International Journal of Agriculture Innovations and Research
Volume 2, Issue 3, ISSN (Online) 2319-1473

# Growth and Performance of the Ugandan Dairy Sector: Elites, Conflict, and Bargaining

**Thomas Mwebaze**
Makerere University, School of Economics

**Anne Mette Kjaer**
Associate Professor, Department of Political Science, Aarhus University

*Abstract* – **The dairy sector is one of the only agricultural sectors in Uganda that has enjoyed sustained high growth since the late 1980s. Milk and the cold dairy chain developed especially in the South-Western part of the country. Some farmers have since adopted improved breeds and better livestock management. However, the biggest percentage of the milk is sold unprocessed. This paper explains why this sector has experienced significant growth in the last decade. We argue that the dairy sector has relatively been successful in the South-Western region due to the involvement of the ruling elites who wanted to build a support base in their home area. In addition, the elites had special interest in dairy farming, since key elite members owned dairy cattle themselves hence have played key role in promoting the dairy sector. Liberalisation enhanced the competitiveness of the dairy sector business, which has since attracted a big number of middlemen including processors, leading to a significant increase in milk production. As milk production grew, there was need to regulate the sector. Regulation has been relatively successful and an agency called the Dairy Development Authority (DDA) established to promote efficiency in marketing of milk. With the existence of DDA, to a considerable extent there has been an improved organization of dairy farmers and traders and also the quality and safety of milk enhanced amidst conflicts.**

*Keywords* – **Dairy, Liberalisation, Marketing, Milk, Regulation.**

## II. INTRODUCTION

Uganda's dairy sector has been bucking a trend in the agricultural sector in which production has been growing very slowly since the late 1990s and was less than one percent in 2010/11. However, milk production has grown quite rapidly at about 7 percent annually, and the number of livestock has also grown. Whereas in the early 1990s Uganda was dependent upon imported milk powder, it is now largely self-sufficient in fresh milk. Though still rudimentary, technology in the dairy sector has been upgraded and milk quality has improved. There has also been an increase in the volume of pasteurized milk. The former state-owned dairy corporation has been privatized, and it buys milk, mainly from the South-Western cooperatives, which it then processes. There are a rising number of small-scale pasteurizers offering competition to the big privatized unit, called SALL (Sameer Agriculture and Livestock Ltd). Milk production has increased most markedly in Uganda's South-Western region.

This paper explores why and how the ruling elite have supported the dairy sector in Uganda. Its main purpose is to analyze and explain Policies, Implementation Arrangements and Results (PIRs) in the sector. It argues first that milk production in Uganda grew because of a mixture of targeted government initiatives towards south-western dairy production and a general liberalization of the sector that allowed milk to be traded. Secondly, the paper argues that initial pressure to privatize the state-owned Dairy Corporation (DC) came from donors. The reason why its implementation took over ten years was that there was pressure from the south-western dairy farmers, who are well-organized, to buy it. However, the government wanted the factory to be sold to a private investor for investment and technology purposes as well as probably for the more hidden purpose of providing funding for the ruling coalition. Thirdly, we argue that the sector has been regulated and upgraded technologically because of the establishment of a relatively successful regulatory agency, the Dairy Development Authority (DDA), whose director has been able to negotiate with well-organized stakeholders among farmers and particularly dairy traders. The DDA has had some autonomy to do this, but there has been pressure from ruling elites to regulate the sector, because regulation would reduce the sale of unprocessed milk and hence would benefit the processing industry and SALL in particular. In other words, the ruling elite have had an interest in supporting this particular factory, a preference that coincided with the interests of the factory-owners.

The paper starts with a brief overview of the dairy sector and how it is organized. We then sketch the analytical framework and its point of departure in the importance of the ruling coalition in explaining productive sector initiatives. We then give a summary of the ruling coalition and how it is related to the dairy sector. We analyze the liberalization and in particular the privatization initiatives and how they were implemented. The privatization of the Dairy Corporation was dragged out for more than a decade due to the many complex interests at stake in the sector. We then go on to examine how a coalition of dairy farmers and traders succeeded in organizing and bargaining with the regulatory agency, achieving a gradual upgrading of the milk marketing chain.

## II. DATA SOURCE

This paper is built on several sources of information. The most important of which are about fifty key informants, such as key officials in relevant ministries and local government, key advisors, consultants and donor representatives, central and local politicians, and industry actors. Many of these were interviewed twice or three times.

International Journal of Agriculture Innovations and Research
Volume 2, Issue 3, ISSN (Online) 2319-1473

In addition, parliamentary and media debates in key English-language papers since the late 1980s were reviewed, and key policy documents carefully read.

## III. Overview of Uganda's Dairy Sector

In the early 1990s, after civil war and economic collapse, there was a renewed increase in agricultural production in Uganda. Between 1990 and 1999, the agriculture sector grew at 3.9 percent per annum (World Bank, 2007). However, most of this growth was a consequence of one-off gains resulting from the peace dividend. Most observers argue that further agricultural growth will require more focused interventions (Piron and Norton, 2004; Selassie, 2007). For example, some of the increases in production over the mid-1990s are explained by expansions of the size of the areas of cultivation, and this clearly cannot continue, as further expansion is limited by the prevailing unequal and insecure access to land (World Bank, 2007; AfDB, 2005). It seems that the peace dividend has worn off somewhat with regard to agricultural growth. There are no accurate data on agricultural production, but according to the Uganda Bureau of Statistics, real growth in agricultural output has been declining, from 7.9 percent in 2000/01 to 0.7 percent in 2007/08 (UBOS, 2008) and 0.9 percent in 2010/11 (Background to the Budget). Population growth is estimated to be 3.2 percent, which basically means that every year there are a million more mouths to feed.

In contrast, there has been no stagnation in the dairy sector, which has been growing at an average of 7 percent annually since the early 1990s.[1] Milk production is estimated to have more than tripled over the last two decades (DDA, 2009, Banadda, 2010) to make Uganda largely self-sufficient in fresh milk.

At least 80 percent of the milk is traded in the informal sector. The numbers in Figure 1 cover the total estimated production, both formal and informal. At a micro-level, there has been an increase in the average milk yields per cow, mainly because some dairy farmers have invested in improved breeds and also adopted better livestock management approaches. The main source of increased milk production is a mix of higher yields per cow and an increased number of cows (FAO, 2010).[2] Milk consumption in Uganda has more than doubled from an estimated 20 to about 44 litres per person per year.

Though the exact number of livestock in Uganda is not known, data from the latest national livestock census (2008), as indicated in Figure 2, show that the number of cattle in Uganda had grown to over 7 million in 2008, from estimates of less than 5 million in 1980. The number of high-yielding exotic breeds has also grown, although the indigenous and lower yielding types still make up more than 90 percent of the national herd.

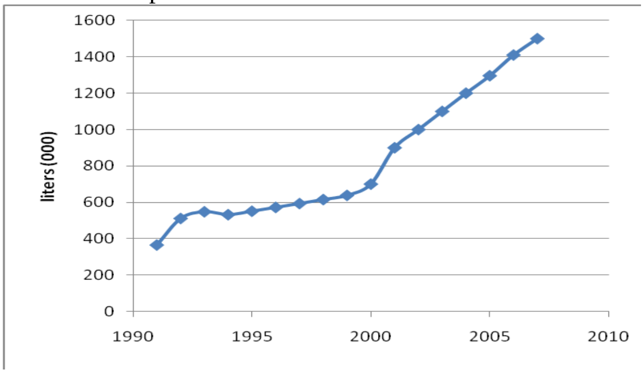



Fig.1. Milk Production in Uganda, 1991-2008
*Source: DDA, 2009*

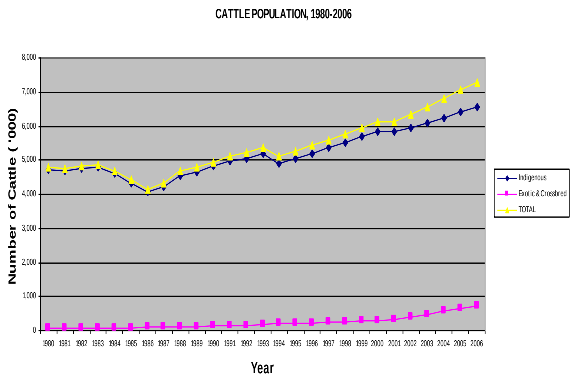



Fig.2
*Source: DDA (2009), drawn from Uganda Bureau of Statistics, 2008.*

Milk production is gradually spreading from the south-western and central areas to the rest of the country.

