UHT milk line very soon. The company would like to export this type of milk as well, possibly to Zambia and Mozambique and they would like to sell to more rural areas within Malawi where the cold chain does not reach. In addition, flavoured yoghurts will be produced very soon and should enter the market by end of April. The plant purchases raw milk from the Milk Bulking Groups and in addition they import substantial quantities of milk powder (reportedly 30 MT every six weeks). The processing volume is currently around 7,000 litres a day.

#### Northern Dairies

The technical condition of the processing equipment is reported as very poor. Much of the equipment requires replacement and renewal as it dates from the 1950's and 1960's and the cost of repair is now prohibitive. Several items of essential equipment simply do not operate at all. As a result of a lack of financial resources, replacements cannot be made, and the plant continues to operate under exceedingly difficult conditions. The plant is currently producing a range of products including pasteurised drinking milk, Chambiko, yoghurt, ice cream, cream and ghee. The processed volumes are relatively small being approximately 1,000 litres/day. The plant is supplied by six milk collection centers. Some of those are sited in remote areas and served by poorly constructed dirt tracks through hilly forest area. During the rainy season, trucks often cannot reach the

collection centers, resulting in no milk for Northern Dairies and farmers are left without a market.

The following table shows the milk processing statistics for fresh milk in 2002. It again shows that most of the fresh milk is processed in the Southern Region; 5,120,657 litres per year (86%) out of the annual total of 5,957,702. The Central Region only processes 9% of the fresh milk total resulting in the necessity to import milk powder for processing. The North processes the other 5% of the local milk.

**Table 5 Processing statistics in 2002**

<b>Processor</b>	<b>Region</b>	<b>Processed Litres/p.a.</b>	<b>%</b>	<b>Daily Processed Litres</b>
New Capital Dairy	Central	351,814	6%	963
Lilongwe Dairy	Central	59,220	1%	162
Natures Gift	Central	111,800	2%	305
Northern Dairies	North	304,504	5%	834
Dairibord	South	2,249,829	38%	6,160
Suncrest	South	2,586,338	43%	7,081
MAFE	South	176,580	3%	483
TAWA	South	107,910	2%	295
<b>Total</b>		<b>5,947,995</b>	<b>100%</b>	<b>16,283</b>

Source: Land O'Lakes

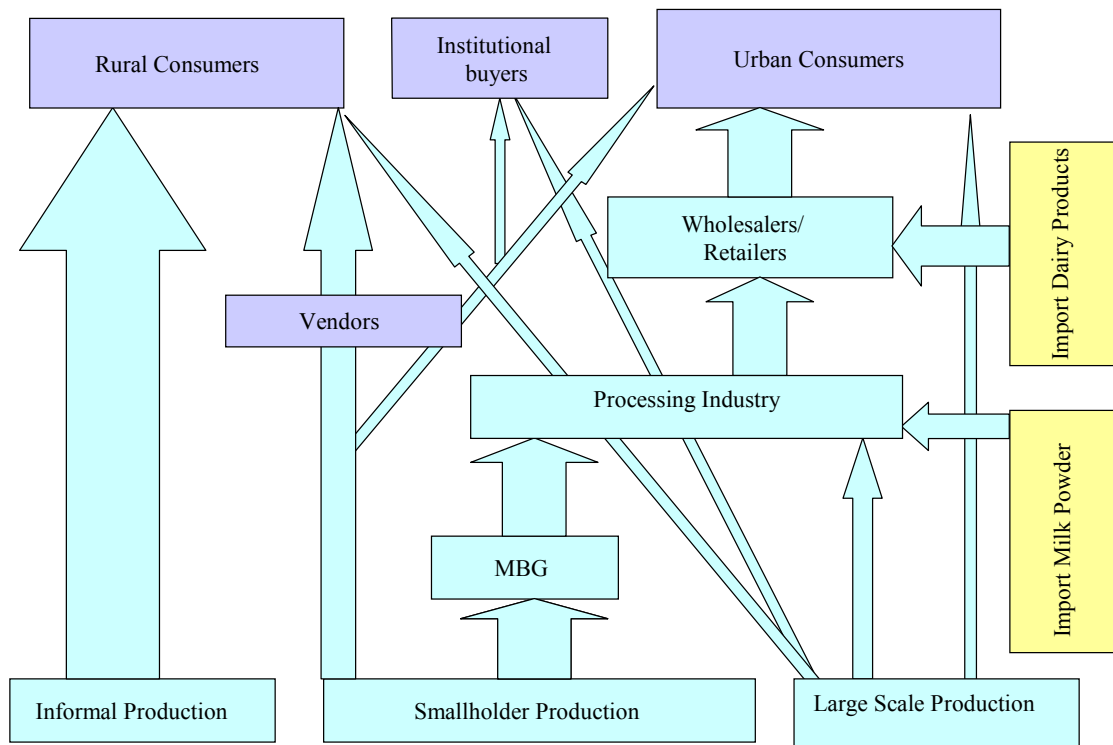
New Capital Dairy, Lilongwe Dairy, Dairibord and Suncrest formed a body called the Milk Processors Association a few years ago. So far the activities of the association have been very limited and currently this body is not very active.

## 5.0 Value Chain Analysis

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### 5.1 Value Chain

Figure 1 Malawi milk value-chain



*Source: Consultant's Research*

As shown in the above figure, most of the milk does not enter the formal circuit at all. In the following price example this informal sector milk will be left out.

According to respondents, the production cost for a litre of milk is estimated between 14-16 MK (exchange rate 1 USD=108 MK) as at March 2004 for an average smallholder in the Southern Region. However, these cost vary across different livestock management systems (e.g. smallholder versus estate) and between smallholders. There is a further differentiation between zero-grazing, semi-zero and open grazing and across geographical zones (North/Centre/South). Farmers sell their milk for local consumption

at around 20 MK/litre in the village, to institutional buyers or to vendors. Although not allowed, vendors sell the raw milk in town for MK 30/litre to urban consumers or again, institutional buyers. The base price for un-chilled milk paid by the MBG varies from 19 to 22 MK/litre. Processors collect the milk at the MBG's for around 20 to 22 MK/litre but this price varies on volume collected, distance to the factory, a bonus system for the MBG, etc. Imported milk powder lands in Malawi at a price of 27 MK per litre (reconstituted) and is therefore at least 30% more expensive. Large-scale producers sell their milk straight to the processors or have their own processing facilities. Smaller quantities are sold to institutional buyers such as hospitals and large organizations. Liquid pasteurised milk is sold to retailers at around MK 50/litre and to the final consumer at around MK 60-62/litre.

The processing cost is different for each product and generally, the less the value added the less the processing cost. The margin is also related to the added value: According to the processors, the net margin on liquid pasteurised milk is as low as 5% whereas this can go up as high as 15% for more added value products such as cheese. The gross margin is much higher but due to high operational costs especially electricity, water and transport cost in Malawi, the net margin is estimated at between 3-10%. Supermarkets are reported to take a margin of 15 to 20%.

