REPORT ON THE INVESTIGATION INTO THE EFFECTS OF DEREGULATION ON THE DAIRY INDUSTRY
NATIONAL AGRICULTURAL MARKETING COUNCIL (NAMC)
MARCH 2001

### **CONTENTS**

		Page				
	EXECUTIVE SUMMARY	3				
	RECOMMENDATIONS	5				
1.	INTRODUCTION	8				
2.	LITERATURE REVIEW ON PREVIOUS INVESTIGATIONS	10				
3.	GOVERNMENT POLICY AND DAIRY INDUSTRY STRUCTURES	12				
4.	INTERNATIONAL DAIRY REGIMES	15				
5.	REGULATORY CHANGES IN THE DAIRY INDUSTRY: THE PROCESS AND IMPLICATIONS	18				
	5.1 Changes in legislation and regulations affecting production, processing and marketing of milk and dairy products					
	5.2 Impact of changes in policy and import control measures					
	5.3 Effect of deregulation on hygiene standards and inspection services					
	5.4 Price formation in the diary industry and its impact					
	5.5 Impact of deregulation on the collection and dissemination of data and industry information					
	5.6 Level of participation of the emerging sector, barriers and solutions					
	5.7 Effect of deregulation on consumer education, market development a availability	nd product				
6.	ABBREVIATIONS	55				
7	REFERENCES	57				

#### **EXECUTIVE SUMMARY**

The report is organised so that the executive summary and conclusions are presented at the beginning to allow readers to assimilate a basic outline before proceeding to a more in-depth reading of the content.

#### Introduction

Since deregulation of the South African agricultural sector, no effort has been made to revisit and investigate the impact of policy changes on the agricultural dairy industry. The dairy industry was deregulated over a short period of time, and to such an extent that there is now only minimal government intervention in the industry. In this process the industry has developed into one of the freest dairy markets in the world.

At the National Agricultural Marketing Council (NAMC) meeting of 22 March 2000, the Council appointed a Section 7 Committee to investigate the impact of a deregulated marketing environment and other developments on the dairy industry and to propose remedial steps as necessary. Further specific terms of reference were drawn up and are set out on page 10.

The NAMC invited key role-players and other stakeholders to participate in the investigation. The Committee sought inputs from a wide spectrum of stakeholders, and these inputs were extensively discussed.

The Committee's main findings are summarised below:

- The changes brought about by deregulation have made varied impacts on the different sectors of the dairy industry (production, processing, marketing and consumption).
- Imports increased rapidly during deregulation and this has had an adverse effect on the milk powder, butter and cheese markets.
- The number of distributors and producer-distributors increased while the retail trade in the top end of the market saw greater concentration.
- There has been a noticeable decline in the application of regulatory measures for quality control and food safety, especially in the secondary sector.
- Unfair competition, low levels of investment in people and equipment, and the strength of the national groups in the retail trade have driven product prices down to unacceptably low levels, which makes control, investment and development very difficult.

- Small, emerging farmers are finding it difficult to enter the industry.
- The statistics and information now available, which are compiled on a voluntary basis, are incomplete and unreliable.

#### **Discussions and conclusions**

**Effect of imports.** For various reasons, subsidised imports into the Republic of South Africa have increased rapidly. The markets for milk powder and butter were halved as a result of unfair competition, while the cheese market was also affected. This has led to significant variations in milk prices and an overall decrease in prices to producers. As a result, producer numbers and job opportunities have decreased sharply.

**Product quality.** Changes in government structures, limited funds and lack of enforcement of regulations have created a situation where existing regulations are often poorly applied or not at all. This has resulted in products of varying, often poor and at times even dangerous hygienic quality. This problem was recently highlighted by the inspection report of the European Union Commission, which led to the abolition of all exports to the Union.

**Entry barriers.** The major entry barriers for emerging farmers are low profitability of milk production, lack of credit facilities and financial packages tailored to their needs, market volatility, high transaction costs and the depressed producer prices resulting from imports.

The concentration of production and long transport distances mean low production per square kilometre and high collection costs. This makes entry into the market an unattractive option for small, emerging farmers because they lack resources and practical, hands-on proficiencies.

**Statistics.** The Committee observed that voluntary collection of information has a number of shortcomings and has resulted in inaccurate figures. The committee welcomes and fully supports the effort by the National Department of Agriculture to establish a National Agricultural Database.

Pace of deregulation. Overall, the committee noted that deregulation has proceeded too quickly and too far. As a result, the industry and the country have been harmed both financially and socially while the markets of the developed countries have benefited and have, largely through government subsidies, captured a substantial part of the local market. Limited investment in infrastructure, research and development has caused a stagnant consumer market.

#### RECOMMENDATIONS

Many of the changes that have occurred as a result of deregulation are still in their early stages of development and the full impact and responses are still to be experienced. Many other unrelated influences have also interacted with the effects of deregulation, and it is therefore not always easy to attribute outcomes exclusively to the deregulation process in the dairy industry.

### **The Committee made the following RECOMMENDATIONS with regard to:**

- 1. The impact of changes in policy and import control measures on the dairy industry (page 24), that:
  - a. The relevant government departments should be empowered via their budget and trained personnel to combat illegal imports.
  - b. At the Seattle round of negotiations, government should renegotiate the basis of South Africa's Minimum Market Access quota, without compensation, as the local industry has been unjustifiably harmed.
  - c. Government should investigate the aggressive manner in which developed and developing countries protect their domestic producers and manufacturers within the World Trade Organisation's legal framework.
  - d. The National Department of Agriculture should energetically seek an acceptable solution for administering the Minimum Market Access quota with as little damage as possible to the industry.
  - e. The position of the dairy industry in the South African Customs Union should be reviewed.
  - f. The negative effect of continuing subsidies and unfair trade practices of developed countries should be accentuated at the Seattle Round of negotiations.
  - g. Possibilities should be investigated to assist smaller processors/distributors who do not have balancing facilities to balance their milk supply in order to prevent sporadic dumping in the market.

# 2. The effect of deregulation on hygiene standards and inspection services in the dairy industry (page 32), that:

- a. The coordination and application of hygiene standards and veterinary services should be executed on a national level.
- b. Regulatory measures currently undertaken by government institutions should be reinforced or, alternatively, assigned to competent third parties to be executed on behalf of government institutions.
- c. When making decisions that will directly or indirectly impact on the dairy industry, policymakers should engage in a consultation process with industry role-players before such decisions are implemented.
- d. A central, independent authority to regulate and monitor safety standards in the dairy industry should be introduced, to which certain government tasks can officially be delegated. The recognition of such an authority should be negotiated with relevant importing countries and trading blocs such as the European Union. The state and the dairy industry could jointly fund such a body.
- e. Government should introduce the required administrative and control measures to obtain health certification for export purposes.

#### 3. Price formation in and its impact on the dairy industry (page 36), that:

- a. A study of the futures markets as offering a possible solution for unstable producer prices should be undertaken.
- b. Sub-standard milk and other dairy products should not be permitted.
- c. Processing facilities should be registered and inspected by a competent authority.

### 4. The impact of deregulation on the collection and dissemination of data and industry information (page 44), that:

- a. The dairy industry should apply for statutory measures in terms of the Marketing of Agricultural Products Act, 1996 to make the registration of role-players and furnishing of records and returns compulsory.
- 5. The level of participation of the emerging sector in the dairy industry (page 42), that:

- a. A model should be developed for small-scale dairy farming based on pasture utilisation and seasonal production. Milk stored in strategically placed bulk tanks under the auspices of small dairy cooperatives, can be collected by existing dairy companies and cooperatives.
- b. Extension services in the dairy industry should concentrate on the establishment of viable economic upcoming farmers with special attention given to practicalities such as share milking, equity investment, farms/cattle, etc.
- c. Measures should be put in place to increase the effectiveness of existing quality inspection services.
- d. The Steering Committee for Market Access that was approved by the Minister of Agriculture on January 2001 (NAMC Committee), should specifically examine ways of increasing market access for the emerging sector in the dairy industry.
- e. Roads should be included in the rural infrastructure targeted as eligible for government funding.

#### 1. INTRODUCTION

In terms of section 7 of the Marketing of Agricultural Products Act 1996, the National Agricultural Marketing Council (NAMC) is empowered to appoint committees to investigate agricultural marketing issues. At its meeting of 22 March 2000, the Council appointed a Section 7 Committee to investigate the impact of a deregulated marketing environment and other developments on the dairy industry, and to propose remedial steps as necessary.

#### 1.1 Composition of the Section 7 Committee

Members of the Dairy Section 7 Committee were appointed from all role-playing structures in the dairy industry. Members of the Committee were as follows:

Mr Winston Mvabaza (Chairperson)	(NAMC)
Ms Lungile Bengu-Baloyi	(NAMC)
Mr Bertus de Jongh	(MPO)
Mr Frik Grobler	(NMDA)
Mr Schalk Burger	(NAMC)
Prof Chris Blignaut	(SAMFED Consultant)
Mr Jafta Kola	(MPO)
Dr Marthinus Hermann	(SAMO)
Ms Dinah Mavuso	(Consumers)
Mr Donald Mokoena	(NAMC)

Ms L Bengu-Baloyi attended two of the meetings and tendered apologies for the rest. The Committee invited representatives from the labour and retail sectors but was unable to obtain the participation of these role-players.

### 1.2 Terms of reference

The broad terms of reference of the Committee were as follows:

To investigate the impact of a deregulated marketing environment and other developments in the dairy industry and to propose remedial steps as necessary.

The Committee examined the following specific issues:

- The effect of changes in policy and import control measures on the dairy industry and acceptable measures to address these impacts as appropriate
- The effects of deregulation on hygiene standards and inspection services in the dairy industry
- Price formation in and its impact on the dairy industry
- The impact of deregulation on the collection and dissemination of data and industry information
- The level of participation of the emerging sector in the dairy industry, possible barriers and their elimination
- The effects of deregulation on consumer education, market development and product availability, especially in rural areas and townships

#### 2. LITERATURE REVIEW OF PREVIOUS RELEVANT INVESTIGATIONS

#### 2.1 Various\_reports

The Committee took *note* of the investigations summarised below. They are referred to here for the sake of completeness.

### Investigation into the price mechanism in the food chain, Board of Tariffs and Trade, 1992

The Board of Tariffs and Trade (BTT) Report noted that concentration in the food marketing chain tended to coincide with the existence of statutory controls. The report concluded, *inter alia*, that

- deregulation should occur at both the national government and local authority levels
- quantitative controls and tariffs applied to imported foodstuffs should be reviewed with a view to fostering competition from abroad
- the statutory powers of control boards should be terminated, and any control boards retaining such powers should be reconstituted so that the board members were appointed to look after the national interest rather than commodity-specific vested interests.

### Report of the Committee of Inquiry into the Marketing Act (Kassier Report), 1992

The Kassier Report recommended that statutory single-channel and price support marketing schemes should be abolished and that the agricultural control boards should operate as private and voluntary organisations outside the 1968 Marketing Act. A further recommendation was that the former National Marketing Council (established in terms of the 1968 Marketing Act) should investigate the "blatantly unfair practices by foreign competitors".

# Agricultural marketing in a democratic South Africa, Land and Agricultural Policy Centre, 1993

The Land and Agricultural Policy Centre (LAPC) Report was broadly supportive of the Kassier Report. The LAPC recommended *inter alia* that

- all remaining statutory controls over the movement of agricultural products (except for health and hygiene regulations) should be removed
- voluntary collective action should be encouraged
- government should promote equality of access to marketing services
- smallholder productivity should be improved through improved access to resources and services rather than through generalised input and output subsidies.

#### Agricultural Marketing Policy Evaluation Committee (Basson Report), 1994

The Agricultural Marketing Policy Evaluation Committee (AMPEC) released two reports. These reports recognised that there would have to be reforms but they were more broadly supportive of the then existing interventions in the market for the dairy industry. AMPEC mentioned that the Milk Board had been established with the purpose of facilitating national liaison and to fund the national producer organisation. The Committee supported the view that collective statutory levies for maintaining an information system in order to keep producers informed of developments in the market place were justifiable.