Table 1: Regional Distribution of Milk Production in Uganda

| Region | Milk production (%), 2006 | Milk production (%), 2009 |
|---|---|---|
| South-western | 36 | 25 |
| Central | 34 | 24 |
| Midwestern | 15 | 12 |
| Northern (including Karamoja) | 8 | 18 |
| Eastern | 7 | 21 |

Source: DDA (2006 and 2009).

Table 1 shows that the south-western and central regions provide a smaller proportion of Uganda's total milk production than was the case in 2006. However, even though milk production is increasing in the rest of the country as well, the south-west still has by far the largest share of the milk that is marketed. On the basis of the UBOS 2008 livestock census, Banadda (2010) estimates that the western region still is the main source of marketable milk (Banadda, 2010: 10). Interviews with production and veterinary officers in Jinja town (further to the east) confirm this observation, generally arguing that

[1] There are varying figures, and the data are disputed. The DDA data are considered by some to overestimate the degree to which milk production has increased. DDA estimates production at current to be 1.5 billion litres annually, with 300 million in 1990. Other experts say a realistic estimate would be 1.2 billion litres (Banadda, 2010). In any case, there is no doubt that production has indeed at least tripled over the last twenty years.

[2] The sudden increase in 2000 is not due to a sudden increase in production but rather reflects the fact that registration of the produced milk improved, according to the DDA director (personal communication, August 2010).

International Journal of Agriculture Innovations and Research
Volume 2, Issue 3, ISSN (Online) 2319-1473

there is a lack of cold chain infrastructure (interviews carried out in May, 2011).

As indicated in Table 2, the coolers are concentrated in the south-western region, which has over 70 percent of operational coolers. In this region, 61 coolers belonged to the former DC and were passed over to SALL (see also Frimand Jensen, 2011). The rest are coolers owned by private individuals, smaller processors and traders. In the east there are only 19 coolers, and as can be seen in the table, many of them are not operational.

The market is dominated by one big processing company, Sameer Agriculture and Livestock Ltd (SALL). SALL collects more than 80 percent of its raw milk from the south-western milk shed. The remaining 20 percent comes from the central region. There is still a milk deficit in the northern and north-eastern regions. In the Gulu area milk is still imported from Kenya (Henriksen and Lang, 2010), although milk production is slowly increasing there as well (Minutes, Dairy Stakeholder Platform meeting).

Table 2: Regional Distribution of Milk Coolers by Number and Capacity

| Region | Number | Capacity (litres) | Operating (litres) | Non-operational (litres) |
|---|---|---|---|---|
| Central | 30 | 62,050 | 57,050 | 5,000 |
| Eastern | 19 | 37,900 | 7,500 | 30,400 |
| Mid-West | 4 | 4,800 | 4,800 | 0 |
| South-West | 131 | 316,600 | 316,000 | 0 |
| | 184 | 421,350 | 385,950 | 35,400 |

*Source: DDA. Mid-West includes Masindi, Kiboga, Kyenjojo, Fort Portal, South West, Greater Mbarara*

Of all the milk produced in Uganda, an estimated 30 percent is consumed on farm and never traded. Of the remaining 70 percent, about 80 percent is not processed but sold through various channels. This is the so-called 'informal' sector. This raw milk is picked up from farmers by vendors, often on bicycles, who take it to collection centres that have coolers. From here, it is either sold directly or transported, increasingly in insulated cooling tankers, to Kampala (where demand is high) and sold from fresh milk outlets. Some of this milk is pasteurized in batch pasteurizers fuelled by firewood (Henriksen and Lang, 2010; Banadda, 2010, Dobson and Combs, 2005).
Uganda used to depend on milk powder imports for drinkable milk, but it is now largely self-sufficient in fresh milk (FAO, 2010). The DDA estimates that since 2001 the value of dairy imports to Uganda has declined considerably, from about 55 billion Ugandan shillings (USD 25 million) in 2001 to only about 4 billion shillings (USD 2 million) in 2008 (DDA, 2009). Other estimates say imports have grown somewhat (Banadda, 2010). The main imports are of milk powder and UHT milk from Kenya. The regional market for milk is regarded to be positive for Uganda, as it has a comparative advantage in milk for climatic reasons. Uganda is already exporting milk products to Rwanda, South Sudan and Congo. SALL has started exporting milk powder to North Africa, India and the Middle East (interview, SALL, director, 2010; also Banadda, 2010).

The market for processed milk is dominated by one big player, the formerly state-owned processing factory, SALL. This hinders competition and affects the milk price. In comparison with other countries, Ugandan dairy farmers are paid very little for the milk they sell. The share of the farmers' price of the consumers' price in Uganda is estimated at 23 percent, which is quite low. In Bangladesh, for example, the farmers' share is 61 percent and in China 41 percent (FAO, 2010). As one consultant said, 'Basically, the farmers are screwed' (personal communication, August, 2010).

However, the dominance of SALL may be slowly diminishing as competitors to it are gradually emerging. One dairy company, Jesa, is a very successful dairy company producing high-quality pasteurized milk that is always in demand. Jesa's milk is regarded as being of better quality than SALL's milk, probably because the Jesa farm has its own outgrower scheme, which makes it possible to control the milk at every level of the value chain.[3] Other dairy processing companies are also establishing themselves in Uganda (interview, Maggie Kigozi, Director of the Uganda Investment Authority, October, 2009).

Table 3: Milk Processing Plants and Mini Dairies in Uganda, June 2009

| Name of Company | Location | Installed capacity (L/day) | Capacity Utilized (L/day) | Products made |
|---|---|---|---|---|
| 1. SAMEER | Kampala | 300,000 | 160,000 | Pasteurised milk, UHT, yoghurt, ice cream, butter, ghee |
| 2. Jesa Farm Dairy | Busunju | 10,000 | 7,000 | Pasteurised milk, yoghurt, butter, ice cream |
| 3. White Nile Dairy | Jinja | 6,000 | 3,000 | Pasteurised milk, yoghurt, ghee, cream |
| 4. GBK Dairy (U) Ltd | Mbarara | 54,000 | 15,000 | UHT, ghee, pasteurised milk |
| 5. Dairi Board (U) Ltd *** | Mbarara | 40,000 | | Plant not operating at present |
| 6. Birunga Dairy | Kisoro | 15,000 | 12,000 | UHT |
| 7. Teso Fresh Dairy | Soroti | 3200 | 800 | Pasteurised milk, yoghurt, |
| 8. MADDO Dairies Ltd | Masaka | 2000 | 800 | Pasteurised milk, yoghurt, |
| 9. Gouda Gold | Kampala | 15,000 | 1,500 | Cheese |
| 10. Paramount Dairies Ltd | Mbarara | 3,000 | 2,000 | Cheese |
| 12. NIRMA Dairy & Foods ltd | Entebbe | 8,000 | | Plant not operational |
| **Total** | | **448,200** | **204,100** | |

Source: DDA, 2009: 11
*** *Formerly Alpha Dairy Products (U) Ltd*

[3] Interview, James Mulwana, June 2009; and Danida Adviser, October, 2009; but see also Banadda, 2010.