## **5.2 Constraints faced within the chain**

From the mapping and analysis of the Dairy Sub-sector, a number of key constraints have been identified. It is worth noting that information on supply and demand issues is very poor. The most important constraints at farm level are:

1. Low smallholder productivity and slow herd growth, thereby limiting returns. The average daily yield level for all cows during lactation was reported by Land O'Lakes to be 5.7 litres in 2003. High mortality of calves ranging from 10 - 40% has reduced the ability of the sector to increase the number of dairy cows. Insecurity through theft has also been a threat to investment in dairying. At farm level, apart from mortality, long calving intervals and reduced conception rates have further reduced increases in the number of dairy stock.
2. Limited smallholder access to knowledge which constrains improvements in yields and supply. The Department of Animal Health and Livestock Development (DAHLD) abruptly handed over some of its health activities and extension work to the farming communities and the private sector following the wider economic reforms in the country in 1997. This left farmers without capacity to improve performance and affected production at farm level. The farming communities are still not well organised to take up the challenging jobs. Often donor supported organisations have stepped in to provide training and advice to improve management skills.
3. Limited access to capital. Lending conditionalities plus high real interest rates (in excess of 35% in 2002-03) have prohibited small-scale dairy farmers access to credit from financial institutions. Most of the farmers in the South have access to credit through their MBG – for monthly feed, drugs and breeding requirements. Targeted

families also receive credit for the capital requirements of starting dairy units. This is one of the important services of the existing milk collection network. However, for the initial capital to start up it is still quite difficult.

4. Small-scale dairy farmers would normally be classified as risky borrowers by lending institutions in Malawi if there is no credit guarantee arrangement in place. Streamlining credit arrangements for these farmers would greatly enhance their accessibility to productive resources.
5. Critical inputs to smallholders, such as feeds and AI, are not consistently available to the right quality. Artificial insemination service delivery has been inefficient due to a lack of transport by AI technicians, lack of resources such as liquid nitrogen, lack of operational resources, insufficient government AI technicians, etc. Feed problems occur especially in the Southern and Central regions. Most farmers plant inadequate pastures and supplement usually with maize bran alone due to the high cost of concentrate feeds. Some farmers practice mineral and vitamin supplementation, but availability and cost are still a problem resulting in reproductive constraints and low milk yields.

For processing, the following constraints can be described:

1. Under-utilization of processing plants. Capacity utilization is as low as 30% or lower causing financial problems for the processing companies. They have to pass on the price burden to consumers but this is difficult as the purchasing power is already very low.
2. Poor quality of raw milk. Processors in general have to face an inconsistent and poor quality of raw milk. Although some quality checks are present, the milk is often still contaminated. This is due to many factors for example poor hygiene circumstances at farm and collection level, failure of cooling equipment at the MBG, adding of water to milk to increase the volume, mastitis etc. In some cases the processors are to blame themselves as they do not pick up the milk in time.
3. Slow/no growth in consumer incomes, limits rate of growth in overall market demand. Consumption of dairy products is only 4.8 kg/person/year, mainly due to low purchasing power. With an average GDP of less than 1 USD /per person/per day many consumers cannot afford milk products, especially not value added dairy products.
4. Insufficient infrastructure to bring the milk to the cooling and processing units as a result of poor road maintenance. This problem mostly occurs in the North of the country but also in the Central and Southern Region, especially in the rainy season. During this time it can be difficult to reach certain MBG's.
5. High operational cost. According to the processors, the gross margin is reportedly quite high but due to high operational cost in Malawi, the net margin on dairy products is low. Cost of utilities are all very high, especially electricity, water and communication cost. Fuel and vehicle maintenance is very costly, with the latter required frequently due to the poor road conditions.

## 6.0 Trade in Dairy Products

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### 6.1 Import of Dairy Products

It has been very difficult to obtain accurate figures of milk and dairy products imports in Malawi. From earlier experiences we learned that the figures obtained from National Statistical Office (NSO) in Zomba might not be accurate but other import data were not readily available. Therefore our only option was to use the NSO figures.

As explained above, the raw milk production in Malawi in the formal sector has been consistently so low that the country has had to import milk and dairy products in order to increase supply to the growing Malawian population. Powdered milk for reconstitution, steri- and UHT milk, condensed milk, butter, cheese, yoghurt and other products are imported. The dairy processors are the major users of imported milk powder and they process this further into milk. Most of the milk powder imports are for the Lilongwe dairy processors as they always face a shortage of fresh milk supply relative to the potential market. Other dairy companies import less volume but still import as they need it for various production processes, for example to thicken yoghurt. Dairy products such as cheese are imported by wholesalers/retailers.

**Table 6 Import Volume of Dairy Products in tons, 1999-2003**

HS No.	Tariff No	Commodity Description	1999	2000	2001	2002	2003*
<b>04011: Milk and cream not concentrated nor containing sugar or other sweetening matter</b>							
040110	04011000	Of a fat content by weight not exceeding 1% (Skimmed UHT)	7	79	1,044	1,526	1,100
040120	04012000	Of a fat content by weight exceeding 1% but not exceeding 6% (UHT)	979	361	320	1,205	3,222
040130	04013000	Of a fat content by weight exceeding 6%	104	300	97	139	35
<b>0402: Milk and cream concentrated or containing sugar or other sweetening matter</b>							
040210	04021000	In powder-granules or other solid forms, of a fat content by weight not exceeding 1.5%	162	108	156	332	237
040221	04022100	Not containing added sugar	302	441	890	882	1,206

	04022900	Milk in solid form not sweetened	430	468	619	547	176
040291	0402910	Not containing added sugar or other sweetening matter	8	50	2	1	4
	04029900	Milk not in solid form sweetened	604	579	635	878	503
0403: Buttermilk, curdled milk cream, yoghurt, Kephir and other fermented or acidified milk							
040310	04031000	Yoghurt	6	16	10	73	37
040390	04039000	Other	6	52	29	22	13
0404: Whey, whether or not concentrated ....							
040410	0404100	Whey and modified	1	-	-	1	-
040490	0404900	Other	-	1	-	-	-
0405: Butter and other fats and oils derived from milk; dairy spreads.							
	04050000	Butter and other fats and oils derived from milk	51	-	-	-	-
040510	04051000	Butter	-	22	16	52	84
040520	04052000	Dairy spreads	-	-	-	1	11
040590	0405900	Other	-	11	9	11	10
4.06: Cheese and curd							
040610	04061000	Fresh (unripened or uncured) cheese, including whey cheese, and curd	23	19	-	4	2
040620	04062000	Grated or powdered cheese of all kinds	-	-	-	1	-
040630	04063000	Processed cheese, not grated or powdered	3	-	6	11	8
040690	04069000	Blue veined cheese	36	40	37	105	108

Source: NSO

\*2003 is still provisional

The table shows the significant rise in imports of liquid milk, which is largely sterilised milk in plastic bottles and UHT milk in cartons. These imports come mainly from Zimbabwe as a result of the parallel currency distortions making such imports competitive. There have also been significant illegal imports of steri-milk from Zimbabwe (without permits) but this situation has eased in recent months. South Africa is the major consistent country of origin for milk powder. However, there are many other suppliers of milk powder including Denmark, The Netherlands, Italy, New Zealand, Argentina and Australia and each year the countries of origin varies. Quality seems to be a major item for some importers and although countries such as Argentina and Eastern European Countries can offer milk powder cheaper, they prefer to import from reliable countries as the ones mentioned. Some importers however mainly based their decision where to buy on price.

Luxury dairy products such as cheese, yoghurts and butter are supplied by South Africa due to the geographical advantage. These products only have a limited shelf life and need to be imported in refrigerated trucks.