#### 2.2 Business Plan of the Milk Board (January 1997)

In terms of the Marketing of Agricultural Products Act 1996, the Milk Board submitted a business plan to the Minister for approval at the end of January 1997. Essentially, the business plan described the status quo of the Milk Board and indicated the direction the Board and the industry intended taking.

Because the assets of the Milk Board were relatively small, it was recommended that an industry trust should not be formed as this would have been costly and its administration cumbersome. The assets and functions of the Milk Board were transferred to the Milk Producers' Organisation (MPO).

The following objectives were foreseen for the MPO:

- 1. promotion of the interests of all dairy farmers
- 2. increase of market access to all dairy farmers
- 3. promotion of efficiency of the marketing of milk and milk products
- 4. promotion of the consumption of SA milk and milk products both locally and internationally
- 5. enhancement of the viability of milk production
- 6. maintenance and creation of job opportunities in the primary sector
- 7. creation of a world competitive primary dairy industry
- 8. enhancement of export earnings

#### 3. GOVERNMENT POLICY AND DAIRY INDUSTRY STRUCTURES

#### 3.1 Changes in agricultural policy

In line with the international trend of liberalisation in agricultural marketing, gradual changes took place in South Africa's agricultural marketing environment until 1996. A shift of emphasis from rigid, strict control measures in favour of a more market-oriented approach occurred, and international rules and norms were applied. This resulted in, amongst others, the replacement of quantitative import controls by tariffs, the abolition of most subsidies and a re-examination of the marketing regulations that were still on the South African statute books.

The 1968 Marketing Act made provision for the appointment of producer-dominated marketing boards and for various controls with regard to the movement, price setting, quality standards, sale and supply of agricultural products. The growing gap between producer and consumer prices of agricultural products and the rapid rise in food prices prompted a number of official inquiries into the domestic agricultural marketing system between 1992 and 1994 (refer to the previous section).

Following an inclusive process of consultation during which inputs were sought from a wide spectrum of stakeholders, and an in-depth investigation into the marketing needs of the agricultural sector, the Marketing of Agricultural Products Act (No 47 of 1996) came into effect on 1 January 1997 and introduced a new era in the marketing of agricultural products in South Africa. One of the main provisions of the 1996 Act was that all the remaining control boards had to be phased out within twelve months. It should be mentioned that some partial deregulation had taken place prior to the implementation of the 1996 Act and some Schemes had already been revoked before 1997 (e.g. bananas, dried beans, eggs, chicory, *rooibos* tea and tobacco).

The 1996 Act also made provision for the establishment of a council to be known as the National Agricultural Marketing Council (NAMC). The first year of the existence of the NAMC was devoted mainly to the phasing out of the control boards that had been instituted in terms of the 1968 Marketing Act. Although a number of Control Boards continued to exist after January 1998, their activities were concerned solely with various outstanding legal issues in respect of non-payment of levies and the ownership of assets acquired with statutory levy income. No functions of the former control boards continued beyond January 1998.

In terms of the 1968 Marketing Act, the Minister could consider introducing an intervention (a statutory measure) only if it had the proven support of a specified majority of producers. The 1996 Act, on the other hand, determines that any

directly affected group can request an intervention but that the Minister may only approve such a statutory measure if he or she is satisfied that it will advance one or more of the objectives of the 1996 Act.

To date, statutory measures in respect of records, and returns and registration have been introduced in the maize, winter cereals, oilseeds, cotton and sorghum industries, while levies have been introduced in the winter cereals, cotton, wine and sorghum industries. At this stage the dairy industry has not applied for any of the statutory measures provided by the 1996 Act and is therefore operating free of any marketing control measures.

### 3.2 Current structures in the dairy industry

In response to the phasing out of the Milk Board, a collaborative structure or federation involving organisations concerned with the dairy industry was established on 24 July 1997. This is the South African Milk Federation (SAMFED). The founder members are the South African Milk Producers' Organisation (MPO), the South African Milk Organisation (SAMO), the National Milk Distributors Association (NMDA), organised labour and organised consumers. The MPO represents both commercial and small-scales farmers.

SAMFED was formed with a view to promoting the optimal development of the industry. It serves as a discussion forum and as a mouthpiece for those involved in the industry, and liases and negotiates with government and other institutions. Its services revolve mostly around high level discussions with various interest groups on behalf of the industry as a whole with regard to issues such as tariffs, imports and exports. SAMFED also acts as a forum where issues of mutual interest can be discussed.

The General Meeting is the highest authority of SAMFED. The Management Board acts on behalf of the General Meeting. The Management Board consists of 24 members and is constituted as follows:

10 members of MPO

6 members of SAMO

4 members of NMDA

2 members of organised labour

2 members of the National Consumer Forum

(SAMO and the NMDA represent the secondary sector.)

SAMO, with its present functions, is serviced by its secretariat, which is known as the South African Dairy Foundation. SAMO members represent some 70% of all milk distributed in this country, whereas the NMDA represents some 12% of milk distributed in the country. Membership of both SAMO and NMDA is open to all distributors of milk.

The primary sector is serviced by the MPO. Membership is open to all milk producers. As the Milk Board was principally a producer board, most of its services were incorporated into the structures of the MPO.

Unlike in the past, when the milk industry was funded through statutory levies, the entire SAMFED structure, including the primary and secondary legs, is funded by voluntary contributions from its members. SAMFED itself is funded by a financial contribution from each of the three organisations, with SAMO and NMDA contributing jointly 50% of the funding and MPO 50%. The MPO is also funded by voluntary contributions from its members, i.e. the producers. This funding is collected by milk buyers from producers on behalf of the MPO and paid to the MPO. This fee is the same as the Milk Board levy of 0,46 cents (VAT included) per litre, which was collected in terms of the old Marketing Act of 1968.

#### 4. INTERNATIONAL DAIRY REGIMES

"The concept of Producer Subsidy Equivalent (PSE) was introduced by the OECD as an indicator of the level of government support to agriculture in a particular country" (Kirsten, Tregurtha, Gouse & Tswai 2000). The higher the PSE indicator the more support a government gives to agriculture. Table 1 lists the PSE of a number of selected countries.

Table 1: Producer Subsidy Equivalent (PSE) of selected countries, 1998

Country	PSE%	
1. New Zealand	0,8	
2. Republic of South Africa	5,2	
3. Australia	6,8	
4. Hungary	11,8	
5. Canada	16,1	
6. Mexico	16,7	
7. Czech Republic	17,5	
8. United States of America	21,6	
9. European Union	45,3	
10. Japan	63,2	

Source: Kirsten et al 2000

Note that South Africa's 1998 PSE figure is substantially lower than the previous figure of 12,4% calculated in 1995. South African agriculture's support from government has thus declined (Kirsten et al 2000).

From Table 2<sup>1</sup> it is clear, first, that South Africa's dairy industry is one of the most deregulated industries in the world. In comparison with New Zealand, which is deemed to be the country with the lowest PSE and the most deregulated in the world, and which has mandatory single channel export via its Dairy Board, South Africa's dairy industry has even less statutory intervention.

Australia's dairy industry started a major deregulation process from 1 July 2000. This restructuring process will, to some extent, level the playing fields between Australia and South Africa, but one must keep in mind that the Australian government still supports its dairy industry via large-scale research funding (SAMFED 2000) and an effective regulatory support system, both of which are lacking in South Africa. Thus the Australian dairy farmer will, until 2008, receive a restructuring package funded by a consumer levy. This will increase the Australian PSE to more than the current 6,8%. As long as this support is in place, the Australian industry has a competitive advantage.

<sup>&</sup>lt;sup>1</sup> Based on information received from different countries as well as information taken from the Internet.

Of all the countries listed in Table 2, the European Union's (EU) support for its dairy industry is the most destabilising (SAMFED 2000). As the EU is the largest international trader in dairy products, its dairy support policies, which include large subsidies at both primary and secondary levels, have a profoundly disruptive effect on the international market. The International Dairy Federation (2000:10) observes, of the EU and the United States, that "neither is competitive without refunds".

Table 2: Categories of potential government support to the dairy chain in different countries

Assistance to primary producers:	EU	USA	NZ	AUS	CAN	BRAZIL	RSA
Subsidies	*	*			*		
Direct payments	*			*			
Surplus removal	*	*			*		
Funding research	*	*		*	*		*
Veterinary services	*	*	*	*	*	*	*
On-farm inspection services	*	*		*	*		
Fixed price		*			*		
Quality control	*	*	*	*	*	*	*
Quota system	*				*		
Assistance to processing industry:							
Subsidies	*	*					
Support advertising					*		
Fixed prices/margins							
Quality control	*	*	*	*	*		*
Funding research	*	*		*	*		
Tariffs	*	*		*	*	*	*
Surplus removal	*	*	*		*	*	
Retail: legal control:							
Fixed margins		*					
Fixed price							
Quality control	*	*	*	*	*		*
Single channel marketing	*		*		*		
State trading	*	*	*		*		
Support exports	*	*	*	*	*		

Table 3: Currently used international dairy support measures

Type of Specific measu support		Description	Countries		
	Intervention price	Floor price; dairy companies are paid this guaranteed price for designated quantities of dairy products.	EU, Canada, USA		
Price support	Supply quota	Limit on production; levies are imposed on excess production.	EU, Canada, Japan, Australia (some states)		
stimulation butter indus		Subsidies on the sale of school milk, butter to armed forces and the bakery industry and milk powder for animal feed.	EU		
Decoupled direct	Income support	Compensation to farmers for the adverse effect of natural disasters, industry and budgetary payments to compensate for falling prices.	Most countries		
payments	Other support	Farm credits, government transfers to research development, extension services, training and agricultural infrastructure.	All countries except India and Argentina		
Coupled direct	Input subsidies  Subsidies paid to farmers for the use of farm inputs like maize.		EU, Canada, Japan		
payments	Deficiency payments	Output subsidy to bridge the gap between the market price and the officially administered price.	Japan		
Tariffs as border measure		A tax on imported products.	All countries		
	Import quota	A quantitative restriction on the level of imports.	EU, Japan, Canada, USA, India		
	Export subsidy	A subsidy given to bridge the gap between the supported domestic price and the world market price.	EU, USA, Canada, Japan		
Non-tariff border measures	Health and sanitary restraints	Regulations to restrict or prohibit the importation of dairy products to prevent the introduction or spread of disease	All countries		
	Import and export boards	Governmental or quasi-governmental organisations having a monopoly on imports or exports of dairy products.			

Source: Adapted from Johan 1997

### 5. REGULATORY CHANGES IN THE DAIRY INDUSTRY: PROCESS AND IMPLICATIONS

# 5.1. Changes in legislation and regulations affecting production, processing and marketing of milk and dairy products

The dairy industry was historically controlled and regulated by means of the Dairy Industry Act of 1961, the Marketing Act of 1968, Dairy Boards and Milk Boards, as well as national, provincial and local health legislation, plus a variety of other Acts and Regulations. The goals of the Dairy Industry Act of 1961 are summarised in Table 4.

#### Table 4: Goals of the Dairy Industry Act 1961

The Dairy Industry Act, 1961 (No 30 of 1961) and its subordinate legislation previously regulated the dairy industry. The following are the most important determinations and stipulations of this Act:

- All premises where milk was handled had to undergo a yearly inspection and registration process.
- No butter or cheese could enter the retail trade without being graded by an official of the Directorate Agricultural Products Standards of the department of agriculture.
- No person could be involved in the manufacture of butter or cheese unless he/she was tested in the art of cheese-making and the manufacturing of butter and possessed a certificate of proficiency.
- Factory personnel had to write examinations and obtain certificates of proficiency in the testing of milk and cream as well as the grading of butter, cheese, cream and milk
- Milk received from farmers was tested daily for fat and protein content to determine
  the monetary value. Officials from the Directorate audited the test and regularly
  made unscheduled visits to factories to check on the correctness of the tests until
  1983.