Table 3 shows that SALL was still the dominant processor in Uganda in 2009. It also shows that there are other smaller processors. In addition to the registered processors, there are a number of processors in the informal sector, as already mentioned. In sum, this brief overview of the dairy sector has shown a sector that has grown, not just in terms of production, but also in terms of consumption, pasteurization and milk quality. The question is how and why it has grown. What initiatives were taken, how were they implemented and what made ruling elites support them? The next section gives a sketch of the analytical framework used to analyze PIRs in the dairy sector before we go on to study early initiatives in the sector.

## IV. The Ruling Coalition in Post-Colonial Uganda

Recent literature points to the importance of political-economy factors in explaining initiatives in both industry and agriculture (Khan, 2010; Doner et al, 2005; Leftwich, 2009; Brautigam et al., 2002). Although macro-economic stability is generally regarded as a precondition for sustained growth, it is also recognized that targeted state support for infrastructure, extension services and education is important (Evans, 1995; Whitfield, 2011). In less developed countries, state support for productive sectors often does not occur. This is because there may be strong factions resisting such state initiatives, and their support is important for the ruling elite.

When power is not derived from formal institutions alone (such as constitutions, elections, a formal sector tax base etc.), ruling elites legitimize power by building coalitions often through distributing patronage to ensure loyalty (Whitfield and Therkildsen, 2011: 18). Patronage is therefore often used to hold the ruling coalition together. The more fragmented the ruling coalition is, the more will the ruling elite tend to use rents to hold it together. If initiatives to promote the productive sector impede the holding together of the ruling coalition, they will be difficult to implement.

If a ruling coalition has strong local factions as well as strong excluded factions (or, we may add, opposing factions *within* the ruling coalition), it is quite fragmented. Strong factions can potentially resist an initiative. Initiatives to promote particular productive sectors take place if ruling elites believe they will help keep them in power. If such initiatives are taken, their successful implementation will depend on the relationship of the industry to the ruling coalition. If there is a close link between ruling elites and industry actors, it will be easier to negotiate policies that are implementable. Successful implementation will also depend on the ability of the ruling elite to create pockets of bureaucratic capability, e.g. an agency that has adequate political support in terms of resources, but enough autonomy from political intervention, and adequate knowledge of the industry's needs (Whitfield and Therkildsen, 2011).

## V. Historical Background and Early Initiatives in Dairy Farming

In the immediate post-independence years in Uganda, there was widespread control of exports and imports through licensing (Bibangambah, 2002) and control of most categories of prices, including exchange rates and wholesale and retail prices. Many large plants were owned and established by the state through loans, such as steel production plants, the big milk plant and spinning mills. The independence government also launched import substitution programs that were largely financed through loans and the taxation of agricultural exports, especially coffee (Gukiina, 1972, Bates, 1981). In this first period after independence, government took some initiatives to promote the livestock and dairy sectors, especially driven by Dr Babiha, who was the minister for Animal Production at that time, clearing large areas of tse-tse fly, thereby creating what has been termed the cattle-corridor, a belt stretching from the south-western area of greater Mbarara to the north-east covering Soroti and Lira and up to Moroto and Karamoja (see Appendix 1 for a map) (see e.g. Hansard, March 11, 1999; see also Mbabazi, 2005). In this period, the state-owned Dairy Corporation (DC) was set up along with several government-owned milk coolers and state farms in which to develop new high-yielding breeds. In the 1960s there were reports that many of the state farms (which were funded primarily by USAID) were allocated to some elites rather than on the basis of who would be competent to run them (Dornboos and Lofichie, 1971).

During 1970's, the economy collapsed. One of the main reasons was the expulsion of Asian Ugandans. Since Asians controlled the majority of economic enterprises in Uganda at the time, this resulted in a complete breakdown of the Ugandan economy. Between 1970 and 1986, agricultural GDP declined by close to 20 percent in real terms, while food crop production and yields declined by 20 percent and 12 percent respectively. Coffee export volumes declined by about 30 per cent and tea and cotton export volumes by over 90 percent (Bibangambah, 2002). The dairy sector also collapsed. The amount of milk collected and processed by the Dairy Corporation fell from 20 million litres per annum in 1972 to less than half a million litres in 1979. The breakdown of input supply, extension and the collection centres led to commercial milk output declining to virtually nothing by the late 1970s. In the 1980s, urban milk demand was being met from imported dried milk (Republic of Uganda 2000).

In 1980's, the Ugandan economy was experiencing civil war. Unlike other traditional cattle areas further to the north-east, the south-western region had not been strongly affected by the civil war, and its population of long-horned Ankole cattle had remained intact. However, during the civil war, and even several years after 1986, where the NRA came to power, a combination of general insecurity in the north-east with the looting of cattle by rebels, Karimojong cattle-rustlers and government soldiers, led to a loss of cattle. Although at the outset the National Resistance Movement government was quite broad-based, the north remained excluded from the ruling coalition. The near total de-stocking in Gulu and Kitgum regions has been referred to as one of the tragedies of the war in the north. According to Van Acker (2004), the cattle population in Kitgum fell from 156,667 in 1986 to 3,239 in 1998, even though within the same period the national cattle population increased from 3 to 5.6 million. Other estimates indicate that the cattle population in the whole northern area in 1997 was 5 percent of what it had been ten years previously (Gersony, 1997; see also Branch, 2005). The narratives told by Ugandans in the North and East is that the NRM government favoured the cattle owners in Ankole and did not do anything to help the North and East retrieve their lost cattle.[4]

After the NRM came to power, reconstruction of the Ugandan polity and economy started. The international financial institutions and bilateral donors strongly supported the new government, and a period of stabilization and liberalization began. The newly established stability, combined with the structural adjustment program carried out in the early 1990s, led to increases in growth and initially also in agricultural production.

In the south-western part of Uganda, the ruling elite took a number of initiatives to promote dairy farming and trading. These initiatives clearly came from the fact that the elite had its roots in cattle farming. Quite often the President has talked about the initiatives that he personally undertook in order to develop his home region. In his autobiography, Museveni tells the story of how, in the late 1960s, he and a friend would campaign among the nomads to make them settle down and to fence their lands in order to not lose cows. He argued that he and a group of friends educated the Banyankore peasants on how to grow food crops so that they could rely on other nutrients than milk and could start selling surplus milk. He argues that as a result of their advice 'a slight modernization' followed and the number of cattle increased. He also notices that, with more cattle, farmers would need advice on how to go into dairy farming, since dairy cows require less grazing land. However, this would be a matter for the future (i.e. after 1986) (Museveni, 1997: 20-22).

The initiatives taken after 1986 should therefore be seen in the light of the fact that ever since the 1960s Museveni had had a focus on cattle and dairy farming. Speaking before Parliament on June 7th 2005, he said:

*I always want you to come (to Rwakitura) and see what some of us did when we were still young people. We campaigned among those people who were nomads to make them settle down first, but later on when I was able - after I had come back from exile - I was able to introduce the selling of milk. Those people had been keeping cattle since time immemorial but they were never selling the milk, which is where the problem was.*

Such personal initiatives have also been taken by other key people, for instance, the Minister of Works (until 2011), John Nasasira, who is very popular in his home area of Kazo, where he is known to have introduced many support schemes and, among other things, to have educated the local people to exploit milk production better.[5]

There were also early government initiatives to rehabilitate the dairy infrastructure in south-western Uganda. According to the Dairy Master Plan drafted in 1992, the Dairy Corporation had made 'considerable investment in the establishment of new milk collection centres. All this investment has taken place in the South Western and Western Zones which are often called the Mbarara milkshed area' (Dairy Master Plan, 1993, Vol. 2, section 2.1). These early initiatives mainly rehabilitated milk coolers and supplied generators for them. Between 1987 and 1991, the government-owned Dairy Corporation established 42 milk collection centres with (about 2,000-litre) milk coolers and generators in the south-western region. This was mainly financed by the African Development Bank through a loan to the DC of about ten million dollars (Dairy Master Plan, Vol. V; Okwenye, 2009). UNDP/FAO's Dairy Industry Development Program supported extension and training. In this period, Danida also supported rehabilitation of the milk collection facilities in Mbarara region and of the DC processing plan itself. Danida supported the sector to the tune of about 6 million dollars between 1987 and 1993. In a recent evaluation of Danida's support to Uganda, it was found that the milk coolers have become symbolic of Danish aid. President Museveni has said that Danish milk coolers have transformed the dairy industry in his home region and on several occasions has remarked that '*Denmark --- you have made my people rich*' (Lister et al., 2006), 'my people' referring to the Banyankore people rather than Ugandans as a whole.