**Table 7 Import Value of Dairy Products, in '000 USD, 1999-2003**

HS No.	Tariff No	Commodity Description	1999	2000	2001	2002	2003*
<b>04011: Milk and cream not concentrated nor containing sugar or other sweetening matter</b>							
040110	04011000	of a fat content by weight not exceeding 1% (Skimmed UHT)	6	48	185	887	646
040120	04012000	of a fat content by weight exceeding 1% but not exceeding 6% (UHT)	500	215	188	582	1,524
040130	04013000	of a fat content by weight exceeding 6%	142	246	67	76	4
<b>0402: Milk and cream concentrated or containing sugar or other sweetening matter</b>							
040210	04021000	In powder-granules or other solid forms, of a fat content by weight not exceeding 1.5%	424	226	404	733	423
040221	04022100	Not containing added sugar	780	1,160	602	1,986	2,107
	04022900	Milk in solid form not sweetened	1,100	1,354	1,200	997	545
040291	0402910	Not containing added sugar or other sweetening matter	4	85	-	-	-
	04029900	Milk not in solid form sweetened	712	671	865	1,703	590
<b>0403: Buttermilk, curdled milk cream, yoghurt, Kephir and other fermented or acidified milk</b>							
040310	04031000	Yoghurt	25	24	11	81	82
040390	04039000	Other	9	123	22	16	26
<b>0404: Whey, whether or not concentrated</b>							
040410	0404100	Whey and modified	-	-	-	-	-
040490	0404900	Other	-	-	-	-	-
<b>0405: Butter and other fats and oils derived from milk; dairy spreads</b>							

HS No.	Tariff No	Commodity Description	1999	2000	2001	2002	2003*
	04050000	Butter and other fats and oils derived from milk	84	-	-	-	-
040510	04051000	Butter	-	45	38	106	162
040520	04052000	Dairy spreads	-	-	-	-	11
040590	04059000	Other	-	9	22	14	10
<b>4.06: Cheese and curd</b>							
040610	04061000	Fresh (unripened or uncured) cheese, including whey cheese, and curd	78	29	-	8	3
040620	04062000	Grated or powdered cheese of all kinds	-	-	-	1	-
040630	04063000	Processed cheese, not grated or powdered	24	1	7	26	26
040690	04069000	Blue veined cheese	91	109	92	179	221

Source: NSO

\* 2003 is still provisional

## 6.2 Export of Dairy Products

As shown in Table 8, there is hardly any export of dairy products from Malawi. As local supply cannot fulfil the consumption requirement, Malawi is almost solely an importer. The potential in the domestic market far exceeds supply and it seems unlikely that Malawi will start to export dairy products on a significant level in the near future. However, Suncrest targets the export market mainly in Mozambique for long shelf life milk. The company has acquired new machines that would enable them to export its products to those countries. Lilongwe Dairy is also planning exports, once they have installed the new UHT milk line. Their target markets include Zambia and Mozambique, particularly those areas that border Malawi and are less accessible to the main urban and milk production centres of these countries.

**Table 8 Export Volume of Dairy Products in tons, 1999-2003**

HS No.	Tariff No	Commodity Description	1999	2000	2001	2002	2003*
<b>04011: Milk and cream not concentrated nor containing sugar or other sweetening matter</b>							
040110	04011000	of a fat content by weight not exceeding 1% (Skimmed UHT)	-	-	-	-	1

HS No.	Tariff No	Commodity Description	1999	2000	2001	2002	2003*
040120	04012000	of a fat content by weight exceeding 1% but not exceeding 6% (UHT)	-	-	-	-	4
040130	04023000	of a fat content by weight exceeding 6%	-	-	-	1	-
0402: Milk and cream concentrated or containing sugar or other sweetening matter							
0404: Whey, whether or not concentrated							
040490	0404900	Other	-	-	-	-	1

Source: NSO

\* 2003 is still provisional

**Table 9 Export Value of Dairy Production in '000 USD, 1999-2003**

HS No.	Tariff No	Commodity Description	1999	2000	2001	2002	2003*
04011: Milk and cream not concentrated nor containing sugar or other sweetening matter							
040120	04012000	of a fat content by weight exceeding 1% but not exceeding 6% (UHT)	-	-	-	2	-
0404: Whey, whether or not concentrated							
040490	0404900	Other	-	-	-	2	-

Source: NSO

\* 2003 is still provisional

### 6.3 Constraints faced in Trading Dairy Products

For the Malawian dairy industry, trading in dairy products therefore mostly refers to importation. In general, respondents did not face major constraints but below are the ones most often mentioned:

- Difficulties to obtain foreign currency to finance imports. The financial situation of some dairy processors is weak and because they do not have any foreign currency income it is harder to access forex from the banks.
- Imported milk powder is expensive compared to local milk supply. As mentioned above, processors buy local milk at around MK 20 whereas imported milk powder comes in at MK 27. This difference of more than 30% is often too high to compete in the market.
- Imports from Zimbabwe are exempt from surtax whereas the Malawi dairy industry needs to pay surtax on packing material.
- The checks by the Malawi Bureau of Standards are regarded as costly.
- The procedure to obtain an import permit is regarded as cheap and standard and therefore this does not form a constraint.

## **7.0 Trade Policy and Regulatory Framework**

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### **7.1 Overview**

The Milk and Milk Products Act (1972) is the most important regulation in the Dairy Industry as applied by the Government of Malawi. This act is part of the Food Act in Malawi and provides for the improvement and control of the production, processing and marketing of milk and milk products.

Incorporated in the Milk and Milk Products Act are the Milk and Milk Products Regulations: These proscribe rules for:

- Adulteration of Milk and Milk Products
- Milk Production and Registration
- Dairy Plant Licenses
- Dairy Plant Premises and Equipment
- Dairy Plant and Milk Collection Centre Personnel
- Issue of distributor licenses
- Distributor Premises
- Bacterial Standard-Pasteurized Milk in Dairy Plants and Distributor's Premises
- Milk and Milk Products Samples
- Miscellaneous Provisions

The Ministry of Agriculture – Veterinary Department, the City Assembly and the Malawi Bureau of Standards (MBS) are overseeing the implementation of the Milk Act.

### **7.2 Import and Export Regulations**

Malawi operates a liberalized import and export licensing system under which very few commodities are subject to license. However, all **livestock** products are subject to permits due to the health risks involved. The products have to originate from areas where there have not been any cases of Foot and Mouth Disease, Rinderpest or any infectious diseases of cattle, pigs, sheep, goats and other domestic animals. The import of raw milk is banned for safety and health reasons. However, one processing company manages to import raw milk from Zambia and during the interviews it was not clear which procedure they follow.

Each company can apply for an import permit at the Ministry of Agriculture, Department of Animal Health and Industry. The issuing is centralized in Lilongwe, in order to have a good overview by the Ministry. For each consignment one needs to apply for a new permit at a cost of MK 2,000, generally issued within a few days. According to respondents, the import permit requirement is just a formality and does not cost a lot of

time or money. When the permit is issued, a copy will be sent to the veterinary officer at the border post. As soon as the products arrive at the border post, the permit is checked with the assignment and if all in order the products are allowed to enter the country. An example of an import permit can be found in the Annex.

**Most of the dairy products are not subject to import licenses except manufactured milk.** For this product an importer does have to apply for an import license from the Ministry of Commerce & Industry. Based on the information the Ministry has about the current status of the milk supply in the country, the Ministry will decide whether to issue a license. This will happen within 7 days after applying, without any costs. The Ministry wants to protect the local market or at least give them an adjustment period to develop the dairy industry. For this reason, it seems that the Ministry does not readily issue such permits. Products which arrive through non-official border crossings are not being checked or recorded. This trade is likely to be very limited in our estimate, though illegal imports of steri-milk through Mwanza in particular has been a problem.