Before 1987, the marketing of dairy products in the dairy industry was split into the industrial and the fresh milk sectors. The industrial sector included milk, cream, butter and cheese as well as milk powder and condensed milk. Milk and cream classified as industrial products were not as rigidly controlled regarding production requirements as fresh milk. The fresh milk sector included milk for the fluid markets (so-called fresh milk), and was more rigidly controlled from a health point of view.

The following control measures existed:

- Prices of raw industrial milk and cream for the manufacture of cheddar and gouda cheese, milk powder and butter were controlled.
- Minimum transport tariffs were fixed for industrial raw milk.

- The price of raw fresh milk and, later, milk for ultra high temperature (UHT) processing in defined control areas was fixed.
- The registration of factories was subject to proof that a factory was needed in the area concerned. (This was because there were originally too many factories and the resulting chaos actually led to the formation of the Dairy Board).
- Delivery of fresh milk in controlled areas was according to demarcated zones.
- Pool schemes for butter and cheese included the administration of fixed retail prices and margins for manufacturers and distribution agents, as well as the subsidisation of butter for local use and export.
- A pool scheme for fresh milk producers included the operation of a milk casein factory by the Milk Board, the selling of surplus cream and milk to industrial factories and the determination of selling prices of fresh milk in controlled areas.
- Domestic sales, exports and imports of cheese, butter and milk powder were regulated.
- The grading of butter and cheese was regulated
- The grading and testing of cream and milk were controlled.
- The Department of Agriculture employed qualified Dairy Officers, posted in various regions in the country, in its Dairy Division. They inspected factories to ensure adherence to structural and hygiene requirements and carried out the grading and analysis of butter and cheese for local consumption and export.
- Milk testers and cream graders underwent examinations set by the Department of Agriculture.
- Municipal health inspectors and veterinarians conducted inspections of milking facility structures, farm workers and animals producing milk for the fresh milk market.

Apart from the above-mentioned control measures, the Department of Agriculture also gave substantial inputs regarding:

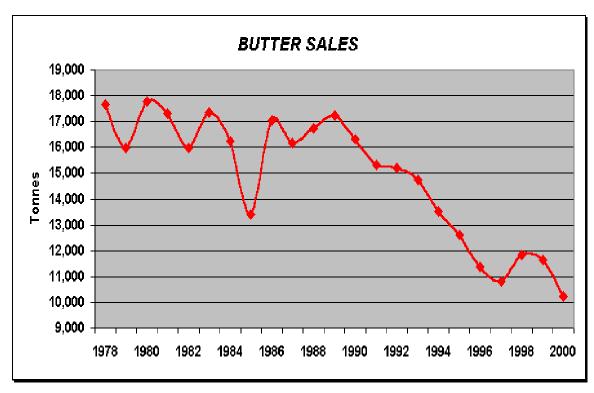
- herd development
- artificial insemination
- milk recording
- research on both milk production and processing of milk and dairy products
- animal disease control
- standards for the buying of milk

Many of the above-mentioned measures seem unnecessary under the current circumstances. However, at that stage they contributed significantly to development and discipline in the dairy industry. The result was the establishment of a stable and economically viable dairy industry.

Deregulation and amendment of the existing regulations started in 1971, with government allowing margarine to be coloured yellow. This led to a drop in the annual butter market from more than 54 000 tons in 1971 to 16 000 tons in 1979

(SAMO 2001). This is apparent from Figure 1, which depicts butter sales from 1978 to 2000. Consequently a large number of butter factories had to close, while cream production was phased out and partly converted to the production of industrial milk. In the wake of this came the disappearance of thousands of small, extensive milk farmers for whom cream was an important cash flow generator. The yearly turnover of the dairy industry was reduced by approximately R600 million. Since 1989 there has been a further marked decline in butter sales.

**FIGURE 1: BUTTER SALES, 1978 - 2000** 



Source: SAMO 2001

The next important change in the control regime was the amalgamation of the Milk and Dairy Boards in 1979. This generated the next wave of deregulation in 1983, which consisted of the following:

- abolition of the fixing of retail selling prices for fresh milk (which had often proved politically embarrassing to the government)
- relaxation of registration of fresh milk distributors leading ultimately to no registration or conditions for registration at all
- abolition of zoning
- partial decontrol of selling prices for cheese and butter

The publication of uniform milk regulations in 1986 paved the way for the so-called "milk-is-milk" era. Following the abolition of discriminatory hygiene and other standards for industrial and fresh milk the price differentiation between the two groups of milk could no longer be sustained and a uniform minimum price for all milk was published on 16 February 1987. This was quite a dramatic step, leading to many further changes, including the transfer of the responsibility for levy collection from farmers to milk buyers

Cheese and butter margins and price control were abolished in 1986 and 1988 respectively. This led to a new approach in balancing the product flow in the dairy industry. As all divisions of the industry contributed to the production of cream and butter, the butter scheme was used as a channel for subsidies and levies to assist the different dairy product divisions. This mechanism was no longer available, and the so-called surplus removal scheme was introduced. Levies on all milk were used to fund losses on exports of milk powder and butter. The perception was, however, that not all surpluses were covered by the Surplus Removal Levy, and the legality of these levy payments was tested in a court of law. As a result the surplus removal scheme was subsequently abolished, and this was eventually followed by the closing of the Dairy Board.

The Dairy Industry Control Act was repealed in 1987. Many functions of the old Dairy Division in the Department of Agriculture were transferred to the Division of Inspection Services. The Department of Agriculture's Directorate for Plant Quality and Health and the Directorate for Veterinary Services now undertake some of the old control functions on an *ad hoc* basis, with a very small complement of adequately trained personnel, who are supposed to handle a variety of products and tasks.

The final deregulation steps were taken in 1994, after the Uruguay Round of the World Trade Agreement discussions when quantitative import control was abolished and replaced by import levies. This brought a drastic new effect into play in the dairy industry, with increases in legal and illegal imports. See Figure 3 and the discussion under section 5.2.2.

The abolition of the 1968 Marketing Act in 1997 and the consequential disappearance of the Milk Board were the last steps in the process of deregulating the dairy industry. Notwithstanding the very limited functions of this Board, at that stage it could at least

fund its functions for the primary production sector through statutory levies. Since then, the dairy industry has functioned with minimum government intervention and no statutory levies.

Table 5 summarises the various regulation and deregulation steps in the dairy industry since 1930.

The Committee *noted* that deregulation of the SA Dairy Industry started and proceeded much earlier and far more quickly than in most other dairy producing countries, and that the process was very drastic and had many far-reaching implications for the local industry.

### ${\color{red} 23} \\ \textbf{Investigation by the National Agricultural Marketing Council into the effect of} \\$ deregulation on the dairy industry

### Table 5: Regulation and deregulation in the dairy industry, 1930-1998

1930	Parliament passes the Dairy Industry Control Act. In accordance with this Act, a Board of Supervision
1,500	for the dairy industry is introduced to impose levies on butter and cheese, absorb export losses, promote
	the consumption of dairy products, fix minimum prices for milk and cream and coordinate the
	production, manufacture and marketing of dairy products.
1937 (as	The Marketing Act is announced, in accordance with which the Board of Supervision for the dairy
amended)	industry is reconstituted on 18 February 1941.
1956	After the institution of a provisional scheme for fresh milk in the Cape Peninsula area in 1956, a control
	scheme comes into effect in certain metropolitan areas on 1 March 1962. Under this control scheme a
	Milk Board is introduced with the objective of bringing stability to the fresh milk industry.
1961	Promulgation of Dairy Industry Act 1961 (No 30 of 1961).
1971	Government allows margarine to be coloured yellow.
1 Mar 1979	The Board of Supervision for the dairy industry is converted into the Dairy Board and the Milk Board
	merges with it to form the new Dairy Board
1983	The process of amending the existing regulations concerning compositional and labelling requirements
	of milk and dairy products commences.
1 Jul 1983	Control over fresh milk retail prices and distributor margins is abolished.
1 Jul 1983	Non-standard cheese and butter are introduced and price control over these products is abolished.
1 Jul 1983	Registration of fresh milk distributors is relaxed.
1985	Retail price control of butter and cheese is abolished.
June 1986	Setting of retail prices for cheese and the operation of a pool for cheese are suspended.
1986	Restrictive registration of butter, cheese, condensed milk and powder factories is suspended.
1986	The Department of Health and Population Development introduces uniform milk regulations in terms of
	which the facilities of fresh and industrial milk producers have to comply with the same standard.
30 Sep 1986	Cheese margins are abolished.
16 Feb 1987	Minimum prices for fresh and industrial milk ("milk-is-milk") are promulgated.
Oct 1987	New set of regulations covering the composition and labelling of all dairy products is promulgated. As
	part of the process, certain actions are taken in terms of the deregulation and privatisation process of the
	government, which include:
	privatisation of cheese and butter in 1989
	deregulation of factory inspections and registrations in 1986
	privatisation of proficiency testing in 1987
1.0 1000	abolition of unscheduled testing of farmers' milk and cream in 1986
1 Sep 1988	Floor price system for milk is implemented.
30 Sep 1988	Wholesale prices of butter are abolished.
1990	Export standards and requirements for dairy products are set in 1990 with the promulgation of the Agricultural Products Standards Act (No 119 of 1990). The basis of these export standards and
	requirements are the regulations for the local market.
31 Dec 1993	The Dairy Board is closed, the surplus removal scheme is abolished and the Milk Board is
31 Dec 1993	reintroduced.
24 Sep 1994	Quantitative import control is abolished and import levies are introduced. The Dairy Board ceases to
	exist at the time of the repeal of the Dairy Scheme. Import tariffs replace quantitative control measures.
1998	The Milk Board is closed. The Marketing of Agricultural Products Act (No 47 of 1996) comes into
	effect on 1 January 1997. One of its main provisions is that all control boards have to be phased out
	within twelve months.

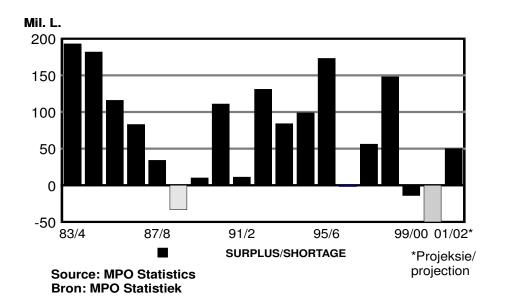
#### 5.2 Impact of changes in policy and import control measures

#### 5.2.1 Balancing

"Balancing the dairy industry" means its supply and demand have to be balanced within and between seasons and years because of dairy product and industry specifics. On the supply side, highly perishable raw milk is produced throughout the year, but with distinctive seasonal variances, such as production peaking during summer. Dairy products are consumed throughout the year, but the demand for certain dairy products has a similar seasonal variance. Summer production is usually higher than summer demand. Excess summer raw milk production is converted into cheese, butter, milk powders and other storable products. Although these products are saleable products in their own right, they are referred to as concentrated or "balancing products". It is, for instance, possible to "balance" fresh milk supply between periods of shortages and surplus production by converting raw milk into butter and milk powder and partly reconstituting it back to fluid milk during shortfalls.

Annual differences between milk production and consumption from 1983/84 to 2000/2001 are shown in Figure 2. From this figure it is clear that South Africa is traditionally a producer of surpluses and that annual shortages are infrequent.