Later, the support for the south-western area has been supplemented by providing tractors through the Agricultural Extension program (NAADS). The first of these tractors was given to Kiruhura dairy farmers to help them construct dip tanks for the cows.[6]

To sum up, the government has built a rather stable coalition with weak excluded factions in the north and, in the early years, weak lower-level factions as well. The dairy sector has blossomed in the southwest as stabilization and liberalization has given milk producers an outlet for their milk. Government initiatives supported by donors have built a dairy infrastructure in the south-west. Since the ruling coalition has deep roots in the south-western milk shed and several members of the ruling coalition have a deep interest in and family tradition of keeping cattle, this sector has been promoted by the ruling elite through both personal initiatives and a number of government supportive initiatives such as rehabilitation of milk coolers.

[4] Prof. Michael Whyte, personal communication, December, 2011.

[5] See e.g. *The Monitor*, October 4, 2009 'Kazo's Journey from Cows to Wealth'.

[6] Interviews, *New Vision*, September 9, 2008, 'Kiruhura farmers get tractor'.

IJAIR

International Journal of Agriculture Innovations and Research
Volume 2, Issue 3, ISSN (Online) 2319-1473

## VI. Liberalization and Privatization: Drivers and Consequences

Liberalization was important because, with the lifting of the Dairy Corporations' monopoly on buying milk, new outlets emerged for the dairy farmers, and their daily incomes rose as a consequence of their being able to sell their milk (Deniva, 2006). One of the most important elements in the government's plans to rehabilitate the dairy sector was to 'encourage the private sector to participate in the dairy development program and to allow the informal and formal milk marketing systems to develop alongside each other' (Dairy Master Plan, Vol. 2, section 2.4). The official government goal was to become self-sufficient in dairy products through a policy emphasizing the establishment of liberal and competitive markets. The near-monopoly status of the Dairy Corporation in the formal sector was abolished: 'farmers and their organizations as well as private investors will be invited and facilitated to participate in development of milk processing and marketing' (Dairy Master Plan, 1993, vol. 2 section 10.2).

When asked what was most important for the sector's growth, most interview respondents reply that liberalization was very important, and no one said it was not! The south-western farmers would tell us how they hated the Dairy Corporation because it had not been able to buy their milk. Many of them had started cooperatives, and after liberalization they were able to sell milk to traders who started making a business out of buying the milk in the south-west and then transporting it, mainly to Kampala, and selling it there. Although several people, including Members of Parliament (MPs), at the time argued that a lot of milk in the south-western area was not being collected, by 1994 there had already been a rise in production because of the new outlet that farmers had found with the private vendors.

The lifting of the Dairy Corporation's monopoly on buying milk was part of the overall liberalization drive at the time. This push for liberalization came from an alliance between the president, a cadre of technocrats in the merged Ministry of Finance, Planning, and Economic Development (MOFPED), the International Financial Institutions (IFIs), and the donors. Initially, President Museveni had been against a liberal approach to economic reforms, but he changed his mind upon interacting with donors and key technocrats in the then Ministry of Planning (Mutebile, 2010; Museveni, 1997, Kjær and Katusiimeh, 2011). According to several insider accounts, the President's shift towards supporting liberalization and his focus on fiscal discipline was crucial. In particular, his decision to merge the Planning Department (where the pro-reformers were located) with the Ministry of Finance had an important effect.

Another part of the structural adjustment programme was the privatization of a large number of state-owned enterprises, including the Dairy Corporation. The IFI's were pushing for privatization. The decision was taken in the early 1990s but took effect only in 2006. The Director of the Privatization Unit adds that since the DC was one of the most complicated of the more than 130 companies to be privatized.

Two particular reasons as to why the privatization of the DC took so long stand out from our interviews. One is that the core elites had an interest in benefiting in the privatization in order to fund the ruling coalition. The other is that the south-western famers constituted an unusually strong interest group with tight connections to MPs and even the Minister for Animal Industries.

A big Ugandan industrialist in plastics, batteries and dairy production and owner of his own successful dairy farm informed us that he had been the one to establish contact with SALL 'because it was a good big company, and the government was desperate' (interviewed July 2, 2009). Whether members of the ruling elite could derive rents from the sale is not verifiable, but influential Ugandan observers are of that opinion.[7] It is clear that the President is very supportive of SALL, referring to the company as 'My investor', and there have also been initiatives to protect SALL's new milk powder production. There was initially a tariff on the import of milk powder from Kenya (IPS news update, 2009; Stahl, 2009).[8] In addition, a ban on the sale of raw milk was issued by the Minister for Livestock immediately after the sale to SALL, a ban that was later annulled due to protests, but it would have helped SALL a lot.[9]

The second reason for the prolonged privatization process was the pressure from the south-western farmers, who had been very determined to put in a bid for the DC, as they wanted to buy it and run it. The President, on the other hand, wanted someone who would be able to make longer-term investments in the DC, someone who could also set up a milk powder line. He also did not think the farmers would have the capacity to run a big processing plant like the DC. The farmers, on the other hand, argued that their cooperatives had hired graduates and that they were able to mobilize the money through a mixture of own contributions and loans.

When the Dairy Corporation was rehabilitated in the 1990s, the farmers had been promised the possibility of buying shares in the event of privatization. The farmers were very determined to make a serious bid, their influence and ability to assert pressure on the government being an important reason why the privatization process was dragged out for so long. They saw the privatization as a sell out to foreign interests and almost as anti-patriotic. Hence the decision to privatize the Dairy Corporation was unlikely to be popular, and the government would risk losing votes on the issue. An MP and former minister of state for agriculture stresses the importance of farmers as a coalition: '*Privatization was not done in a good way. Government doesn't trust her people. There is always a*

---

[7] This opinion was expressed by several interview respondents. See also *The Independent*, May 19, 2009: 'Dictatorships don't serve their peoples, they give privileges to their cronies'.

[8] However, under the East African Customs Union intra-regional tariffs have gradually been reduced, which means that taxes on milk products have come down from 16 percent to zero, whereas there is now a common external tariff that is much higher than Uganda's before it joined the customs union (at 60 percent) (Stahl, 2009, EAC Handbook).

[9] The bans are accounted for in the section below.

*tendency to get people from abroad every time there is something to sell. I was with the farmers and supported them with their moves to take over the Dairy Corporation, but the President decided otherwise*' (interviewed August, 2009). The MP was himself from the south-western area and is but one of the many powerful connections the farmers had to the ruling elite.

A coalition consisting of the south-western dairy cooperatives and MPs from the south-western region constituted a strong pressure group against the selling of the Dairy Corporation to a foreign-owned company. The dairy farmers also represent an area in which up to a million people depend on milk to a lesser or greater extent. So, elections and the fear of losing votes probably also played a role. In interviews, the point was made that the eventual privatization happened after the 2006 elections because it was considered to be such an unpopular measure.

To summarize, there are two main reasons why the privatization was dragged on. One was the interest in using the privatization to acquire financial benefits for the ruling elites. The other was the pressure from the south-western dairy farmers.