The import tariff for dairy products is as provided for in the table below. The table classifies tariff by broad origin regions, i.e. Non Preferential (Non Pref) means goods from non-Most Favoured Nations (MFN), Preferential (Pref) means from MFN, COMESA, SADC, and South Africa (RSA). There is a bilateral non-reciprocal trade treaty with South Africa which is why the tariff book has a separate column for that country. It shows that imports from COMESA countries attract the lowest tariff, varying from free import for concentrated milk powder to a maximum of 6 percent for other dairy products. All imports are exempted from excise duty.

**Table 10 Import tariffs for Dairy Products**

HS Code	Tariff Number	Description	Non Pref	Pref	Comesa	SAD C	RS A	Surtax
<b>04.01</b>		<b>Milk and cream, not concentrated nor containing added sugar or other sweetening matter.</b>						
	0401.10	- Of a fat content, by weight, not exceeding 1 %	10	10	3	10	10	Ex.
	0401.20	- Of a fat content, by weight, exceeding 1% but not exceeding 6 %	10	10	3	10	10	Ex.
	0401.30	- Of a fat content, by weight, exceeding 6 %	10	10	6	10	10	Ex.
<b>04.02</b>		<b>Milk and cream, concentrated or containing added sugar or other sweetening matter.</b>						
	0402.10	- In powder, granules or other solid forms, of a fat content, by weight, not exceeding 1.5 %	10	10	Free	10	10	17.5
		- In powder, granules or other solid forms, of a fat content, by weight, exceeding 1.5 %:						
	0402.21	-- Not containing added sugar or other sweetening matter	10	10	1	10	10	17.5
	0402.29	-- Other	15	10	1	10	10	17.5
		- Other:						
	0402.91	-- Not containing added sugar or other sweetening	10	10	1	10	10	17.5

HS Code	Tariff Number	Description	Non Pref	Pref	Comesa	SAD C	RS A	Surtax
		matter						
	0402.99	-- Other	10	10	1	10	10	17.5
<b>04.03</b>		<b>Buttermilk, curdled milk and cream, yogurt, kephir and other fermented or acidified milk and cream, whether or not concentrated or containing added sugar or other sweetening</b>						
		<b>Matter or flavoured or containing added fruit, nuts or cocoa.</b>						
	0403.10	- Yoghurt	15	10	6	10	10	17.5
	0403.90	- Other	15	10	6	10	10	17.5
<b>04.04</b>		<b>Whey, whether or not concentrated or containing added sugar or other sweetening matter; products consisting of natural milk constituents, whether or not containing added sugar or other sweetening matter, not elsewhere specified or included.</b>						
	0404.10	- Whey and modified whey, whether or not concentrated or containing added sugar or other sweetening matter	15	10	6	10	10	17.5
	0404.90	- Other	15	10	6	10	10	17.5
<b>04.05</b>		<b>Butter and other fats and oils derived from milk; dairy spreads.</b>						
	0405.10	- Butter	30	25	5	25	25	17.5
	0405.20	- Dairy spreads	30	25	5	25	25	17.5
	0405.90	- Other	30	25	5	25	25	17.5
<b>04.06</b>		<b>Cheese and curd.</b>						
	0406.10	- Fresh (unripened or uncured) cheese, including whey cheese, and curd	30	25	5	25	25	17.5
	0406.20	- Grated or powdered cheese, of all kinds	30	25	5	25	25	17.5
	0406.30	- Processed cheese, not grated or powdered	30	25	5	25	25	17.5
	0406.40	- Blue-veined cheese	30	25	5	25	25	17.5
	0406.90	- Other cheese	30	25	5	25	25	17.5

Source: MRA tariff book 2003

Apart from these tariffs Malawi has bilateral free trade agreements with Zimbabwe and Botswana. All products mentioned in the above table can be imported duty free from these countries if they meet the rules of origin. Due to this bilateral agreement with Zimbabwe dairy products enter Malawi from this country at very competitive prices. The local industry has difficulties to compete especially as there is also a surtax disadvantage for the local producers e.g. the milk imported from Zimbabwe is exempt from duties and surtax whereas local suppliers do pay surtax on packing material and other inputs

currently at 17.5%. This results in a higher cost price for the milk as it cannot be reclaimed. Some respondents mentioned that recently as a result of decreasing production in Zimbabwe due to sharp reductions in the dairy industry, imports seem to have been reduced. This may also reflect measures to tighten parallel currency market operations by the Zimbabwean authorities.

### **7.3 Sanitary Regulations**

#### ***Sanitary regulations enforced by the Department of Veterinary Services***

The Department of Veterinary Services and Animal Industry checks the premises where milk is produced, stored or processed. Each processor and MBG should obtain a Certificate of Registration (cost of MK 10,000) that specifies the premises with respect to which it is issued. Before issuing this certificate an inspection shall be made to the applicant's premises. This is not applicable for the individual farmers as long as they are registered at a MBG. However, their premises are supposed to be inspected regularly as well. For example, at least every six months each farm needs to be checked medically for example for TB. Unfortunately, due to a lack of funds these checks at individual farm level seldom take place.

The Veterinary Department also checks at processing level. They take samples and send these back to their laboratory in Lilongwe. The frequency of the visits seems to vary per processor. According to the DAHLD, this is currently still free of charge but this might change soon.

#### ***Sanitary regulations enforced by Public Health Department***

The checks of the various City Assemblies focus on hygiene of the premises. They do not take samples as they do not have access to laboratory facilities but they check the hygiene of the equipment, the premises, etc. The City Assemblies focus their checks on processing plants and selling points of milk.

The City Assemblies use the MBS standards and the sanitary specifications as set out by the Food Act (which includes the Milk Act). Their inspections focus on hygiene of the premises, hygiene of the equipment and hygiene of the personnel. They do not take samples as they do not have access to laboratory facilities. The City Assemblies focus their inspections on processing plant and selling points of milk and check as often as required. Each year each player (processor, retailer, wholesaler) needs a food license, issued by the City Assemble. These need to be renewed annually. The price of this certificate depends on the type of business.

#### **7.4 Quality standards**

Milk and milk products are subjected to quality testing by Malawi Bureau of Standards (MBS) whether they are produced locally or imported. The MBS is a member of the International Bureau of Standards and their standards are based on Codex Standards. In case there are no specific standards issued by the MBS, for example for cheese, international standards are used. Most of the Milk & Milk Products Standards are not very up to date being printed in the 1980's but still generally applicable. They should be revised every 5 years but this very rarely happens. Instead they are only revised on demand. As a result, only the standards for Milk Powder have recently been updated.

MBS carries out routine checks around three or four times a year at the processors premises. So far, they do not check at farmer's level. MBS inspects whether the processing establishment fully complies with the hygiene standards and they test the products according to the standards. MBS charges the firm based on its turnover. Some companies have applied for an MBS logo, which indicates that the company is fully certified according to the MBS standards.