FIGURE 2: ANNUAL DIFFERENCE BETWEEN MILK PRODUCTION AND CONSUMPTION, 1983/84 TO 1999/2000



A very important function of the Dairy Board was to guide and assist the dairy industry in "balancing the industry" to the benefit of all involved. Instruments the Board had available included good statistical information and mandatory levies

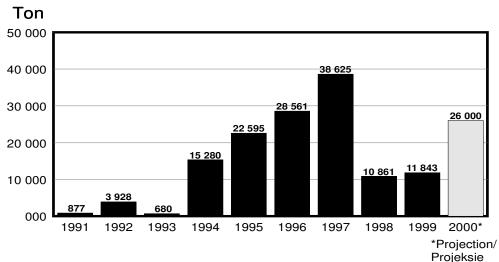
used to cross-subsidise the balancing process, stimulate the demand for dairy products and develop the export market.

With the demise of the Dairy Board came the disappearance of levies that spread the burden of market development and the exporting of surpluses among producers, processors and consumers. The cost of exporting surplus commodities into a highly distorted international market thus became the sole responsibility of the dairy industry. Many economists argue that this is, theoretically, correct. One must, however, keep in mind that when groupings such as the EU dominate the international market with their subsidised products, this tips the scale against fair competition, and that the cost of exporting surplus dairy commodities – in many instances to balance the market – was borne by the producers and processors.

#### 5.2.2 Deregulation of the trade regime: from quantitative control to tariffs

Although deregulation of South Africa's trade regime started prior to the Marrakech Agreement, the major shift, from quantitative regulation to tariffs, took place in September 1994.

FIGURE 3: ANNUAL SOUTH AFRICAN CUSTOMS UNION IMPORTS OF DAIRY PRODUCTS, 1991 – 2000



**Bron/source: Customs & Excise Statistics** 

Within the limits set by the WTO, South Africa decided to initially set import tariffs at low levels compared to the bound rate and also to the tariff rates set by South Africa's major trading partners. The changeover from quantitative import control to tariff control therefore resulted in an increase in total imports into South Africa – see Figure 3 and annexure 1. Loopholes in the import tariff structure aggravated the problem. In some instances cheese was imported as curd as well as

under different sub-headings, with lower ad valorem rates than on cheddar and gouda cheese.

This tariff dispensation regrettably opened the way to fraudulent imports, particularly of milk powders (AgriInspect 2000). During the period 1994 to 1998 the value of dairy products where illegalities were identified amounted to R190 million. This represents a direct impact of 10 cents per litre on the producer price of milk, or a total effect on farmers' income of R200 million. If these products had entered the South African market via the legal channels, government would have received tariffs to the amount of R149 million. Should these imports continued to enter the RSA market, it could have had a total negative effect of R263 million on the total GDP and affected 9 000 jobs (Agri Inspect 2000).

#### 5.2.3 Minimum and current market access quotas

As a co-signatory of GATT and various WTO agreements, South Africa had to establish current and minimum market access quotas for dairy products. The process of deciding on this quantum powerfully demonstrated the negative effects of not having a sound database for international and domestic purposes (see section 5.5).

For some products with a high domestic protection level, there was a danger that on its own the tariffication process of the Uruguay Round would not have a significant liberalisation effect even after implementation. In article 5.2 of the Marrakech Agreement on Agriculture, the techniques of current and minimum access were adopted to complement the tariffication process (International Trade Centre 1996:228). Prior to the Uruguay Round, SA used quantitative import control for dairy products.

The base rate or its equivalent is the rate negotiated by the participating countries and applicable during the base period 1986 to 1988. This rate must decrease by 6% per year over 6 years. The yearly decreased base rate becomes the bound rate, which is the ceiling rate for a specific year.

Current access commitments (CAC) must ensure that those *imports* that entered a country up to its quota limits on either a duty free or preferential basis during the period 1986 to 1988 (base period) and that were at least 5% of the domestic market, would not be affected by the application of higher (base) rates resulting from tariffication. The quanta imported under this commitment remained the same until 2000. The quota tariff applicable in these instances was 20% of the bound rate (International Trade Centre 1996:229). See Table 7 for South Africa's base, bound (ceiling) and applied rates.

Minimum market access (MMA) commitments are for products of which little or no imports took place in the past. Participating countries were required to give MMA tariff quota commitments for such products equal to 3% of the domestic

consumption in the base period and rising to 5% by the end of 2000 for developed countries and 2004 for developing countries (International Trade Centre 1996:229).

The MMA quota enters the South African market at 20% of our bound rate. See Table 8 for the market access quotas.

Prior to 1994, the Dairy Board, together with the Department of Agriculture, administered the allocation of import permits not only for South Africa, but also for South African Customs Union (SACU) imports. Actual imports reported by South African customs and other authorities could not be broken down into South African and BLNS (Botswana, Lesotho, Namibia and Swaziland) country-specific quantities. Consequently South Africa's MMA quota was calculated on total SACU imports during the base period 1986 to 1988, resulting in a completely overstated quota being notified for South Africa.

Table 6: RSA: Production, imports, consumption and exports of skimmed and full cream milk powder, 1979/80 - 1990/1991 (tons)

	immed milk pow	der
--	----------------	-----

YEAR	Production	Imports	Consumption	Exports
79/80	20 133	3 646	18 076	-
80/81	18 069	-	20 175	541
81/82	16 157	2 429	18 131	-
82/83	25 329	1 347	12 714	21
83/84	23 824	-	16 846	9 761
84/85	21 881	-	17 257	6 713
85/86	24 540	-	17 854	11 687
86/87	14 159	462	17 750	3 409
87/88	12 961	7 039	18 287	45
88/89	19 735	1 233	18 577	25
89/90	20 864	-	18 723	-
90/91	26 154	-	16 599	8 643
ull cream r	nilk powder	<u>.</u>		
79/80	8 653	1 663	10 654	-
80/81	12 873	_	12 739	14

79/80	8 653	1 663	10 654	=
80/81	12 873	-	12 739	14
81/82	13 512	1 129	14 204	=
82/83	10 000	147	10 041	-
83/84	12 317	-	13 098	27
84/85	11 786	-	11 626	173
85/86	11 370	-	11 906	58
86/87	10 312	-	9 880	-
87/88	8 555	4 274	11 717	12
88/89	8 742	1 755	10 166	415
89/90	10 477	-	9 742	708
90/91	12 392	-	9 966	1 250

Source: Dairy Board: Dairy Digits, Statistical news release

During the base period, SACU experienced extraordinary shortfalls in milk production caused by severe droughts and adverse climatic conditions. In the case

of both skimmed and full cream milk powder, there was a marked drop in production and an increase in consumption during 1986/87 (see Table 6).

The immediate effect of this incorrect quantification of the MMA quota was that South Africa's domestic dairy processors and the dairy farmers unjustifiably lost market to subsidised imports, entering at 20% of the bound rate. The quota established for milk powder, in particular, was considered excessive. Consequently the milk powder market decreased for South African processors by more than 50%, which constitutes 10% of our market. Eventually milk spraytowers were reduced from eleven in 1998 to the present five.

Table 7: SA bound rates as negotiated during the WTO Uruguay Round

Tariff heading	Product description	Base rate as in 1995 %	Bound rate as in 2000 %	Applied rate of duty C/kg	Applied rate as % of the F.O.B. value %
04.01	Milk and cream	215	96	Free	Free
04.02	Milk powders and condensed milk	215	96	450	SMP: 60
04.03	Buttermilk and yoghurt	215	96	450 Yoghurt free	Buttermilk: 60
04.04	Whey	215	96	450	140
04.05	Butter	158	79	500c/kg	44
04.06	Cheese	190	95	500c/kg	Cheddar: 43

Source: National Department of Agriculture

SAMFED (2000) does not disagree with the MMA percentage, but believes total SACU imports should not have been used as the basis volume. SAMFED points out that during the Seattle Round, South Africa's applied rates on dairy products were less than the bound rates (see Table 7). In relation to the MMA quotas this gives ample scope for imports without in-quota volumes (see Table 8). Judged on the basis of imports during the past five years, SAMO (2001) is convinced that market access quotas can be completely eliminated without any tariff adjustments.

Members of the investigating Committee also expressed concern about the administrative process surrounding the MMA quotas. The allocation of imports and the administrative procedures involved under the MMA followed by the National Department of Agriculture (NDA) resulted in an additional decrease in the share of the total quota allocated to manufacturers of concentrated products. The initial allocation to manufacturers of 85% of the milk powder quota in 1996 has been reduced to 65% for 2001, while the allocation for butter has been reduced from 85% to 55% (SAMO 2001).

Table 8: South Africa's commitment regarding market access for dairy products

Tariff Heading	Description	Initial Quota (tons)	Final Quota (tons)	In-quota Tariff Rate	1997 Quota
04.01	Milk and cream, fresh <sup>3</sup>	32 194	53 657	19,2%	39 348
04.02	Milk powder <sup>1</sup>	4 470	4 470	19,2%	4 470
04.03	Buttermilk and yoghurt <sup>1</sup>	213	213	19,2%	213
04.04	Whey <sup>1</sup>	2 786	2 786	19,2%	2 786
04.05	Butter <sup>1</sup>	1 167	1 167	15,8%	1 167
04.06	Cheese <sup>2</sup>	1 557	1 989	19,0%	1 701

<sup>1</sup>Current market access; <sup>2</sup> Minimum market access; <sup>3</sup> No tariff applicable

Source: National Department of Agriculture

Particularly alarming is the fact that in the case of butter, quota allocations are made to importers (i.e. dealers and agents) who have not made any investments in the dairy processing industry. It is also doubtful whether they allow the consumer to share in the benefit of the lower tariffs on the MMA volumes (see discussion under heading 5.4).

The 1999 MMA quota for milk powders represented approximately 23% of local consumption (21% of production), exceeding by almost five times the required WTO minimum requirements of 5% of domestic consumption. The Committee expressed concern about the administration of milk powder and the substitution of demineralised whey powder.

The situation would also have been more accurately reflected if imports had been converted into total milk equivalent.

Approximately 60% of the total dairy market (milk and cream) is not easily accessible to imports. The remaining 40% (concentrated products) is, however, completely over-exposed to imports in terms of current and minimum market access quotas because of lack of border control.

Cognisance should be taken of the manner in which the major participants in the world market manage their affairs to comply with minimum WTO requirements without making unnecessary adjustments in their tariff dispensations (Michaloupolis 2000). South Africa, which contributes only 0,5% of world dairy production, should not take the lead in attempting to dismantle the dairy tariffs. South Africa's bound tariffs are well within the required parameters of the WTO. Any further adjustment of applied tariffs should be treated with caution, taking into consideration all its future implications for the dairy industry.

5.2.4 Inconsistent application of trade-related regulations: rebate quotas granted to BLNS countries and Zimbabwe

South Africa is a member of SACU. Prior to 1994 the BLNS partners were allowed to import dairy products according to permits granted free of duty. After 1994 they applied for and insisted on exemption from duties, allowing imports of dairy quotas from outside the Customs Union at zero tariffs. See Table 8.

The quanta in Tables 8 and 9 are independent of one another. The rules of origin apply to commodities imported, as in Table 8, meaning they cannot be reexported to other SACU countries without adding value. One can, however, argue that the 7 220 tons of milk powder noted in Table 9 were part of South Africa's traditional market that was given away to highly subsidised imports. The implication of such an argument is that South Africa lost a market of 16 176 tons of milk and whey powder due to deregulation.

Under a bilateral agreement between Zimbabwe and South Africa, Zimbabwe can export 500 tons of milk powder tariff free into South Africa. The ice-cream and baby food manufacturers can import unrestricted amounts of buttermilk and whey powder.

Duty free import quotas were granted to BLNS countries based on local consumption. BLNS figures submitted could not be readily verified due to lack of official statistics. Lack of proper customs control measures means that products are imported to BLNS countries free of duty to find their way back into South Africa without being detected by the authorities.