The eventual sale of the Dairy Corporation to SALL had several implications for the milk sector. First of all, investments in the factory did increase. SALL rehabilitated and upgraded existing equipment and also set up a milk powder line and thereby injected about 11 million dollars in the factory (interviews; own visit to the factory; Banadda, 2010). It is also evident that milk collection has gone up since 2006 when SALL took over the Dairy Corporation.[10] The point, according to the director of the Privatization Unit, is that no matter what the process of selling the Dairy Corporation, the result is that '*a non-functioning unit has been turned into a functioning unit'* (interviewed August, 2010).

The sale of the Dairy Corporation to SALL also had the effect of angering the south-western farmers so much that they actually strengthened their own organization, which is now making efforts to set up their own dairy plant in Mbarara. They formed an umbrella organization for the many south-western cooperatives, called the Uganda Crane Creameries Cooperatives Union (UCCCU). The level of organization in the dairy sector had increased considerably during the 1990s because of a new government act on cooperatives that reduced the degree of government control over them substantially (Dairy Master Plan, Vol. 2). While there were only six dairy cooperatives in the early 1990s, there are now about 120 cooperative unions (Land O'Lakes, 2006).

In the Dairy Master Plan (1993, volume 3), the document that guides the current Dairy Industry Act (passed in 1998), there is a recommendation that '*the major part of the collection network will be sold to dairy farmers' associations and cooperatives*' and that they should be provided with training and support in order for them to buy and run the collection centres. However, this advice has not been followed because SALL owns the collection centres, which makes farmers' cooperatives dependent on selling most of their milk to SALL at prices mostly dictated by SALL (except for the very dry season, which forces the price upwards).

This is a very real conflict. SALL is interested in buying a lot of milk at low prices. UCCCU is interested in selling but at a higher, more stable price. In securing that, they have a strong interest in owning the milk coolers that were taken over by SALL when it bought the Dairy Corporation. UCCCU wants to take over the collection centres, and they claim that SALL is trying to out-manoeuvre them, negotiating more favourable prices with farmers who are not their members, thus trying to lure members from them. Since SALL owns 45 percent of the milk coolers, cooperatives feel forced to sell most of their milk to that processing company. The cooperative unions have signed agreements with SALL in order to be able to use SALL's coolers, and they sell more than 80 percent of the milk they collect to SALL.

Mushtaq Khan (2010: 70) argues that '*the holding power of emerging capitalists in developing countries, even if they are high capability entrepreneurs running big organizations, is unlikely to be based entirely or even largely on the profits generated by their organizations*.' To sustain profits, these entrepreneurs also must rely on informal networking with the ruling coalition. According to Khan, if the entrepreneur has high technological capability and is powerfully networked this can drive accumulation within a sector, but the development of new capitalists is constrained in that the capitalist can try to drive other potential investors in the sector away. This may be partly what is happening with dairy-processing in Uganda.

SALL representatives are well-networked. They have easy access to the government, and some of the key Ugandan employees in SALL were formerly employed by the Dairy Corporation, so they know the sector well. It is quite likely that SALL lobbied government not to give the south-western dairy farmers a loan in order to build their own dairy plant and thereby, to avoid competition. UCCCU representatives refer to statements by the President when he comments on UCCCU's efforts to establish a plant, such as '*They are ruining my investor*' or '*These people are giving me a headache'*.

However, at the same time, competition is on the increase. UCCCU is finding other loan opportunities, which may even be an advantage, since obtaining a government loan would also mean increased dependence upon the government (interview, consultant, August, 2010). Their work has been delayed because of difficulties in receiving a loan for the equipment, but the building has been constructed and several opportunities for loans are pending, including a mixed credit arrangement with Danida (Henriksen and Lang, 2010; personal communication, Warwick Thomson at RDE). In addition, a number of companies are interested in setting up dairy processing plants in Uganda, including a Canadian company and Kenyan Brookside (Interview, Maggie

[10] *New Vision*, Nov 19, 2008; 'Dairy Industry to Grow by 50%, see also Banadda, 2010.

Kigozi, Uganda Investment Authority).[11] One company, the Midland Group, an international trading and investment company, is already setting up a new milk powder plant in Mbarara.[12]

To summarize, the initial push for liberalization and privatization came from an alliance between key political elites, most notably the President, the IFIs and Ministry of Finance technocrats. In addition, the President's ambition to become self-sufficient has also been significant in this push. However, once the privatization process started, it was dragged out for over a decade because many key stakeholders were anxious to influence the sale of the Dairy Corporation in various ways. Members of the ruling elite were in all likelihood seeking to secure rents from the sale, and the south-western dairy farmers put substantial pressure on the government to take over the factory. Interestingly, the privatization case is thus a case of an intra-coalitional conflict: the south-western dairy farmers are a support base to the President and as such are part of the ruling coalition. To a large extent they owe their wealth to the present government, and many of their sons have careers in the army. At the same time, they feel they are being out-manoeuvred by the same ruling elite which they support. Their resistance to selling the Dairy Corporation to a foreign investor can thus be seen as resistance from the lower level factions in the ruling coalition.

## VII. Regulation in the Dairy Sector: Drivers and Consequences

The Ugandan dairy sector is an interesting case *both* of how economic interests develop *and* of how important the interests of the ruling elite are to a sector. As the dairy sector developed over the 1990s, dairy farmers and traders started to organize. They gradually acquired what Khan terms 'holding power', 'the capability of individuals or groups to engage and survive in conflicts', a power based on economic wealth, legitimacy and the ability to organize supporters and to mobilize them politically (Whitfield and Therkildsen, 2011). What this implies in the case of Uganda's dairy sector is that, although the dairy farmers and traders constitute a support base to government and can thus be seen as a part of the ruling coalition, they have also developed interests based on their economic position. While the government wants to promote and support SALL, the dairy farmers want to earn a higher price for the milk they produce, and they also want more control over collection and processing. The milk traders have an interest in continuing their operations in the so-called informal market: buying, transporting and selling fresh milk. And the government has an interest in regulating this, preferably even abolishing the sale of raw milk. This is because SALL prefers that all milk be sold to them as a large processing company which has too little milk in the dry seasons. It is to the relationship between mainly the traders and the government regulatory agency, the DDA, we now turn.

In the late 1980s, a big consultancy funded by Danida resulted in the Dairy Master Plan, which came out in five volumes in 1993. The Dairy Master Plan took an industry approach in which it studied the needs of the sector as a whole and came up with a number of recommendations. One of the most important of these was improved regulation through setting up an autonomous Dairy Board. After some time, the Dairy Industry Act was passed through parliament and the cabinet, establishing the board following the recommendations in the Master Plan (Republic of Uganda, Dairy Industry Act, 1998). Although it took some time for the Dairy Board finally to be established in 2000, it nonetheless became quite successful in regulating the sector.

The DDA's mandate is to regulate and develop the dairy sector. The first part of the mandate, the regulation, has been the most successful, as is described below. The DDA has had considerable autonomy and, relative to other sub-sectors, it has achieved a considerable amount of government funding. It also collects fees from processing companies and milk coolers. In addition, it has received some donor funding, particularly from Danida.

The allocations from the government of Uganda have been declining since 2001, but still they have been kept at a reliable level (more than 500 million shillings annually). The DDA has generated some internal revenue (approximately one sixth of total revenues) through various fees. A cess on the processing industry had been proposed as part of the Dairy Master Plan. Such a cess would have given the DDA more autonomy vis-à-vis the government. However, the cess was resisted by one of the main processors, Jesa, who felt nothing was being given in return. Had the processing industry been more organized, and had the government been able to bargain with its organization, such vetoes from individual processing firms might not have blocked the implementation of the cess.[13] The funding situation gives a picture which is illustrative of the position of DDA overall: it has access to funding and is rather autonomous. However, it is also subject to political intervention every now and then, as described below.