With respect to imported products, the MBS does not have inspectors or facilities at the border and only sends people when a quality problem arises. Usually, pre-shipment samples are sent to the MBS before importation and if approved, MBS issues a conditional clearance certificate. This certificate can also be handed out on the assurance of the supplier that certain standards are used. Based on this document the goods can enter the country. As soon as the goods have entered new samples are taken, sent to Blantyre for tests and if approved, MBS issues a full certificate. Only then can MRA clear the goods. This procedure of testing takes up to two weeks. Once importing companies use the same supplier for the same goods, this whole procedure only needs to be followed once (the first time). In this case, MBS only checks at random. The MBS charges are MK 1,500 for registration, MK 3,000 and 1% of FOB value for Inspection & Sampling. If necessary, the importer also needs to pay additional cost such as transport and subsistence for MBS employees.

There does not seem to be close cooperation with similar organizations in nearby countries and the standards used regionally are different. Furthermore, there is a lack of credibility and trust between the organizations involved, despite efforts to work together. According to the interviewees, close cooperation of the different Bureau of Standards would ensure that a certificate of another country should be legal/sufficient for Malawi and vice versa. Currently, efforts are undertaken by for example COMESA to get all the standards of the member countries harmonised.

For exporting milk or milk products, a certificate of MBS is not mandatory. However, based on the requirements of the importer, a certificate of MBS is often necessary.

In the Annex, the major quality characteristics for raw cow's milk, pasteurised cow's milk, yoghurts, dairy cream and milk powder will be described.

### 7.5 Constraints faced with regulations

The enforcement of standards is cumbersome and costly to producers and importers, a fact that increases the cost price of milk products and that undermines the effects of the liberal trade policy. Some of the processing industry companies complain about the duplicity of the various controls. Moreover, the MBS lacks dairy-specific knowledge and experience and their ability to inspect dairy plants and monitor the dairy industry is limited. At the production level, the quality checking is also insufficient and therefore the quality of the milk is inconsistent.

The dairy industry is eager to have regional standards, especially the companies which are involved in trading and have expressed their interest to export. However, this was only mentioned by a few as many are not involved in the international market and others only on a very small scale. It is not yet seen as a critical issue, but would become more important given a significant increase in the ability of Malawian producers to export. The major problem with standards as mentioned by the industry is that is very costly whereas the quality of the inspections undertaken is limited.

Constraints to implementation of certain standards include:

- Lack of capital at the processing industries to enforce standards.
- Inadequate qualified personnel at controlling agencies.
- Lack of funding at the Ministry of Agriculture to carry out more regular checks at farm and MBG level.
- Lack of advice to farmers on how to improve quality, as part of their extension work.

Land O'Lakes has identified the problem of uncontrolled, informal disposal of milk and dairy products some time ago and instituted a Joint Farm and Factory Hygiene Audit Team. This team comprised personnel from the Department of Animal Health and Livestock Development, Cit Assemblies, MBS, Ministry of Education and LO'L. The team concluded that it is practically impossible to enforce a system of quality control of dairy produce as the organizational infrastructure is simply lacking. During meetings with the major stakeholders it was agreed all parties were to blame for the low quality of milk and milk products. To solve this problem, each stakeholder needs to see to it that its role is being enforced.

For example the City Assemblies should enforce the **Public Health Act** by doing the following:

- Providing measures for promoting public health and preventing introduction of infections or communicable diseases. They were mandated to sensitise the public about the dangers of taking unprocessed milk from vendors through public media.
- Prescribing public health rules for milk and dairies.

- Inspecting areas including, dairy premises, cows, milk products, personnel, receptacles, utensils and equipment for hygiene, and the health of the cows and personnel.
- Licensing and issuing certificates to milk handlers and traders.

The **Milk and Milk Products Act** needs to be enforced by Ministry of Agriculture and Food security through the Department of Animal Health and Livestock Development.

Their role of this department should be:

- Supervising the activities of Dairy industry
- Providing infrastructure for efficient production, distribution and supply of dairy products of good quality,
- By this Act ensure by itself and/ or in collaboration with other relevant institutions that measures and practices are designed to promote efficiency in production of good quality milk and milk products,
- This Act is enforced in addition to the Public health Act,
- This Act also empowers DAHLD to register and license all Milk Producers, Processors Distributors and retailers,
- Prescribing grades and minimum standards for dairy products and prohibits sale and distribution of substandard milk.
- Inspecting milk and milk products plants, or any packages, milk and milk products for examination, analysis and testing for grading and compliance to minimum standards.

The Malawi Bureau of Standards should enforce **The Standards Act** by:

- Providing infrastructure to promote standardisation in industry and trade
- By this Act, the Malawi Bureau of Standards promotes development of standards and their implementation, sensitisation and training to facilitate quality assurance and culture in industry,
- Providing measures to prevent introduction of substandard goods into the local market,
- Operating a product and quality systems (ISO 9000) certification schemes,
- Promoting Environmental Management System standards,
- Promoting accuracy of management in industry (calibration)

The roles of **regional associations** is to coordinate milk production activities like

- Making sure that farmers are practicing clean milk production.
- Facilitating the acquisition of dairy production inputs for their MBG members like feeds, drugs, acaricides, health cows, equipment and receptacles.
- Collaborate with other stakeholders in the industry.
- Lobby with government, NGOs for development of the industry.

The **milk processors** should do the following:

- Collect milk from all the milk cooling centres on each other day system
- Introduce an internal audit team
- Establish minimum standards for their products

- Test their products before sending them to market for wholesomeness, microbiological levels and chemical and physical properties.
- Have their workers medically examined for certified fit for food handling.

In addition to these roles, processors from the southern milk shed areas will:

- Be providing protective clothing to milk cooling centre milk buyers.
- Be buying detergents in bulk and sell to MBG's through the regional association.
- To fund some of MBG leadership training courses.

If each of the above stakeholders will enforce their roles, the Joint Hygiene Audit Team is convinced that the dairy sector should achieve optimum operation and good quality produce. Currently this process of enforcement is running and cooperation between all the stakeholders is increasing.

## **8.0 Summary of Recommendations**

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### **Production: on farm level**

- Increase smallholder productivity by means of better extension work.
- Improve access to inputs such as feed, AI and capital.
- Improve hygiene on smallholder and MBG level in order to deliver a consistent good quality of milk.
- Investment in dairy production needs to be stimulated in order to increase production. Still enormous potential to fulfill on supply side.

### **Production: on processing industry level**

- Address under-utilization of processing plants. Local production of milk needs to be increased in order to make dairy processors more profitable. Few companies seem to be able to import a substantial volume of milk powder due to the price disadvantage (around 20 to 30% more expensive) and due to the lack of foreign currency.
- Investment in processing plants needs to be stimulated for example by certain tax incentives or by providing an easier access to capital. On various plants equipment needs to be updated or renewed by due to a lack of money, just a few companies seems to be able to do so.
- Infrastructure to collect the milk from the MBG's needs to be improved.

### **Marketing**

- Infrastructure (roads but also cooling facilities) needs to be improved to link easier with rural areas and with other international regions (for export). This will provide marketing opportunities for the processors.
- Consumption needs to be stimulated. The dairy industry (working together with donors?) should set up a campaign to promote the consumption of dairy products.

### **Trade Policy and Regulatory Framework**

- Increase cooperation between the inspection of the MBS, the City Assemble and the Veterinary Department in order to come up with a joint inspection plan. This avoids duplication and will make it less costly for the processors.
- Inadequate qualified personnel at controlling agencies. Need for training to specifically obtain knowledge for the dairy industry.
- Strict and uniform policy on imported manufactured milk. Currently, a substantial volume of steri-milk enters Malawi through informal channels and undermines the local production, as well as being unfair competition to those firms that import legally.
- Fair competition for imported versus locally produced products. Surtax on packing materials for local produced dairy products needs to be abolished.