Table 9: Customs Union: market access for dairy products

Tariff line	Product description	BLNS quota (tons)
04.01	Milk and cream	Free of rate
04.02	Milk powder and condense milk	7 220
04.03	Butter milk and yoghurt	220
04.04	Whey	1 700
04.50	Butter	950
04.06	Cheese	500

Source: Customs Union: BLNS countries

Current rebate quotas to BLNS countries create numerous problems and contribute to distorted development of the dairy industry. SAMFED (2000) is of the opinion that BLNS and Zimbabwe rebates and quotas should be abolished and included in the MMA quotas. They have requested the Department of Trade and Industry (DTI) and NDA to include this position in their Seattle Round negotiations.

It is common knowledge that the NDA is locked in protracted negotiations with the SACU partners to establish a new SACU agreement. It is also known that the BLNS countries are reluctant to move to a new SACU dispensation.

#### 5.2.5. Competition

Deregulation in the dairy industry led to the entrance of numerous new milk distributors, mainly in the metropolitan areas. The dairy industry has no quarrel with this but has voiced its concern about the entrance of milk distributors who do not comply with health and/or composition regulations. It appears that deregulation has resulted in unbridled competition in this industry, resulting in unacceptable practices such as water being added to milk, under-filling of packaging, etc.

Competition is more fully discussed under heading 5.3.

#### 5.2.6 Employment in the dairy industry

Since 1994 there has been a constant decline in the profitability of milk production. This has caused a sharp decline in the number of milk producers and a concomitant loss of jobs in the primary industry. Results of the NDA case study (1999) suggest that, over the period 1994/95 to 1998/99, commercial farmers engaged in almost all types of farming activities reduced their employment of regular workers. Among commercial farmers whose main source of income was either mixed farming or animal production, the employment of regular workers declined by 11,9% and 14% respectively.

The greatest decline of employment of regular workers over the period 1994/95 to 1998/99 was among those commercial farmers whose main source of income was animal production (down by 27,6%). The number of seasonal workers employed by farmers involved in animal production and mixed farming declined by 9,3% and 4,2% respectively during the period 1994 to 1999. The MPO estimates the direct loss of jobs in the dairy primary industry at 17 000 over the past five years.

#### The Committee *noted* that:

- The deregulation process destabilised the dairy industry.
- With the institution of tariffs in 1994, legal and illegal imports of dairy products increased.
- The dairy industry officially lost a market for 16 176 tons milk and whey powder.
- The statistical basis on which the Minimum Market Access is founded contains errors to the detriment of South Africa's dairy industry.
- Major participants in the world market manage their import affairs to comply with minimum WTO requirements without making unnecessary adjustments to their tariff dispensations.

- There is concern about the administrative procedures followed in allocating the MMA quotas.
- There is concern about the effect of the MMA quotas combined with rebate quotas granted to BLNS countries.
- Employment opportunities and capital infrastructure have decreased as a result of the effect of deregulation on the dairy industry.

#### Recommendations:

- The relevant government departments should be empowered via their budgets and trained personnel to combat illegal imports.
- In the Seattle Round of Negotiations the South African government should renegotiate the basis of its MMA quota, without compensation, as the South African industry was unjustifiable harmed.
- Government should investigate the aggressive manner in which developed and developing countries protect their domestic producers and manufacturers within the WTO legal framework.
- The NDA should energetically seek an acceptable solution for administering the MMA quota with as little damage as possible to the industry.
- *The position of the dairy industry in SACU should be reviewed.*
- In the Seattle Round of negotiations the negative effect of continuing subsidies and unfair trade practices of developing countries should be accentuated.

#### 5.3. Effect of deregulation on hygiene standards and inspection services

#### 5.3.1 Background

The Committee was of the opinion that hygiene standards of dairy products have deteriorated considerably since the deregulation of the dairy industry. It is not only the abolition of the former Milk Board that has caused the problems in the industry: the effectiveness of local authorities has declined due to lack of funds and commitment. In the new, deregulated environment milk inspectors appointed by local and provincial authorities are over-burdened.

The NDA, Department of Health and the former Boards employed inspectors to check that distributors of milk as well as manufacturers of dairy products were registered and that their premises had been inspected to ensure that the quality of the product was of acceptable standards. With the abolition of the Milk Board,

compulsory registration of factories and milk producing units under the Dairy Industry Control Act 1961 (No. 30 of 1961) was abandoned.

#### 5.3.2 The role of local and provincial authorities

The effective monitoring of legal requirements by the local and provincial authorities is deemed to be critical to the success of the dairy industry.

Deregulation brought about major structural adjustments in the control of hygiene standards. Numerous control functions in respect of public and animal health inspection services to ensure adherence to product standards, which were previously conducted by the Departments of Health and Agriculture, were deregulated and /or transferred to local and provincial authorities.

A large number of new producer distributors, PDs and cheese factories emerged in the dairy industry. It is estimated that there are currently about 600 to 800 such players actively involved in the industry. The problem that has arisen in the absence of compulsory registration of such enterprises is that local authorities are often not aware of their existence. Regulations pertaining to hygiene in milk parlours and factories are not enforced and authorities are unable to execute regular analysis of milk and dairy products due to either lack of funds and/or suitably trained personnel.

Milk tanks are installed in cafts, butcheries, bakeries and even at petrol filling stations. Milk is sold from these tanks to consumers who bring their own containers. The absence of regular health and hygiene inspections of these bulk tanks and of the premises is disturbing. In many instances unpasteurised milk is sold to consumers without any certification that the milk is obtained from herds certified to be TB and CA free, and with no control over hygiene standards. Proper hygiene standards exist only among those dairy companies that have invested in laboratory and analytical facilities.

In a recent survey on milk quality conducted for SAMFED, a total of 132 samples from 75 dairies were analysed by reputable laboratories. This sample is not statistically representative of the dairy industry as a whole, but the findings are nevertheless noteworthy:

- 43 (32%) had high coliform counts (which indicate poor pasteurisation or excessive contamination after pasteurisation).
- 44 (33%) had total bacterial counts exceeding legal limits.
- 20 (15%) had butterfat content below the legal minimum.
- 19 (14%) had water added to the milk (in one case as much as 29%).
- 25 (19%) were under-pasteurised (and could therefore contain pathogenic organisms).

.

Only a small number of samples were analysed for Brucellosis. Seven of these tested positively for Brucellosis, which causes Malta Fever in humans.

Australia recently implemented deregulation measures in its dairy industry. All the state bodies that had until then played a role in the regulation process became food safety agencies. These food agencies are now responsible for ensuring the quality of dairy products from the production points through to the consumers. South Africa did not do this when it deregulated. The deteriorating quality of dairy products and the recent outbreak of Foot and Mouth disease are some of the problems that now require urgent attention. Since the demise of the Milk Board, there has been less interest in controls because the bodies that were responsible for the controls have disappeared. The grading of cheese and butter also disappeared as a result of deregulation. The inspection service is now part of plant and quality control, and the dairy division has disappeared. There are not enough officials carrying out inspection services and this lack of capacity is hampering their effectiveness.

The Committee wishes to sound a cautionary note as regards the new government structures. There is some concern that if, for instance, the six newly-formed local authorities in Gauteng do not give a high enough priority to the inspection of milk parlours and factories and milk hygiene inspections in general, there may be a further negative effect on the execution of existing regulations.

In the case of veterinary services, the problem is the split of veterinary services between provinces. This is not as a result of deregulation *per se* but as a result of new government structures. However, the Committee is of the opinion that veterinary services should not be a provincial matter but a national one.

Government programmes to step up the eradication of TB and CA have been seriously hampered by lack of funds and trained veterinarians and, more recently, non-availability of vaccines. The recent outbreak of Foot and Mouth disease has clearly illustrated the need to control ports of entry and cross-border traffic in biological products. This outbreak poses a real risk to the industry at both primary and secondary levels. The monetary loss suffered by agriculture as a result of decreased exports due to the outbreak of the disease is substantial.

Here, too, the Committee is of the opinion that the deterioration of hygiene standards has not been caused by deregulation *per se*, since effective control measures are still in place. The various levels of government whose responsibility it is to ensure that the measures are adhered to do not, however, apply these measures properly.

#### **Recommendations**

• The Committee recommends that the coordination and application of hygiene standards and veterinary services be executed on a national level.

- Regulatory measures currently undertaken by government institutions should be reinforced or, alternatively, assigned to competent third parties to execute on behalf of government institutions.
- When policymakers make decisions that will directly or indirectly impact on the dairy industry, they should engage in a consultation process with industry role-players before such policies are implemented.
- 5.3.3 Mission from the European Commission to South Africa concerning milk-based products

In 1999, the dairy industry in collaboration with the NDA embarked on establishing a national residue-monitoring programme for milk and dairy products to ensure compliance with EU standards for dairy products.

The EU Commission visited South Africa in October 2000 and found that food safety control in South Africa is totally inadequate at all levels of government. During this visit a number of serious deficiencies in the operation of food controls were identified. In light of their findings, the EU Commission recommended in their report that immediate action be taken to ensure that the foods involved were not exported to the EU until these deficiencies had been rectified, and that no dairy products could be exported to the EU until further notice. As a result, all dairy exports from South Africa to the EU were cancelled.

The findings of the EU Commission have had a direct impact on the South African dairy industry as a whole. The Committee is of the opinion that the banning of South African dairy exports to the EU was brought about by the failure to apply and execute the regulations. The Committee noted that there are existing regulations, but that they are not being properly executed.

Obtaining the required health certification for export purposes has become a cumbersome process. This is caused by shortages of competent provincial veterinarians to conduct the certification process.

There is also a lack of control over the quality and safety of imported products. Government agencies do very little to ensure that imported products meet the health and composition standards.

#### **Recommendations**

- Government should introduce the required administrative and control measures to obtain health certification for export purposes.
- A central, independent dairy safety regulatory authority should be created to which certain government tasks can be officially delegated. The recognition of

such an authority should be negotiated with relevant importing countries and trading blocs such as the EU. The state and the dairy industry could jointly fund such a body.

#### 5.4. Price formation in the dairy industry and its impact

#### 5.4.1 Background

A basic characteristic of the dairy industry is the variation in production and consumption patterns. Some of this is predictable, such as consumption patterns over a week and between seasons. Predicting the effect of the variability in the production of raw milk is more difficult. A significant proportion of South Africa's milk is produced partially or wholly from natural or artificial pastures, with consequential seasonal production. From the farmer's point of view these are generally seen as the least costly production systems. Variability in climatic conditions between years destabilises farmers' milk flow, prices and cash flow. Unstable inter and intra-seasonal milk flows also have a cost increasing effect on the dairy processing industry. These periodic surpluses and shortages make it difficult to stabilise production and demand. This instability in the market is aggravated by low-priced subsidised imports. Mechanisms to improve stability are vital for the development of a viable dairy industry.

As discussed under 5.5, the breakdown of reliable, timeous and easily accessible statistical information on all aspects of the dairy industry is a serious development. Good statistical information improves transparency in the market. A lack of it opens the way for unsound and destabilising trade practices that can make it extremely difficult for participants in the market to distinguish between apparent and real market signals. This ultimately creates an "unstable" market.

#### 5.4.2 Price formation at producer level

The estimated 800 milk processors purchase milk from about 5 700 milk producers for the commercial processing of milk. The vast majority of these are small-scale processors. They process and sell their own milk production and in many instances the milk produced by farmers in close proximity to their farms. They are known as producer distributors.

No uniform milk purchasing system is applied on an industry-wide basis. The major milk buyers, who process approximately 70% of total deliveries for commercial processing, use comparative base-pricing purchasing systems, i.e. pricing according to composition (milk fat and non-fat solids) and hygienic quality of milk. To the base price a variety of premiums (e.g. volume) is added and penalties deducted.

Most of the smaller milk processors, who main service segments of the fresh milk and fresh milk by-products market, tend to purchase milk solely on a volume basis with no quality standards in place.