Bureaucrats in the DDA, in particular the director (until 2011), Dr. Twinamasiko, a former commissioner in the Ministry of Agriculture and Fisheries Livestock Department, have a lot of knowledge of the industry and have gradually established linkages to industry actors. As already mentioned, the DDA has successfully established a relationship with the traders and big dairy farmers based on mutual recognition and trust. All interview respondents representing different players in the sector agree that he has done a good job since he became director. The DDA director has consistently negotiated with the milk traders and farmers and in the process persuaded them to upgrade technologically and improve the quality of the milk. As Khan (2010) notes, there has to be considerable pressure

[11] See also 'Uganda's Dairy sector attracts more investors'. At www.in2EastAfrica.net Oct. 7, 2011.
[12] The Midland Group, News Release, Oct 17, 2011.

[13] Interviews, officer at Sameer, and owner of Jesa, and personal communication from the key consultant on the Master Plan.

International Journal of Agriculture Innovations and Research
Volume 2, Issue 3, ISSN (Online) 2319-1473

on producers to invest money in upgrading when they are not sure of the results. However, the DDA managed to persuade farmers and traders to upgrade, for instance, from plastic containers to the better metal ones, or from boiling milk in open saucepans to using batch pasteurizers. The process of imposing a ban on jerry cans in the early 2000s is illustrative of how the trader's organization bargained with the DDA. Jerry cans are less hygienic but naturally a lot cheaper than aluminium cans (1,200 shillings versus about 200,000 shillings), so for smaller traders and farmers this is a considerable investment. The traders and farmers therefore initially protested against it and managed to postpone the ban for a year in order to have sufficient time to raise the money. Some of the poorer traders had to drop out altogether, but the remaining trade has raised standards.[14] In this case, the dairy traders managed to negotiate a gradual phasing out of the plastic jerry cans rather than a sudden ban, so that they could find time to get money to acquire aluminium cans.[15]

Another regulatory initiative has been the abolition of the boiling of milk in big saucepans in the urban centres. The DDA tried to sensitize farmers and traders to promote small-scale pasteurizing. The practice of boiling milk had been common because it killed possible bacteria, but unfortunately also the nutrients. UNDATA also protested against this ban, as it would involve investing in expensive pasteurizers. The DDA tried to convince the traders to buy electric pasteurizers, but the traders argued for charcoal pasteurizers at only one third of the cost (interview, dairy trader and small-scale processor). After the ban on boiling, the traders invested in the purchase of 52 batch pasteurizers (UNDATA report, 2009). In this case the organization managed to get the DDA to accept cheaper pasteurizers rather than the more expensive electric ones. In the long run the firewood pasteurizers are probably unsustainable environmentally, but the end result of the negotiations was a compromise involving the abandonment of boiling the milk in open pans.

In 2005 there was a ban on the sale of un-cooled milk, which caused a lot of the private traders to invest in coolers (allegedly the construction of around 90 milk coolers). Finally, in 2006 there was a ban on transporting milk in aluminium cans over long distances, and the traders (according to their own report) subsequently purchased forty tank vehicles. For these investments the traders have used own funds, either through savings or bank loans. The Centenary Bank, for instance, has provided loans for dairy farmers and traders. When interviewed, the traders emphasize that they have loans they need to pay back and that abolishing the sale of raw milk would ruin them.[16]

Though the DDA director has an organizational interest in developing and modernizing the dairy sector, and there are proponents for doing this 'the hard way' through the outright abolition of raw milk sales, as the above accounts indicate, the DDA has argued for a more pragmatic approach, pointing out that it would not be wise to abolish what literally constitutes eighty percent of the sector. The DDA has therefore adopted a more gradual approach, where the sector is being upgraded stepwise and thereby gradually formalized (DDA director, interviewed May, 2009). In general, the DDA's linkages to industry actors are described as strong. In spite of conflicts and disagreements between on the one hand dairy farmers and traders, and on the other hand large-scale processors and the government, the DDA has established a relationship of bargaining and trust with industry actors and has succeeded in upgrading the sector, thereby improving the quality of the milk being sold.

As appears from the description of the interaction between industry actors, there are strong interest organizations in the sector, particularly with regard to dairy farmers and traders. 75 percent of the south-western dairy farmers are members of a cooperative (Banadda, 2010). On the processor side, the degree of organization is not as high. There is a processors' organization, but the active ones are smaller scale processors, and the most important ones, SALL and Jesa, do not take an active part as they can pursue their interests through their direct links to the government, as when they blocked the cess to the DDA, as described above. The Land O'Lakes (an American co-operatives organization) and DDA initiated a Dairy Stakeholders' Platform with representation also from the processors, but they have not met as regularly as was intended.

While these interest organizations are most important in affecting policy implementation, elections appears to have had an occasional effect. At least, two interview respondents (a representative for a large NGO and a dairy trader) point to the fact that bans on the dairy industry have not been issued immediately prior to elections. However, elections do not seem to be a major driver in the dairy sector, maybe because the most important milk-shed is already strongly supportive of the ruling coalition (as indicated above).

The push for regulation has come from the DDA, combined with a government that has a general drive to upgrade and develop the dairy industry. The government's interest in promoting investments in the dairy processing industry and the entry of SALL have also implied that the government is now interested in promoting SALL by easing the conditions under which it operates. This means that political interference with the DDA's functions has occasionally occurred. Part of easing the conditions was to let SALL take over the collection infrastructure in the south-west. Another part focuses on the informal sector, which has created conflict. SALL would benefit from the abolition of the sale of raw milk, as this would ensure a more steady supply of milk. SALL pays the lowest price in the market for the farmers' milk (see above). In the public media, the DDA and SALL have had public disagreements over whether there is enough milk. During the dry season, SALL struggles to collect enough milk and can only keep

[14] Interview, Kalidi Matavo, see also *New Vision*, Monday, September 4, 2006.
[15] See also *New Vision*, March 1, 2003, 'Milk cans to replace jerry cans today'.
[16] Interviews, Minutes of the Uganda Dairy Stakeholders Platform meeting, April 2009.

its milk powder plant running for a few days a week (interviews, visit to the factory). SALL publicly claims there is not enough milk, while the DDA director argues that there is plenty of milk but that 85 percent of it is sold through other channels. In his view, the problem is that SALL offers farmers too low a price.[17] SALL would also benefit from the increased quality of milk, because then it would not have to reject so much milk at the factory gate (interview, Director, SALL). Thus, SALL's interests in the regulation of the sector coincide with what would be good for the sector in general in terms of upgrading and quality (not price).

One dairy trader representing the Traders' Association (UNDATA) expresses the organizations' fear that SALL will put pressure on the government to ban the sale of raw milk so as to acquire a better and steadier supply. In fact, the Minister of State for Animal Industry, Bright Rwamirama, proposed precisely such a ban in 2006, after the sale of the Dairy Corporation to SALL. This created an outcry among traders and farmers.[18] A former Member of the Parliament's Agricultural Committee interprets the move as an attempt to create more favourable conditions for SALL: '*I was a chairperson in the Agricultural Committee at the time [of the ban on the sale of raw milk] so I said to the Minister: face the reality, this sector is 80 percent of all milk, you cannot just ban it. You cannot create space for Sameer that way because he is only buying a small part of the milk. I know the traders were resisting it – they even resisted the tankers*.'

The traders protested violently against this ban, among other things by erecting blockades on milk routes to stop milk deliveries to SALL. The ban was never introduced, and the Minister publicly said that there were no plans to do so.[19] According to interviews, many industry actors had put pressure on the Minister on the issue, including the DDA itself whose autonomy to regulate was being impinged. Many traders and farmers feel that SALL is being favoured by the government, as indicated by a prominent MP, who argued that 'SALL uses people who were formerly working with the Dairy Corporation and that they continue to talk as if they have been sent by government' (interviewed May, 2010). The fact that the traders agreed to invest in cooling trucks is interpreted by many as a compromise: they avoided a complete ban on the sale of raw milk but agreed to improve the conditions under which milk is transported to Kampala.