## 9.0 Proposed Policies and Regulations for Rationalization/Harmonization

### *Summary of proposed policies/regulations for Regional rationalization or harmonization*

<i>Issue</i>	<i>Specific Policy/regulation and the underlying legislation</i>	<i>How policy/regulation is inhibiting trade in dairy products (specify the product)</i>	<i>Specific proposal for rationalization/ harmonization</i>	<i>Institutions Responsible</i>	<i>Time frame</i>
Standards not harmonized	Standards as stated in the specification of MBS	Each country has its own standards and testing methods. A certificate of any other country is not valid in Malawi and vice versa. This results in extra cost for the importer.	Harmonize standards between the Southern and Eastern African Countries.	MBS MoCI COMESA, SADC	As soon as possible
Trade Monitoring System	Restrictions on imports should be monitored by an international independent body	Currently there are no restrictions on trade, except for raw milk. But just in case a country wants to protect its industry, an independent organization should recommend whether it is allowed or not allowed.	Install an independent body to sort out trade issues and to monitor trade flows	MoCI, COMESA, SADC	
Tax issues	Surtax Act. Surtax rate on imports are not harmonized with	Unfair competition between imported liquid products from Zimbabwe and local produced milk, as processors have to pay surtax on	MRA to create exemption for the dairy industry	MoF, MoCI, Dairy Industry, Budget and Finance parliamentary committee	As soon as possible

<i>Issue</i>	<i>Specific Policy/regulation and the underlying legislation</i>	<i>How policy/regulation is inhibiting trade in dairy products (specify the product)</i>	<i>Specific proposal for rationalization/ harmonization</i>	<i>Institutions Responsible</i>	<i>Time frame</i>
	local surtax rate.	packing materials whereas imports are duty free and exempt from surtax.			

**a. Summary of proposed policies/regulations for National rationalization or harmonization**

<i>Issue</i>	<i>Specific Policy/regulation and the underlying legislation</i>	<i>How policy/regulation is inhibiting trade in dairy products (specify the product)</i>	<i>Specific proposal for rationalization/ harmonization</i>	<i>Institutions Responsible</i>	<i>Time frame</i>
Low production of milk		As a result of low production, Malawi will not be able to export substantial quantities in the near future	Stimulate production through: Improved husbandry techniques Increased accessibility of necessary inputs such as AI and feed Improve access to capital	MoAI, DAHLD Land O'Lakes SHMPA	Ongoing
Low milk consumption		Trade is very low due to low consumption rate	Increase consumption through awareness campaigns, promotion, etc	Ministry of Health Dairy Industry	Ongoing

Quality Problems	Milk Product Act	Quality of many locally produced dairy products seems to be insufficient for export. However, there is hardly any export, therefore this is only for future prospects.	Co-operation between the inspecting organizations. More regular inspections Capacity building through training of staff in quality control.	MoAI, DAHLD MBS City Assembly	Ongoing
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There is a need for special focused committees to coordinate and push the reforms in all the issues.



## **10.0 Conclusion**

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The major problem faced by the processing companies is the lack of raw material as the supply of milk is still too low to satisfy demand. Local producers only produce around 60% of the requirement of the processing industry. As a result, the dairy industry needs to import milk powder in order to fulfill demand. However, this creates problems for some processors, as it is too costly. Instead of increasing trade within the region, all parties mentioned that efforts should focus on increasing local production. In this respect, there are still many constraints to overcome as stated in section 5.2.

As a result of the above, the utilization rate of the dairy industry is as low as 26% causing severe financial problems for some companies. Due to low purchasing power of the Malawian population it is difficult to pass on the price burden to the consumers. In addition, operational costs are very high in Malawi due to high electricity, communication, transport, banking and water costs. Overall the net margins are low and some processing companies are struggling to survive, let alone invest in improvements in their plants.

Malawi is a net importer of dairy products. If the informal sector is included, Malawi's self sufficiency rate is 63% whereas if only the formal sector is taken into account, this rate is only 25%. Sterilised and UHT milk and milk powder are the most common products imported. Zimbabwe is currently the major country of origin for milk in liquid form. For milk powder, South Africa is the most consistent supplier but there are many other countries of origin that vary year to year. South Africa is the main supplier of fresh dairy products such as cheese and ice cream due to the geographical and logistical advantages.

There is hardly any export of dairy products. Just a few companies seem to have processing facilities that are up to international standards and these companies might be able to export in the future. These will probably be long shelf-life products as refrigerated transport is extremely expensive and poor road conditions inhibit trade of fresh products.

However, the focus is currently still on the domestic market. Consumption of milk products is as low as 4.7 litre/capita/year mainly due to the low purchasing power of the population and due to the limited cooling facilities in the countryside. There is a potential market to exploit especially for long life milk, though this is constrained by low rural incomes. The market for high added value dairy products such as cheese and ice cream even in the urban areas is very limited.

Constraints faced in trading, primarily importing dairy products, or with regulations seem to be limited. The high cost of the inspection by the MBS is an impediment, and the surtax free import from Zimbabwe is regarded as unfair competition as producers in the domestic market need to pay surtax on various inputs. The import permit requirement

does not unduly trouble importers, as the procedure is straightforward, though informal imports without permit do increase uncompetitive practices.

Overall, the key stakeholders are optimistic for the future but only if local milk production can be increased. If so, export possibilities might arise and the industry becomes less dependent on imports. However, for the coming five years, most respondents do not expect a significant improvement in the situation.

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## Annex 1: List of Major Stakeholders

Organization:	Dairibord Malawi Limited
Contact Person:	Mr. Phillip Msindo, Managing Director
Address:	P.O. Box 30647, Blantyre 3
Telephone Number:	01-671561 or 670475 or 08-842228 (cell)
Fax Number:	08-845105
E-mail:	<a href="mailto:msindophil@globemw.net">msindophil@globemw.net</a>
Organization:	Suncrest Creameries
Contact Person:	Mr. Farouk S. Kali, Director
Address:	P.O. Box 2622, Blantyre
Telephone Number:	01-673176 or 670885 or 08-827631 (cell)
Fax Number:	01-670368 or 673019
E-mail:	<a href="mailto:pharmavet@sdpn.org.mw">pharmavet@sdpn.org.mw</a>
Organization:	Lilongwe Dairy (2001)
Contact Person:	Mr. Asif Karim, Managing Director
Address:	P.O. Box 111, Lilongwe
Telephone Number:	01-753111 or 01-754111 or 08-821339 (cell)
Fax Number:	01-752111
E-mail:	<a href="mailto:aykarim@malawi.net">aykarim@malawi.net</a>
Organization:	New Capital Dairy
Contact Person:	Mr. B.J. Mwawembe, Managing Director
Address:	P.O. Box 137, Lilongwe
Telephone Number:	01- 766174
Fax Number:	01-766107
E-mail:	<a href="mailto:ncd@malawi.net">ncd@malawi.net</a>
Organization:	Northern Dairies
Contact Person:	Prof. Chibambo, Managing Director
Address:	P.O. Box 198, Mzuzu
Mobile Number:	08-832995 (cell)
Organization:	TAWA Estate
Contact Person:	Mr. M. Mbewe, Director
Address:	P.O. Box 30523, Blantyre
Telephone Number:	01-672699 or 671144
Organization:	MAFE
Contact Person:	Mr. Jumbe, Director
Address:	Development House, Blantyre
Telephone Number:	08-305723 (cell)