Currently, smaller and medium-sized distributors of fresh milk products have no mechanism to physically balance fluctuating milk production and demand. They try to balance demand and supply by way of price manipulation in either the retail store or at the farm gate. Smaller processors tend to pay higher raw milk prices than the larger processors during periods of seasonal milk shortages. During periods of over-supply (especially at weekends, in summer and during periods of general surpluses) they dump (balance) their products (supply) in the retail at very low prices. These price responses of the smaller distributors have a destabilising effect on the producer and consumer milk price. The end result is that the smaller players compensate for their losses by dropping quality standards. The primary milk producer and the consumer have to bear the brunt of this (see section 5.3.2 above).

The bigger distributors of fresh milk usually have facilities to manufacture milk powder, butter, cheese or long-life milk, which can be stored for extended periods. These manufacturers are in a position to "balance" the milk market by storing production in flush periods or usage during low production periods. The manufacturing and storing of milk powder and butter are the universal methods of balancing milk supply and demand, and these products are therefore the main products sold on the world market. In the EU, exports of these products are heavily subsidised. Government subsidies to EU farmers contribute 50% of their dairy income (Doyle 2000). In an uncontrolled trade environment, importers of these products may pay the import duty or avoid paying it by various measures and, moreover, the entry of these products into the local market unjustifiably erodes local demand for the products of domestic manufacturers who have invested in processing facilities This obviously does not encourage investments in these two very important dairy products. One consequence is that the number of milk powder facilities has decreased during the last few of years, from eleven to five.

The absence of a market support mechanism for the industry at large results in large variations in producer prices during periods of oversupply or when there are general shortages of milk. During May 1997 (peak reached in milk deficit) the average producer price reached 135,86 c/kg only to fall back to 107,89 c/kg in January 1999 (peak reached in surplus). At the time of writing of this report, the producer price was approximately 138,07 c/kg amidst a general shortage that had been experienced since March 1999.

#### 5.4.3 Price formation at retail level

About 65% of retail sales of milk and dairy products are channelled through hyper and supermarkets, superettes and specialised food stores (see Table 10). Three

major retail groups dominate the retail trade. Due to the immense bargaining power of these super-groups, individual dairy companies have limited power to establish wholesale prices of dairy products. Most have to be content with funding special discounts, in-store promotions, merchandising and extending periods of debtors' financing. The irony is that retail practices mean that cost cutting actions such as these, funded by the dairy industry, are not always reflected in reductions in consumer prices. This dilutes profit margins on dairy products for the dairy processors and ultimately results in low overall profitability in the dairy industry as a whole.

Table 10: RSA: Division of the formal trade according to the Nielsen Universe <<Author – this term or concept needs to be explained before it appears in a table. YK>>

Store Types	No. of Stores	% Outlets	Turnover (R Million)	% Value
Hyperstores	26	0.1	2 174	9.1
Supermarkets	765	2.3	10 115	42.4
Total Majors	791	2.4	12 289	51.5
Superettes	1 107	3.4	3 258	13.7
Sub Total	1 898	5.8	15 547	65.2
Urban Grocers	11 418	34.8	3 545	14.9
Rural Grocers	10 916	33.3	2 946	12.5
Café/Confectio	8 572	26.1	1 798	7.4
ners				
TOTAL	32 804	100.0	23 836	100.0

Source: Hermann 1996

Retail margins, which varied from 1% to 5% in the Dairy Board era, have increased to between 15% and 30%. It is significant that according to Bayley's (2000) calculations, the real consumer prices of milk, cheese and eggs, with 1975 = 100, rose above the datum line (=100) from 1992 and have remained there since.

The power of the large retailers is a universal issue. In Ireland the same dominance with the same negative effects on quality as described above has occurred: "Producing safe food and adhering to best practises are being made far more difficult, if not impossible, by the relentless downward pressure on food prices."

The retailer is the primary source of dairy products to the consumer and this puts it in a position of strength and accounts for the struggle in which both retailer and processor are engaged to secure custom, margins and authority. This echoes the general trend in the international food sector (Baas, Van Potten, Wazir & Zwanenberg 1998). The larger retailers dictate the delivery times, and

merchandising is at the cost of the processor. The relationship of the dairy processing companies with their retailers is, in fact, ambivalent. Where dairy companies attempt to win consumer loyalty by producing attractive and successful brands, retailers compete with "no-name brands" in order to obtain loyalty to their retail chains. On the other hand, retailers are obliged to cooperate with dairy companies in approaching the consumer, and they benefit from working with them on decisions regarding the product range composition, promotional activities and product development. If manufacturers' brands have a strong image and appeal to consumers, then these are still the way to win loyalty (Baas et al 1998).

The Committee is of the opinion that hyper and supermarkets, especially during times of seasonal oversupply, use the smaller processors, who do not have balancing opportunities, to exert pressure on the major dairy processors to reduce their prices to uneconomical levels. Practices such as this have a negative impact on the dairy market and do not contribute to its stability and growth. The reason is that the smaller dairies, in the absence of the necessary competent government officials, revert to bad quality practices.

The Committee recognises that an investigation into the trading practices of the retail trade is not part of its mandate, but it is of the opinion, based on submissions received and preliminary evidence, that the supermarket trade in milk and dairy products is very concentrated. Their margins on dairy products may well have increased to the detriment of the consumer and the dairy industry in general and their approach to pricing could be playing a role in quality deterioration.

#### 5.4.4 Export prices

Except for a small volume of branded dairy products exported to niche markets, baby food, condensed and ultra high temperature (UHT) milk, dairy exports are in the form of bulk commodity products like milk powder and butter and, to a lesser extent, cheddar cheese. Governments that grant subsidies, export refunds and export initiatives distort world market dairy prices. South African dairy exports thus have to compete internationally at subsidised world market price levels. In the absence of a support mechanism, they normally take place at a financial loss to the individual exporting company.

#### 5.4.5 Producer share of consumer rand

Producer prices have become more volatile as the local market has been increasingly exposed to competition from abroad (see Figure 4). The producer share of the consumer Rand also declined sharply from 1985 to 1988, but improved slightly between 1988 and 1989. Since 1989 it has again decreased to its present levels within the 45% to 50% range (see Figure 5). Under section 5.4.3 above, it was indicated that consumer prices remained under the datum line until 1992. Since then they have again moved above the line.

FIGURE 4: PRODUCER PRICES, 1995/1996 TO 1999/2000

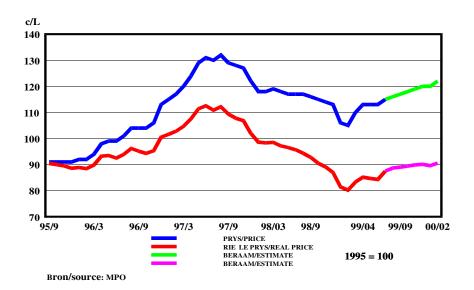
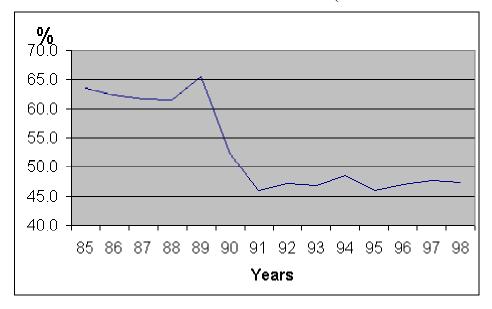


FIGURE 5: PRODUCER SHARE OF THE CONSUMER RAND (DAIRY PRODUCTS AND EGGS)



Source: NDA Abstract 1999

The Committee *noted* that a Board of Tariffs and Trade report referred to concentration in the food marketing chain that coincided with the existence of statutory control. It is also **noted** that since deregulation, stability in the dairy industry has decreased and retail margins have increased.

#### Recommendations

- That a study into the futures markets as a solution for unstable producer prices be undertaken.
- That sub-standard milk and other dairy products be prohibited.
- That processing facilities be registered and inspected by a competent authority.

### 5.5 Impact of deregulation on the collection and dissemination of data and industry information

#### 5.5.1 Data collection and dissemination

Prior to deregulation all processors of milk had to register with the Dairy Board and the submission of a monthly milk return was compulsory. The Dairy Board provided a comprehensive monthly statistical information service. Since its abolition, national dairy statistics have become fragmented, incomplete and not easily accessible.

An example of how international agreements can lead to data problems is the WTO and South Africa's reactions. In conjunction with WTO prescriptions, South African Customs and Excise simplified the sub-headings in the Customs and Excise Tariff Book. These simplifications had positive results in some instances but negative effects in others. An example of a negative effect was the scrapping of sub-headings 0406.90.25 – cheddar and 0406.90.35 – gouda which meant that no statistical information on the imports of cheddar and gouda would be available from then onwards. Statistics are extremely important to the industry in strategic planning and decision making. The BTT was requested to reinstate the previous sub-headings for cheddar, gouda and other cheese.

The industry and other partners in SAMFED have succeeded in preserving some continuity in data collection and dissemination. Data in the dairy industry is currently collected on a voluntary basis. Although the data now available on the dairy industry give a fair reflection of basic trends in the industry, further proliferation of data collection should be avoided and a concerted effort should be made to increase the representativeness of dairy data. The Committee is of the opinion that voluntary collection of information has a number of shortcomings and has resulted in inaccurate figures. The Committee welcomes the effort by the NDA to establish a National Agricultural Database and fully supports the efforts towards achieving this goal.

However, without statutory powers to collect production and price data, the industry finds it difficult to collect reliable data on milk production and producer

prices in total and per region. A statutory measure enabling the timely collection and dissemination of data might be an excellent way of improving the situation.

The Committee *noted* that the dairy industry lacks a statistical base, and agrees that a reliable, up-to-date and accessible database will improve the transparency of the agricultural and agro-industrial market, which will ultimately lead to greater stability.

The Committee is of the *opinion* that it must be virtually impossible for new producers and processors to enter a market that has an incomplete database.

#### **Recommendations**

The Committee recommends that the dairy industry apply for statutory measures in terms of the Marketing of Agricultural Products Act, 1996 to make it compulsory for role-players to register and to furnish records and returns.

#### 5.6 Level of participation of the emerging sector, barriers and solutions

#### 5.6.1 Barriers confronting the emerging sector

The low profitability of milk production is the major barrier to entry for emerging farmers. Access to credit facilities and financial packages specially structured to their needs also plays a role. The volatility of the market and the effect of imports in depressing producer prices make it difficult for emerging farmers to enter the industry.

Table 11 is an abstract from the minutes of a workshop on small-scale dairy farming and offers scant information (National Department of Agriculture 1997). The number of small-scale dairy farmers is unknown. Small-scale and commercial black dairy farmers are located around and in towns as well as in normal farming areas.

Rapid urbanisation in South Africa has brought a new dimension of agricultural activity to the fore, namely an increase in peri-urban agriculture, where people engage in activities such as the keeping of livestock (cattle, pigs, sheep, goats and fowls) in and around cities and towns. Although only two provinces (Table 11) have mentioned urban farming, casual observation indicates that peri-urban livestock production activities are widespread and definitely not of a passing nature. Surveys conducted in the Free State to gain more insight into the extent of peri-urban animal agricultural activities (De Waal 1996, 1998) seem to confirm this. De Waal (1998) surveyed 72 of the 80 urban communities in the Free State Province (Table 12). Livestock were present in almost all towns and cities included in the survey. The peri-urban livestock owners were mostly elderly people, men and to lesser extent women, in the age group of 50 to 55 years and older. Many were not economically active any more. According to de Waal, these people could be classified as pensioners, although not always in the strict sense of

the word, since many of them derived some casual income from next of kin, mostly children, or from casual labour exchange. Age was an important factor among these people and had an important influence on their ability and inclination to get involved in development or active farming. Very few younger people were involved with livestock, with the possible exception of some young school going children and then mostly only in a fetch-and-carry capacity (De Waal 1998). To what extent De Waal's findings can be extrapolated nationally is difficult to say.