So, the drive to formalize the sector also comes from a desire to favour one big investor. The resistance to this comes from traders and farmers who can mobilize quickly and are thus better organized than the big processors, who tend to use individual links to members of the ruling elite. Added to this is the fact that some of the big dairy farmers and traders are also members of parliament where they constitute a strong group. The fact that some of the traders and processors are also politicians makes it more difficult to implement regulatory initiatives. However, at the same time, it means that the farmers have a channel through which to make their claims (when they do not address to the President directly). Several MPs have helped and supported the dairy farmers, among them a former minister who has supported them in their struggle to put pressure on SALL to pay higher prices.

## VIII. Conclusion and Policy Implication

The dairy sector is an exception in Uganda's agricultural sector. Agricultural production has grown less than the 3.2 percent annual population growth in the last decade. However, the dairy sector has grown quite considerably at about 7 percent annually. Given that Uganda's ruling coalition is fragmented and rents are used to keep it together, we can understand why initiatives in the productive sector and in agriculture are in general difficult to implement. In the dairy sector, in spite of an increasingly fragmented ruling coalition, it has been possible to promote growth and to regulate the sector.

The reason for the drive to upgrade and develop the dairy sector should be found in the fact that the ruling elite have a strong base of support in the south-western milk-shed. The ruling coalition is dominated by the south-western elite. Benefitting that region would help keep the ruling elite in power, because this was where the most trusted support base was to be found. So, making the south-western area a beneficial of government initiatives to promote dairy farming would ensure support. From the outset of when the NRM came to power, therefore, initiatives were soon taken by the government and supported by donors to rehabilitate the milk collection infrastructure in the south-western region. Similar initiatives were not taken in other regions that had cattle.

As the dairy sector grew, intra-coalitional conflicts emerged especially around privatization of the Dairy Corporation and regulatory initiatives. Interest organizations representing dairy farmers and traders have grown strong. However, the fact that the south-western area basically belongs to the ruling coalition has made it possible to settle conflicts of interest and to strike compromises through bargaining.

At the same time, the ruling elite wished to derive funding from the privatization of the Dairy Corporation. This was against the interests of the dairy farmers. This conflict of interests induced the ruling elite to establish and support an implementing agency that was able to bargain with dairy farmers and traders and to enforce regulatory initiatives through compromise and through the cooperation of the traders and farmers. The government promoted policies to benefit the Dairy Corporation (regulation of the sale of raw milk), but the fact that the dairy farmers came from the south-western region probably bargaining and establishing trust easier.

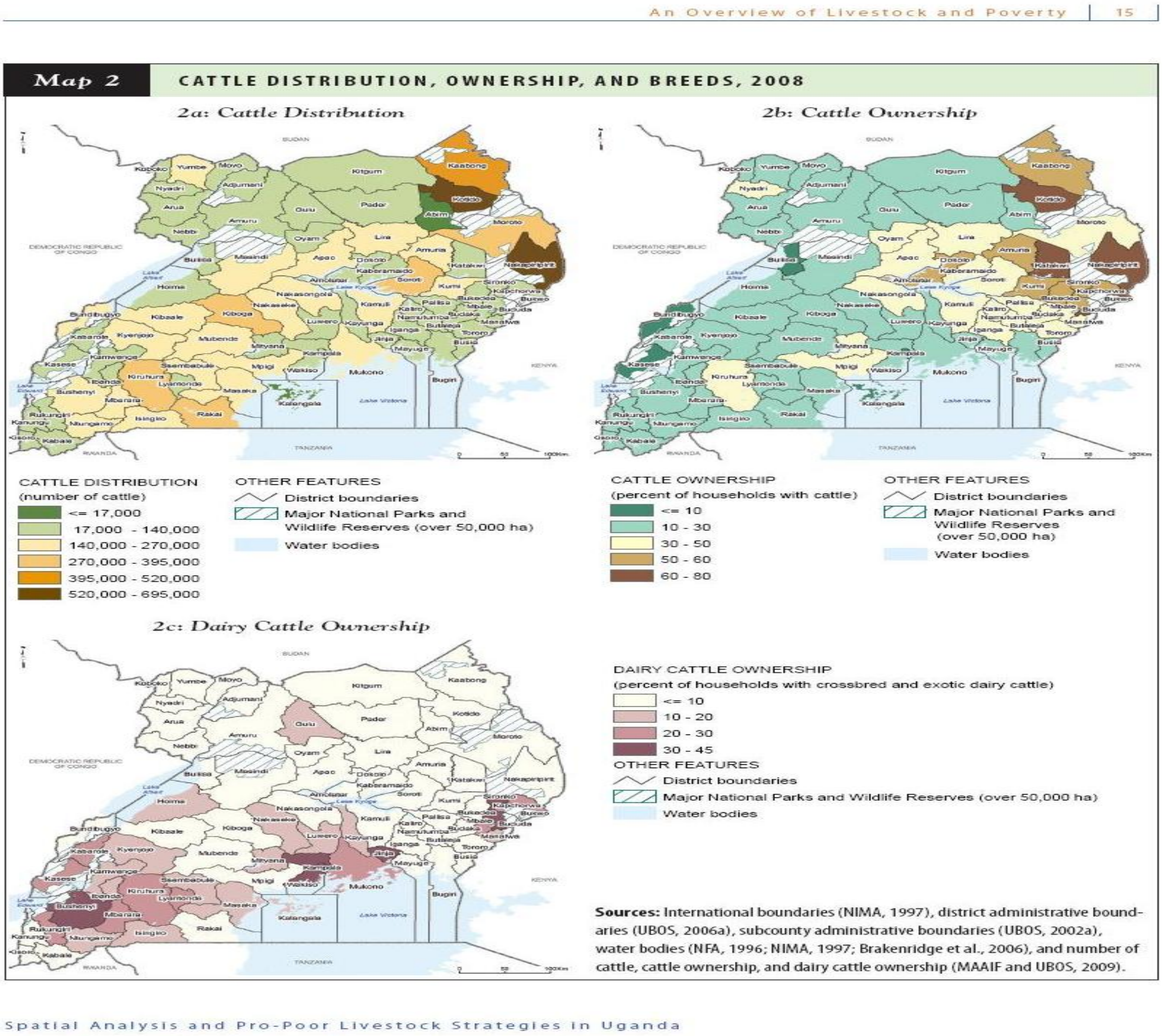
A combination of wanting to please the biggest processor (probably both as Dairy Corporation and after it was privatized) and wanting to please the farmers had the outcome that the dairy sector developed. The ruling elite were able to create a pocket of capability in the DDA

[17] Interviews, and see also 'The DDA takes on Sameer over milk process, *Chinese News Web*, May 14, 2009.
[18] Interviews, see also *The Monitor*, September 9, 2006, 'Milk Sellers Bitter over new Government Ban'.
[19] *New Vision*, Sept 21st 2006, 'No Ban on Milk Trade'.

which helped regulate the sector. Regulation would improve the quality of milk and hence improve the milk supplied to SALL, but the way regulation was implemented was a process of bargaining and compromise between organized industry actors and a government agency. In this case, the interests of the big company with good connections to the government to some extent (regulation and upgrading, not pricing or controlling collection infrastructure) coincided with what would be good for improving technology standards in the sector. In this way, promotion of the productive sector coincided with what could allow the ruling elite to stay in power. This makes the case rather unique.

Despite liberalisation, marketing of processed milk is dominated by one big player. The share of farmers on the consumer price is still very low. The big percentage of the milk is sold unprocessed. Thus, there is need to encourage more players the marketing of processed milk and improvement in cold chain infrastructure. Farmers should be encouraged to join cooperatives. Efforts are required to boost levels of education and training especially on new methods of management.