Organization: Katete Farm  
 Contact Person: Mr. M. Nthala  
 Address: P.O. Box 30338, Lilongwe  
 Telephone Number: 08-314918 (cell)

Organization: Nature's Gift  
 Contact Person: Mr. Thomasi Chiputu  
 Address: P.O. Box 403020, Lilongwe  
 Telephone Number: 09-963402 (cell)

Organization: Department of Animal Health & Livestock Development  
 Contact Persons: Mr. W.G. Lipita, Director  
 Dr. D.O. Chinombo, Deputy Director  
 Address: P.O. Box 2096, Lilongwe  
 Telephone Number: 01-756460 / 01-756389 or 08-859328 (cell) or  
 08-865558 (cell)  
 Fax Number: 01-751349  
 E-mail: [wglipita@hotmail.com](mailto:wglipita@hotmail.com) or [chinombo@sdpn.org.mw](mailto:chinombo@sdpn.org.mw)

Organization: Malawi Bureau of Standards  
 Contact Person: Mr. A.S. Khulumula, Director  
 Address: P.O. Box 946, Blantyre  
 Telephone Number: 01-670488 or 08-821331 (cell)  
 Fax Number: 01-670756  
 E-mail: [mbs@malawi.net](mailto:mbs@malawi.net) or [askhulumula@malawi.net](mailto:askhulumula@malawi.net)

Organization: Malawi Revenue Authority  
 Contact Person: Mr. Mzungu, Acting Commissioner of Customs  
 Address: Plantation House, Private Bag 20, Blantyre  
 Telephone Number: 01-620844 or 09-952107 (cell)  
 Fax Number: 01-620048  
 E-mail: [mrahq@malawi.net](mailto:mrahq@malawi.net)

Organization: University of Malawi – Bunda College of Agriculture  
 Contact Person: Prof. James W. Banda, Programmes Coordinator  
 Address: P.O. Box 219, Lilongwe  
 Telephone Number: 01-277281 or 09-211606 (cell)  
 Fax Number: 01-277281  
 E-mail: [jwbanda@bunda.sdpn.org.mw](mailto:jwbanda@bunda.sdpn.org.mw)

Organization: SHMPA  
 Contact Person: Brian Lewis, Dairy Development Advisor  
 Address: P.O. Box 30603, Blantyre 3  
 Telephone Number: 01-621269 or 08-838109 (cell)  
 Fax Number: 01-624395

E-mail: [otoole-lewis@malawi.net](mailto:otoole-lewis@malawi.net)

Organization: Land O'Lakes  
Contact Person: Mr. Austin Ngwira, Programme Manager  
Address: Private Bag A148, Lilongwe  
Telephone Number: 01-757372  
Fax Number: 01-757373  
E-mail: [lolmalawi@sdp.org.mw](mailto:lolmalawi@sdp.org.mw)



MALAWI GOVERNMENT

DEPARTMENT OF ANIMAL HEALTH AND INDUSTRY

**IMPORT PERMIT FOR LIQUID AND POWDERED MILK**

Nº 000212

To \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DAHI  
P.O. Box 3096  
Lilongwe  
MALAWI

Date: \_\_\_\_\_

Permission is granted to Dr./Mr./Mrs./Miss \_\_\_\_\_

trading as \_\_\_\_\_ to import \_\_\_\_\_ from \_\_\_\_\_  
(country/company) to Malawi under the following conditions:

1. The milk originates from areas where there have not been any cases of FMD, Rinderpest or any infectious disease of cattle, pigs, sheep, goats and other domestic animals for the last six months.
2. The milk is processed in Government Registered and licensed factories which are subjected to regular inspection by qualified dairy quality control Technologists.
3. The products are hygienically and professionally packed.

DIRECTOR OF ANIMAL HEALTH AND INDUSTRY

Copy: The Controller of Customs.  
The Divisional Veterinary Officer.  
The Secretary for Commerce and Industry, P.O. Box 3096, Lilongwe.  
The Regional Manager, MRA, P.O. Box 507 Lilongwe.

G.R. No. \_\_\_\_\_

Ver. 10021/100042002

**Annex 2: Example of an Import Permit**



# MALAWI BUREAU OF STANDARDS

P O BOX 946, BLANTYRE, TEL: +(265) 670 468, FAX: +(265) 670 755

(IR) / J / .....

## IMPORT INSPECTION REQUEST FORM

(Please complete sections 1 to 14 and bailforward to the Malawi Bureau of Standards. Please note that lack of complete information may cause unnecessary delays)

1. Importer (Name & Address)  Tel: _____ Fax: _____		2. Supplier (Name & Address)  Tel: _____ Fax: _____		
3. Forwarding Agent (Name & Address)  Tel: _____ Fax: _____  Container N(s): _____ Seal N(s): _____		4a. Product Brand:		
		4b. FOB value:		
		5. No. & Kind of packages	6. Quantity	
7. Particulars	8. Applicable Malawi Standard	9. Importer's specification		
<b>14. TO THE DIRECTOR GENERAL MALAWI BUREAU OF STANDARDS</b>  Please kindly inspect a consignment as described above and issue an Import Batch Quality Certificate. The consignment can be inspected at _____ which is _____ Km from Blantyre.  I undertake to settle all fees chargeable and abide by the regulations governing the Mandatory Certification Scheme.  _____ <b>NAME OF CLIENT/REPRESENTATIVE</b>  _____ <b>SIGNATURE OF CLIENT/REPRESENTATIVE</b>  _____ <b>DATE</b>		<b>15 FOR OFFICIAL USE ONLY IQMS FEES</b>		
		<b>Item</b>	<b>Rate</b>	<b>Amount (MWK)</b>
		Registration		
		Inspection & Sampling	1% of FOB value	
		Testing		
		Transportation		
		Reporting/Certification		
		Substance Allowance		
		Subtotal		
		17.5% surtax		
	<b>Total</b>			
_____			<b>SIGNATURE OF MBS OFFICIAL</b>	

### Annex 3: MBS Documents



## MALAWI BUREAU OF STANDARDS

P O BOX 946, BLANTYRE, TEL: +(265) 670 468, F AX: +(265) 670 756

### IMPORT BATCH CONFORMANCE CERTIFICATE

Consignee (name & address)		Certificate nr	Ref. nr: <b>IS/QAD/IQMS/SH /</b>
		Date issued:	
Consignor (name & address)		Country of origin:	
		Agent (name & address):	
Mode of transport: <input type="checkbox"/> Sea <input type="checkbox"/> Rail <input type="checkbox"/> Road <input type="checkbox"/> Air			
Port of entry:	Place of customs clearing:	Final destination:	
Product brand name and description:			
Batch identification:			
Date sampled:			
Parameter	Specification	Result(s)	
<b>CERTIFICATION &amp; CONDITIONS OF ISSUE</b>			
THIS IS TO CERTIFY that the above-mentioned branded product has been found to conform to the national product standard. This certificate only applies to the consignment or batch from which the sample was obtained and tested and is strictly valid only up to _____ issued under the regulations and procedures governing the Import Quality Monitoring Scheme of the Malawi Bureau of Standards in this _____ day of _____ by me:			
Seal of issuing Authority		Name: _____	
		Signature: _____	
		Designation: _____	
		Date: _____	

## Annex 4: Standards Specifications

### 1. Specification of unprocessed (raw) whole milk:

*Definition of the product:*

Raw milk is obtained from a cow, without any additional thereto or subtraction there from, and has not been subjected to temperature-time combination which will give negative phosphatase test results. Udder secretion, milking during 4 days after parturition.