Table 11: Summary of information on emerging black dairy farmers

Province	Dairy cattle numbers	Number of farmers	Ownership	Purpose with cattle	Government Projects	Problems	Urban farming
KwaZulu-Natal	1,6 million cattle 50% female cattle>	350 - 400 thousand families	Not specified	Not specified	Community projects involving milk production and dairy systems A cross-breeding project	Lack of suitable grazing Kraaling Need for supplemental feeding Lack of marketing infrastructure High cost of remedies Additional workers needed for intensive farming	Not mentioned
Gauteng	Not available	Unknown	Not specified	Not specified	Settlement schemes	Not specified	Not mentioned
Northern Province	Not available	Unknown	Not specified	Not specified	Has established dairy schemes with varying success; most at a loss	Unfavourable vegetation and climatic conditions	Not mentioned
Mpumalanga	Number unknown. 63% of owners, own 1-10 head. 0,4% own more than 100 head	Unknown	Not specified	Less than 10% for commercial use; most kept for self-provision	Provision of tested bulls  Training of prospective farmers A farm made available for township farmers	Milk bought in is unhygienic Chronic milk shortage Communal grazing systems No additional feeding No disease control Limited grazing Inbreeding Lack of finance	Many cattle
Free State	16 000 mainly multi-purpose	3 500	Private and communal	Own consumption and vending-	Integrated livestock mana- gement project for 19 peri- urban areas	Communal grazing systems No additional feeding No disease control Limited grazing	Widespread
Western Cape	Unknown	60-80 small-scale dairy farmers	Individual	Unknown	Integrated livestock management projects	Danieu gruzing	Not mentioned
North West	Approximately 300	More than 5  1 co-op with 24 members	Individual and cooperative	Local consumption Local hospital A pre-school A dairy	A pilot milk production project Extension service	Supplementary feeding	Not mentioned

Many peri-urban livestock owners, owning from one to six head of cattle and a few sheep, goats or pigs, have no real desire to enter the formal farming sector. Based on the predominant livestock type only (Table 12), it has been calculated that an effective stocking rate of about 1,2 ha/head of cattle is applied on town commonages, instead of an average of at least 6 ha per head of cattle (De Waal 1998 According to De Waal, although this gives some indication of the gravity of

the situation, it does not fully reflect the worst of the actual scenarios in some communities. This congestion of animals leads to the utilisation of overgrazed and polluted land (commonages), resulting in the destruction of the natural resource base. At the same time, however, these people do need food and basic facilities for their animals (De Waal 1998).

Table 12: The peri-urban livestock situation in the Free State province during January and February 1997

Category	Number of Towns <sup>1</sup> Average per Category (Total)		Range per Category	
Livestock owners	72	49 (3 522)	3 – 200	
Pasture (veld) ha	58	337 (19 573)	15 - 4000	
Cattle	72	220 (15 833)	10 - 2500	
Sheep	34	60 (2 027)	5 – 540	
Goats	27	40 (1 079)	3 – 168	
Pigs	40	62 (2 437)	5 – 750	
Horses / donkeys	48	18 (880)	1 - 200	

<sup>1</sup> The total number of urban towns in the Free State is 80.

Source: De Waal 1998

The low milk production/km² in the interior of the country is the Achilles heel of both the primary and secondary dairy industries. A reason is the increasing transaction cost per litre milk collected from small, widely-dispersed producers. In its policy document, the Ministry for Agriculture and Land Affairs correctly identified transaction costs as one of the impediments to market access and pinpointed the reasons for this phenomenon. It cites, amongst others, low volumes, poor infrastructure, poor quality and distance to the closest processor (Ministry for Agriculture and Land Affairs 1998:16 To this list one should add that the transaction cost per kilometre travelled is increasing due to worsening conditions of the road infrastructure, the rising cost of specialised transport equipment and the cost consequences of certain Acts of Parliament.

The dairy industry has expressed the hope that roads will be included in the rural infrastructure targeted as eligible for government funding (Ministry for Agriculture and Land Affairs 1998:16).

Increasing transaction costs have implications for black farmers who wish to start milk production, but have a low milk flow. Almost all of the large buyers have initiated projects to accommodate these farmers, most of which worked reasonably well for a short period. However, many failed because the participants did not adhere to the rules (comments from DairyBelle and Clover). An investigation should be done to find out the reasons for the successes and failures of these projects.

New dairy farm entrants tend to lack resources, market access and practical, hands-on proficiencies to ensure safe, good quality milk, animal health, etc.

With this knowledge as a background, dairy companies, commercial farmers, small-scale farmers and milk processors, in collaboration with interested provincial Departments of Agriculture, could develop a more sustainable small-scale dairy development initiative for the production and marketing of safe, good quality dairy products in an economically viable manner. Sustainable milk production has to do not only with the volume of milk flow, but also its quality and safety. Quality requirements relate primarily to the content of the milk itself. The fat and protein content, and the standard of hygiene of the milk used are essential to the successful manufacture and marketing of dairy products (Baas et al 1998)

#### 5.6.2 Measures to improve the situation of the emerging sector

The emerging sector's level of participation in the dairy industry could increase by means of a model such as the following: Develop small-scale dairy farming based on pasture utilisation and seasonal production, and store the milk, under the auspices of small dairy co-operatives, under controlled conditions in strategically placed bulk tanks, to be collected by big companies and/or cooperatives.

Similar models have been put into operation by the large processors, but a lack of discipline from the farmers' side led to the abortion of the projects.

Many of the problems cited by the participants in a workshop (see Table 11) can be directly attributed to the need for an effective extension service.

Management plays an important role in the financial success of a dairy farm. Formal and informal training is essential for anyone wishing to be a successful dairy manager. Although the present picture of formal dairy training is not complete, training opportunities do exist. These include the following:

- Agricultural colleges, technikons and universities with faculties of agriculture offer different courses on milk production, milk processing and dairy herd management.
- The ARC, in conjunction with the Department of Agriculture, runs an entrepreneurial course for micro enterprises.
- Many suppliers of milking equipment and milk buyers have agricultural extension officers who assist dairy farmers with both technical and economic matters.
- The MPO has developed a manual for emerging dairy farmers.
- The University of the Free State's Department of Livestock Production assists small-scale farmers near Tweespruit to improve their dairy knowledge and skills.

• In Qwa-Qwa, commercial dairy farmers and a processing company have taken a struggling dairy cooperative consisting of small, emerging dairy farmers, under their wing.

An analysis by SAMFED found that there is no career path in dairy practices and management from worker to management level and that this needs to be developed. The decentralisation of such training courses will be beneficial to the learner and the farm owner. An obvious advantage of career paths linked to formal training is that the productivity of the workforce will increase dramatically. Possible career opportunities for dairy farm assistants are: milker, cow feeder, cow handler/stockman, calf rearing specialist and dairy herd manager (Erasmus 1999).

The Committee is of the *opinion* that a competent extension and quality inspection service will be conducive to establishing and fostering an emerging dairy sector, integrated into the mainstream of this sector.

The Committee took *note* of the document developed by SAMFED, namely the "Dairy Development Initiative", and the set of strategies spelled out; and that the NDA and SAMFED are to collaborate on it. The Committee encourages this initiative.

#### **Recommendations**

- That a model be developed for small-scale dairy farming based on pasture utilisation and seasonal production. Under the auspices of small dairy coperatives, milk stored in strategically placed bulk tanks can be collected by dairy companies and cooperatives.
- That extension services in the dairy industry should concentrate on the establishment of a corps of proficient upcoming farmers, paying special attention to practical matters such as share milking, equity investment in <**Author is this addition correct? YK>>**farms/cattle, etc.
- That measures be put in place to increase the effectiveness of existing quality inspection services.
- That the Steering Committee for Market Access that was approved by the Minister of Agriculture in January 2001 (NAMC Committee), should look specifically into aspects to increase market access for the emerging sector in the dairy industry.
- That roads should be included in the rural infrastructure targeted as eligible for government funding.

### 5.7 The effects of deregulation on consumer education, market development and product availability

#### 5.7.1 Background

Between 1983/84 and 1995/96, South Africa's per capita consumption of milk declined by 39%. This represents a negative growth rate of 3,6% per year. This decline took place notwithstanding that the real producer price of fresh milk in 1993 was on average only 66% of the 1970 price (Institute for Future Research 1996; Nieuwoudt 1998). Given a partial price elasticity of demand for fresh milk in the retail sector of -0.78 (Nieuwoudt 1998), statistically a decrease of 5% in the retail fresh milk price should increase the demand of fresh milk by (0.78)x(5)=3.9%. Alternatively, over the period 1960 to 1993, demand should have increased by (0.78)x(34)=26.5%. This indicates that it is not the price of milk that is responsible for the decline in per capita consumption and that other factors more dominant than price must be influencing demand.

The consumption of concentrated dairy products has also declined since 1989 (Figure 6). The per capita consumption of total dairy products (expressed in milk equivalent) has a long-term declining tendency. Although one has to acknowledge that since 1992/93 there has been an upward trend, which lost momentum from 1996/97, a word of caution is necessary. In the early nineties the Central Statistical Services had problems with the population census since it was not clear whether or not some of the old "Homelands" inhabitants had been counted. It is thus highly probable that the population numbers during this period were underestimated and that this accounts for the rise depicted in Figure 7.

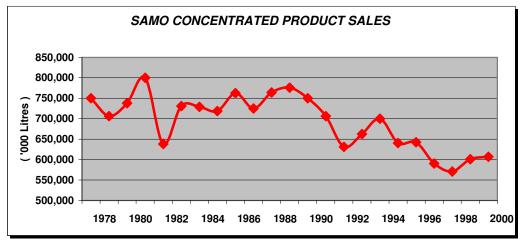
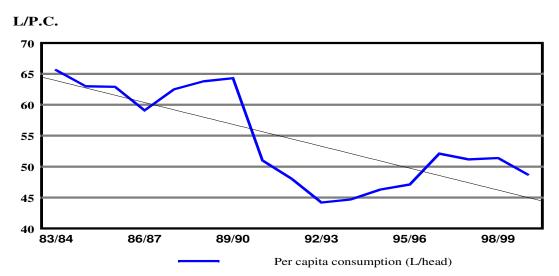


FIGURE 6: DAIRY CONCENTRATED PRODUCTS SALES 1978-2000

International opinion has it that promoting the basic health attributes of dairy products, be it brand promotion or consumer education, will improve their consumption.

The educational programmes, conducted by the former Dairy Board proved successful. Following the demise of the Board in 1993, a national consumer education programme for the dairy industry has ceased to exist. Currently, awareness of the nutritional benefits of milk and dairy products is at a very low level. Tradition has it that farmers take responsibility for educational promotion and processors for brand advertising (see, e.g., Doyle 2000: 29).

FIGURE 7: PER CAPITA CONSUMPTION OF DAIRY PRODUCTS
1983/84 TO 1999/2000



Source: MPO

The decline in total consumption echoes the decline in per capita consumption (see Figure 7). A number of factors, including the cessation of the educational campaign, have contributed to a sharp decline in per capita consumption of dairy products.

In its Dairy Development Initiative, the industry targeted consumer education as being of strategic importance in stimulating the consumption of milk and dairy products in the local market. Efforts are being made to institute a generic consumer education programme funded by dairy farmers. It appears that the majority of farmer members are in favour of such a programme and are willing to voluntarily contribute towards funding generic consumer education.

#### 5.7.2 Promotion (generic versus brand promotion)

Promotion is directed at existing and potential consumers with the objective of increasing sales. Brand marketing is undertaken by an individual firm with the aim of growing the market for its brand, i.e. to increase its market share by diverting existing consumption from competing brands and by stimulating

additional consumption. In contrast, generic marketing is undertaken by an industry or group in a cooperative effort to promote benefits that relate to the whole sector or category rather than to specific brands.