Appendix 1: Mapping the cattle corridor




*Source: The World Resources Institute, Uganda cattle distribution, ownership and breeds, 2008*

## REFERENCES


[1] African Development Fund (2005). 'Republic of Uganda: agriculture and rural sector review.

[2] Background to the Budget, 2011/12. Republic of Uganda. Ministry of Finance, Planning and Economic Development.

[3] Banadda, Noble (2010). Uganda's Dairy Sector: Investment Feasibility Study for GPI. Unpublished Report.

[4] Barkan, Joel, 2011. "Uganda: Assessing risks to stability. A CSIS report. June.

[5] Bates, R.H. *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies*. Berkeley, University of California Press, 1981.

[6] Bibangambah, Jossy R. (2001). *Africa's Quest for Development: Uganda's Experience*. Fountain Publishers.

[7] Branch, Adam (2005). 'Neither Peace nor Justice: Political Violence and the Peasantry in Northern Uganda, 1986-1998'. *African Studies Quarterly* Vol. 8, No. 2.

[8] Brautigam, Deborah, Lise Rakner and Scott Taylor (2002): 'Business Associations and Growth Coalitions in Sub-Saharan Africa'. *Journal of Modern African Studies* Vol. 40, No. 4, pp. 519-546.

[9] Clarke, George, R.G., Robert Cull and Michael Fuchs (2007). 'Bank Privatization in Sub-Saharan Africa: The Case of the Uganda Commercial Bank'. World Bank Policy Research Paper, no. 4407.

[10] Dairy Master Plan (1993). Volumes I-V, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe, Uganda, June.

[11] Deniva (2006). 'Uganda: The Impacts of trade Liberalization in the Dairy and Maize Sectors on Household Welfare'. Final Report. February.

[12] DDA (2005). 'Dairy Development Authority, Business Plan 2005/06'. Journal No. 104, Kampala, May.

[13] DDA (2009). 'Hand over report by the outgoing board of directors to the incoming board'. Dairy Development Authority. November 17th. Kampala.

[14] Dobson, William D. and David K. Combs (2005). 'Prospects for Uganda's Dairy Industry'. Babcock Institute Discussion Paper, No. 2005-4.

[15] Doner, Ritchie and Slater (2005): 'Systemic vulnerability and the origins of developmental states: northeast and southeast Asia in comparative perspective'. *International Organization*. Vol. 59: 327-361. 2005.

[16] Dornbos, Martin and Michael Lofchie (1971). 'Ranching and Scheming: A Case study of the Ankole Ranching Scheme.' In Michael Lofchie (ed.) *The state of the nations constraints on development in independent Africa.* Berkeley: University of California Press.

[17] EAC (2009). East African Community Tariff Handbook.

[18] Evans P. (1995). Embedded Autonomy: States and Industrial Transformation. Princeton University Press.

[19] FAO (2010). 'Pro-poor Livestock Inititiative. Status and Prospects for smallholder Milk Production: a global perspective. By T. Hemme and J. Otte. Rome.

[20] Frimand, Jensen, Lasse (2011). 'When the only alternative is a cooperative'. Master's thesis at Aalborg University.

[21] Gersony, Robert (1997). 'The anguish of northern Uganda: results of a field-based assessment of the civil conflicts in northern Uganda'. USAid, Kampala.

[22] Henriksen, Jørgen and Torben Lang (2010). 'Opportunities for Investments in Uganda Dairy Sector Suitable for Financing and Support Applying the Danida Buisness Development Instruments'. Final report, Development Associates. Danida.

[23] Jamal, Vali (1976). 'Asians in Uganda, 1880-1972: Inequality and Expulsion?'. *The Economic History Review*. Vol. 29, Issue 4, pp. 602-16.

[24] Joughin, J., A.M. Kjær (2010). 'The politics of agricultural policy reform: the case of Uganda'. *Forum for Development Studies* 37(1): 61–79.

[25] Joughin, James (2004). 'Dairy Development in East Africa, with reference to Kenya and Uganda. For the Aga Khan Foundation.

[26] Khan, Mushtaq H (2010). 'Political Settlements and the Governance of Growth-enhancing institutions'. SOAS Working Paper. July.

[27] Kjær, Anne Mette and Ole Therkildsen (2011). Elections and Policy making in Tanzania and Uganda. *Forthcoming, Democratization*.

[28] Kjær, Anne Mette and Mesharch Katusiimeh (2011). 'Ruling coalitions, growth, and the lack of structural transformation in Uganda'. Forthcoming as DIIS Working Paper.

[29] Land O' Lakes (2006). 'Uganda Private Sector Dairy Industry Development'. Final Report. USAID, Land O'Lakes. December, 2006.

[30] Lipton, M. (1977). *Why poor people stay poor: urban bias in world development.* London: Temple Smith, 1977.

[31] Lister Stephen et al. (2006). 'Danish Assistance to Uganda 1987-2005. Volume 2. Stakeholder Perceptions', Ministry of Foreign Affairs, Denmark, June.

[32] Mbabazi, Pamela (2003). *Supply Chain and Liberalization of the Milk Industry in Uganda.* Kampala: Fountain Publishers.

[33] Museveni, Yoweri (1997). *Sowing the Mustard Seed: The Struggle for Freedom and Democracy in Uganda.* London: Macmillan.

[34] Mutebile, Emmanuel-Tuusiime (2010). 'Institutional and Political Dimensions of Economic Reform' in Kuteesa et al. (eds.) *Uganda's Economic Reforms: Insider Accounts.* Oxford University Press.

[35] Mwenda Andrew M. & Roger Tangri (2005) "Patronage politics, donor reforms, and regime consolidation in Uganda", *African affairs*, 104/416, 449-467.

[36] Okwenye, A.A. (2009). 'Rehabilitation of the dairy industry in Uganda'. FAO. Accessed at www.fao.org December.

[37] Piron, Laure-Hélene with Andy Norton (2004). 'Politics and the PRSP Approach: Uganda Case Study.' Working Paper 240. London: ODI.

[38] Republic of Uganda (2000), 'Livestock and Fisheries Policy and Development Programme', MAAIF.

[39] Selassie, Ameme Aemro (2008). 'Beyond Macro-economic stability: the Quest for Industrialization in Uganda'. IMF Working Paper, WP/08/231.

[40] Stahl, Heinz-Michael (2005). 'Tariff Liberalization Impacts of the EAC Customs Union in Perspective'. TRALAC Working Paper, No. 4. August 2005.

[41] Tangri, Roger and Andrew Mwenda (2001). 'Corruption and cronyism in Uganda's privatization in the 1990s'. *African Affairs*, Vol. 100, pp. 117-133.

[42] Tripp, Aili Mari (2010). *Museveni's Uganda. Paradoxes of Power in a Hybrid Regime.* Boulder: Lynne Rienner.

[43] UNDATA (2006). Uganda National Dairy Traders' Association. Strategic Plan, 2006-2011. Prepared by Amos Ruhangore, Kampala.

[44] Van Acker (2004). 'Uganda and the Lord's Resistance Army: The New Order no one ordered'. *African Affairs.* 103/412: 335-357.

[45] Whitfield, Lindsay (2011). 'How countries become rich and reduce poverty: a review of heterodox explanations of Economic Development.' DIIS working paper, 2011: 13.

[46] Whitfield, Lindsay and Ole Therkildsen (2011). 'What drives states to support the productive sectors? Strategies ruling elites pursue for political survival and their policy implications'. DIIS Working Paper. 2011: 15.

[47] World Bank (2007). Uganda. Moving Beyond Recovery: Investment and Behaviour Change For Growth. World Bank, September.


## AUTHOR'S PROFILE

**Dr. Thomas Mwebaze**
is a lecturer in the School of Economics, Makerere University. One of his research interest is Rural Development, with a major focus on Agricultural Development. Some of the courses he lectures include; Agricultural production and Management, Agricultural Marketing and Microeconomics.