<b>Composition and quality factors</b>	<b>Specifications</b>
Milk fat	Not less than 3.5%
Milk solids, non-fat	Not less than 8.2%
Specific gravity of milk	Min 1,028 and max 1,030
Titrateable acidity	Not less than 0.18% m/v as lactic acid
Residues of antibiotic substances	Less than 0,05 i.u./ml (in term of penicillin equivalents, using the TTC test)
<b>Microbiological specifications</b>	
Viable count	Not less than $10^5$
Bye redaction tests	Satisfactory if methylene is not decolourized after 30 minutes at +- 1 degree Celsius
	When resazurin test is used at 37 +-0,5 degrees after a ten minute incubation period, standards 4-6 shall be acceptable: 3,5 or less rejected
Mastitis	Not more than 200 000 somatic cells per ml with microscopic examination
	Not more than 500 000 cells per ml with rapid indirect tests such as the California test

### 2. Specification of pasteurized cow's milk:

*Definition of the product:*

Pasteurized milk shall be milk either retained at 63 C at least 30 minutes or at 72 C for at least 15 seconds and immediately cooled to 5 C or lower, and shall give negative phosphatase.

<b>Composition and quality factors</b>	<b>Specifications</b>
Milk fat	Not less than 3.0%
Milk solids, non-fat	Not less than 8.0%
Freezing point depression	Average -0,545 C and not more than -0,525 C
Hygiene	Free from any impurities, preservative or colouring matter or any other foreign matter
Microbiological requirements	
Viable count	Less than 30 000 per ml and a coliform count of not more than 10 per ml
Phosphatase test	Not more than 10 mg

### 3. Specification of yoghurt, sweetened yoghurt and flavoured yoghurt:

#### *Definition of the products:*

Yoghurt is a coagulated milk product obtained by lactic acid fermentation through the action of "lactobacillus bulgaricus and Streptococcus thermophilus from milk and milk products, which have been pasteurized prior to fermentation. The micro-organisms in the final product shall be viable and abundant. Sweetened yoghurt is yoghurt to which approved sweeteners have been added and flavoured yoghurts is yoghurt to which flavouring foods or substances have been added.

<b>Composition and quality factors</b>	<b>Specifications</b>
Milk fat	Not less than 2.25% for full cream yoghurt and not more than 1.25% for low fat yoghurt.
Milk solids, non-fat	Not less than 8.5% for both full cream and low fat yoghurt
Essential Raw Materials	Milk, low fat milk, skimmed milk (all of these might be concentrated) or cream. A mixture of two or more is possible as well.
Essential Ingredients	Cultures of Lactobacillus bulgarius and Streptococcus thermophilus
Optional Additions	Milk powder, skimmed milk powder, butter milk Approved sweeteners Approved stabilizers, emulsifiers and thickeners For flavoured yoghurts the maximum

	amount of additions in the final product shall be 30 per cent
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#### 4. Specification of Dairy Cream for Direct Consumption:

*Definition:*

Dairy Cream is the milk product rich in fat separated from milk, which takes the form of an emulsion of the water-in-fat type. Pasteurized cream is the cream, which has been subjected to a recognized heat treatment (63 degrees for at least 30 minutes or at 75 degrees for 15 seconds and immediately cooled to 5 degrees or lower). Sterilized cream is cream, which has been subjected to a process of sterilization by a recognized heat treatment in the container. Ultra Heat Treated Cream is a cream, which has been subjected to a continuous flow of an appropriate, recognized heat treatment and has been packaged aseptically.

Type of Creams	Specifications
Heavy Dairy Cream (Double Cream)	Minimum 35% fat content
Medium Dairy Cream (Whippable Cream)	20 to 35% fat content
Light Dairy Cream (Table Cream)	10 to 20% fat content
Raw Material	Exclusively from cow milk
Sweeteners and Flavouring	Sucrose to a maximum of 13 percent m/m. Vanilla may be used for flavouring
Microbiologically	
Total plate count	At 32 degrees for 48 hours shall not exceed 100 000 per one millilitre of cream and coliform group shall be nil

#### 5. Specification of Milk Powder:

*Definition:*

**Partly skimmed milk powder:** Milk from which fat has partly been removed and contains between 1.5% and 26% milk fat.

**Skimmed milk powder:** Milk from which almost all the fat has been removed and contains not more than 1.5% milk fat.

**Standardized (adjusted) milk:** Milk in which fat and/or protein has been so adjusted as to give a final material conforming to the requirements for fat and/or protein as specified in the table.

**Whole or full cream milk powder:** This is the milk from which no fat has been removed and contains between 26% and 42% milk fat.

Chemical and physical requirements for milk powder

Characteristic	Requirement		
	Whole Milk Powder	Partly Skimmed Milk Powder	Skimmed Milk Powder
Moisture, % (m/m), max	5	5	5
Total solids, % (M/M) min	96	96	95
Milk fat, % (m/m)	26-42	1.5-26	Not more than 1.5
Milk protein in milk solids-not-fat (SNF) %, (m/m), min	34	34	34
Total ash (on dry basis), % (m/m) max	7.3	8	9.3
Titratable acidity (lactic acid) % (m/m), max	1.2	1.4	1.5
Solubility, %, min			
a. Roller-dried	85	85	85
b. Spray-dried	98.5	98.5	98.5
Scorched particles	Disc B (15mg)	Disc B (15 mg)	Disc B (15 mg)

Microbiological requirements

Characteristic	Requirement , per gram (except for Salmonella) 25g	
	1 <sup>st</sup> Limit	2 <sup>nd</sup> Limit
Total plate count	50,000	100,000
Coliforms	10	Nil
Staphylococcus aureus (coagulase positive)	10	Nil
Salmonella	nil	Nil
Yeast and moulds count:		
a) whole milk powder	10	20
b) partly skimmed and skimmed milk powder	50	100

**Annex 5: Major Discussions Points from Stakeholders Workshop: 20 July 2004, Malawi**

The discussion during the workshop focussed on three key areas and the facilitator set short-term objectives to analyse them.

1. Raw Milk Management
2. Importations
3. Regional Harmonisation

### **Raw Milk Management**

It was agreed that legislation against raw milk would be hard to police and counter-productive. A more positive approach is to focus on removing the demand for raw milk.

Through the use of Radio / Press Releases / Bill Boards and the focus should be given to education, regarding the impacts of raw milk. Health issues and disease impacts.

Industry Processors would work together to agree a message that would be consistently promoted throughout all areas of the dairy industry. The Ministry of Health would be involved.

Driven by such partnership a consistent message would be used highlighting the dangers of raw milk.

### **Importation of Raw Milk**

The importation of raw milk from Chipata could enable processors to operate at a level of increased efficiency.

- Dairy Industry to lead discussions on trade policy re importations. What is our local shortfall? Processing industry to work together to project raw milk import requirements.
- Agreement made that licensing system should continue.
- The industry will work together to determine the projected shortfall and requirements.
- Industry to form a committee of processors, farmers /local dairy industry, national processors association. It would aim to influence industry regulations.

### **Regional Harmonisation**

Impact of surtax upon competition. Quantify the Malawi Kwacha impact of surtaxes upon the national supply.

Three stakeholders – Processors, Consumers, Farmers should lead discussions and open dialogue with Ministry of Finance about opportunities to harmonise regional competition through changes to surtax regulations.