Most of the studies substantiate the claim that generic promotion increases sales. It should be noted that these studies have been case specific. For example, a study by Blisard et al (1999) modelled the effects of generic advertising on fluid milk and cheese sales in the US from 1984 to 1997. The results of the simulation indicated that gains in sales are fairly constant from year to year and fluctuate with changes in aggregate spending on generic dairy advertising.

The simulation also indicated that generic advertising boosted the demand for fluid milk and cheese, although the demand for butter and frozen products remained relatively flat. The advertising programmes also caused higher farmlevel milk prices.

As this suggests, theoretically sound empirical research is required to determine the impact of each generic promotion campaign. It is not possible to generalise about the benefits of generic promotion. The arguments for and against generic promotion should therefore be case specific.

#### 5.7.3 Consumer education

Although the results are difficult to measure, it is accepted worldwide that consumer education contributes towards increasing or at least maintaining the level of consumption of milk and dairy products

Consumer expectations and needs are changing on an ongoing basis. The idea is to broaden the market for dairy products nationally by, *inter alia*, capitalising on these changes. Urbanisation, stagnant and decreasing incomes, increased employment of women, more households with parents in permanent occupations or one-parent households, and a shift in spending power towards urban blacks, have all changed the decision makers in and the content of the food demand structure. At present dairy products are mainly consumed by the upper percentiles of average income households and higher income groups. Given the present rivalry amongst competitors in the food market, it would be beneficial to increase market share by capitalising on the well-known health and other differentiation attributes (such as convenience) of dairy products.

The dairy basket must be made more diverse and should include other dimensions in addition to the traditional strength of wholesomeness. To further this, collective industry actions are called for to combat the position of substitute products. Pivotal actions in this regard are to provide public information, raise awareness and conduct an educational campaign. In the first instance, the new generation of consumers must be comprehensively informed of the health and convenience attributes of milk and its derivative products. In the second instance, information concerning dairy products' contribution to a healthy nation must be approached systematically and collectively.

It is imperative for the dairy industry to launch an effective communication awareness programme to make consumers aware of what to expect and gain from a product in terms of quality and safety.

The industry reported to the Committee that SAMFED, at its annual general meeting, agreed to continue to fund consumer education on a voluntary basis. Alternatively, a statutory levy in terms of the Marketing of Agricultural Products Act could be an option, provided that sufficient support is obtained from the industry role-players for the promulgation of such a statutory levy.

#### 5.7.4 Market development and product availability

The South African consumer market is well developed and a comprehensive range of milk and dairy products in a variety of pack sizes is freely available (see Table 13).

Table 13: RSA – the market for dairy products, 1996

Product	Unit	Production	Estimated Consumption	Imports	Exports
Pasteurised Liquid Milk	Mil Litre	860	860	-	-
Ultra Pasteurised Milk (UHT)	Mil Litre	225	225	3,466	7,112
Yoghurt, Maas, Buttermilk	Mil Litre	125	125	0,068	0,750
Cheese – all types	Tons	60 000	65 000	3 783	1 258
Milk Powders	Tons	20 110	27 837	4 810	11 162
Condensed Milk	Tons	18 100	17 400	263	3 922
Butter	Tons	8 100	11 410	5 757	1 571
Whey and Buttermilk powder	Tons	n.a.	n.a.	7 449	1 343

Source: SA Dairy Foundation, RSA - market; Customs & Excise: Imports and Exports

In broad terms the dairy market is differentiated between drinking and concentrated products. The first three rows in Table 13 – including blends and cream – represent the drinking products. The rest is concentrated (also referred to as balancing products). (See section 5.2.1 for an explanation of the concept of balancing products.) In terms of both volume and value, the drinking market is the larger of the two.

The major share of dairy products (65%) is distributed through retail chains (see Table 10). Trade by the informal trading sector, with its thousands of small spaza shops, is difficult to quantify. Available data (Eskom 1998) suggest that of South Africa's 8,6 million households, 2,4 million support shops the size of spaza shops and smaller for occasional shopping and 410 000 households use them for their main grocery shopping. Experts in the dairy industry maintain that dairy products are distributed widely in urban and rural areas where some form of retail trade is present.

Note that the discussion of the effect of deregulation on hygiene standards and inspection services in the dairy industry under heading 5.3 is applicable here. Observations in some townships are that unscrupulous milk distributors could be guilty of selling milk from unhygienic sources. In this regard, see also the findings under section 5.3.3.

The average total market growth in dairy products is 1% to 2% annually (SAMFED WG: Product quality, environmental management and packaging) and is in line with the world trend and the trend in countries comparable to South Africa. It must be noted that because the database on milk production, consumption, distribution channels, etc is not as extensive as it should be, it might be that the growth of fresh milk consumption in the townships and milk sold from "in house" bulk tanks, in particular, is underestimated.

The ordinary textbook factors that influence demand, namely population growth, population dynamics (e.g. demographic factors, racial mix and urbanisation), income levels, per capita income, relative price levels, technology, etc. are also dominant factors to take into account when analysing the dairy market (Marx & van der Walt 1989). (See section 5.7.1.)

Changes in income and urbanisation have a profound influence on consumption patterns. For example, fast food outlets are increasing in number and turnover as urbanisation and income increase (Baas et al 1998). An extensive discussion can be found in SAMFED (2000), pages 28 to 32.

#### The Committee took *note* of:

- The declining per capita consumption of dairy products and realises that the deregulation process deprived the industry of funds and structures that cultivated knowledge of the health attributes of dairy products.
- The decision of the primary producers (MPO) to voluntarily fund consumer education on health and other attributes of milk and milk products.
- The fact that dairy products are well distributed in urban and rural areas, but that concern is again expressed about the lack of the necessary quality and health inspection services and the inadequacies of the dairy database.

Signed on this day				
MR WINSTON MVABAZA (Convenor)	DR MARTHINUS HERMANN			
MR BERTUS DE JONGH	PROF CHRIS BLIGNAUT			
MR JAFTA KOLA	MRS DINAH MAVUSO			
MR FRIK GROBLER	MR SCHALK BURGER			
MR DONALD MOKOENA( Compiler)				

#### **ABBREVIATIONS**

Agricultural Marketing Policy Evaluation Committee	<b>AMPEC</b>
Australian Dairy Industry Council	ADIC
Agricultural Research Council	ARC
Board of Tariffs and Trade	BTT
Botswana, Lesotho, Namibia, Swaziland	BLNS
	CO
<b>Current Access Commitments</b>	CAC
Department of Trade and Industry	DTI
Domestic Market Support	<b>DMS</b>
European Union	$\mathbf{EU}$
General Agreement on Tariff and Trade	<b>GATT</b>
<b>International Dairy Federation</b>	IDC
Land and Agricultural Policy Centre	LAPC
Minimum Market Access	MMA
Milk Producer's Organisation	MPO
National Agricultural Marketing Council	<b>NAMC</b>
National Department of Agriculture	NDA
National Milk Distributors Association	<b>NMDA</b>
Organisation for Economic Development	<b>OECD</b>
Producer Subsidy Equivalent	<b>PSE</b>
Producer Distributors	PD
South African Custom Union	SACU
South African Milk Federation	<b>SAMFED</b>
South African Milk Distributors	<b>SAMD</b>
South African Milk Organisation	<b>SAMO</b>
Tuberculosis	TB
	UHT
World Trade Organisation	WTO

#### Annexure 1: SACU imports of dairy products 1991 - 1999

	Products according to HS4 classification						
	1	2	3	4	5	6	
Year							
	kg						
1991	142,574	931,014	156,027	0	1,390,969	7,786,199	
1992	356,584	8,635,233	352,951	532,245	532,245	961,160	
1993	1,439,549	5,641,503	251,931	532,245	532,245	1,250,007	
1994	4,041,093	3,256,211	612,668	4,450,779	817,135	1,628,599	
1995	3,115,012	4,162,031	1,962,732	5,102,003	4,429,480	3,423,560	
1996	3,565,716	8,069,929	1,924,272	7,695,737	5,756,891	3,876,605	
1997	1,272,276	13,725,608	2,914,584	7,695,737	8,966,945	5,252,886	
1998	106,429	6,044,142	1,919,177	3,899,026	1,629,115	3,168,355	
1999	146,206	8,152,731	2,428,764	3,363,492	806,966	2,986,635	

- 1. Milk and cream, not concentrated nor containing added sugar or other sweetening matter.
- 2. Milk and cream, concentrated or containing added sugar or other sweetening matter.
- 3. Buttermilk, curdled milk and cream, yoghurt, kephir and other fermented or acidified milk and cream.
- 4. Whey, whether or not concentrated or containing added sugar or other sweetening matter.
- 5. Butter and other fats and oils derived from milk, dairy spreads.
- 6.Cheese and curd.

#### **REFERENCES**

- Agricultural Marketing Policy Evaluation Committee. 1994. A framework for a future agricultural marketing policy for the RSA and the implementation thereof. Report 1 Framework and guidelines. Agricultural Marketing Policy Evaluation Committee, Pretoria.
- Agricultural Marketing Policy Evaluation Committee. 1994. A framework for a future agricultural marketing policy for the RSA and the implementation thereof. Report 2 Marketing measures and adjustments Agricultural Marketing Policy Evaluation Committee, Pretoria.
- Baas, H.J.A., Van Potten, A.J., Wazir, M.R.I.A. & Zwanenberg, A.C.M. 1998. *The world dairy market*. Utrecht: Rabobank International.
- Bayley, B. 2000. A revolution in the market the deregulation of South African agriculture. Oxford Policy Management, Oxford. January.
- Commission of Enquiry into the Marketing Act. (1976). Report of the Commission of Enquiry into the Marketing Act, (Act No.59 of 1968). Pretoria: Department of Agriculture.
- Commission of Enquiry into the Marketing Act. (1992). Report of the Commission of Enquiry into the Marketing Act. Pretoria: Department of Agriculture.
- De Waal, H.O. 1996. Community kraals the development of zero-grazing systems of integrated agricultural enterprises in the peri-urban agriculture of South Africa. Proc. 2nd All Africa Conference on Animal Agriculture, University of Pretoria, 1-4 July.
- De Waal, H.O. 1998. Community kraals implementing elements of "cut-and-carry" feeding systems or zero grazing in a peri-urban community. Eighth World Conference on Animal Production, Seoul University, Seoul, 28 June –4 July.
- Doyle, R. 2000. Vrijhandel is mooi als regels voor iedereen gelijk zijn. Zuivel Zicht, Jaargang 92:28,29. December.
- Eskom. 1998. Consumer survey in urban and rural areas. Pretoria.
- Hermann, M. 1996. The dairy industry in Southern Africa and specifically South Africa. Annual Conference IDF, Durban.
- Institute for Future Research. 1996. Agrifutura 95/96. Stellenbosch: Universiteit van Stellenbosch.
- International Dairy Federation. 2000. World dairy situation. Bulletin 355/2000. Brussels.

International Trade Centre. 1996. Business guide to the Uruguay Round. Geneva: UNCTAD/WTO.

Kirsten, J.F., Tregurtha, N., Gouse, M. & Tswai, J. 2000. Producer Support Estimate (PSE) for South African Agriculture for 1996,1997,1998. *Agrekon* 39(4):708-717.

Marx, S. & Van der Walt, A. (Red). 1989. Bemarkingsbestuur. Johannesburg: Juta...

Milk Board Business Plan. 13 October 1997.

National Department of Agriculture. 1997. Minutes of an inter-provincial workshop on small-scale dairy farming. Pretoria.

Nieuwoudt, W.L. 1998. The demand for livestock products in South Africa for 2000, 2010 and 2020: Part I. *Agrekon*, 37(2): 130-142.

Parlon T. 2001. Supermarkets under fire. Dairy Markets Weekly, January 17.

SAMFED. 2000. Dairy development initiative. Pretoria.

SAMO. 2001. Database. Pretoria.

Statistics South Africa and the National Department of Agriculture. (2000). Employment trends in agriculture in South Africa. Pretoria.