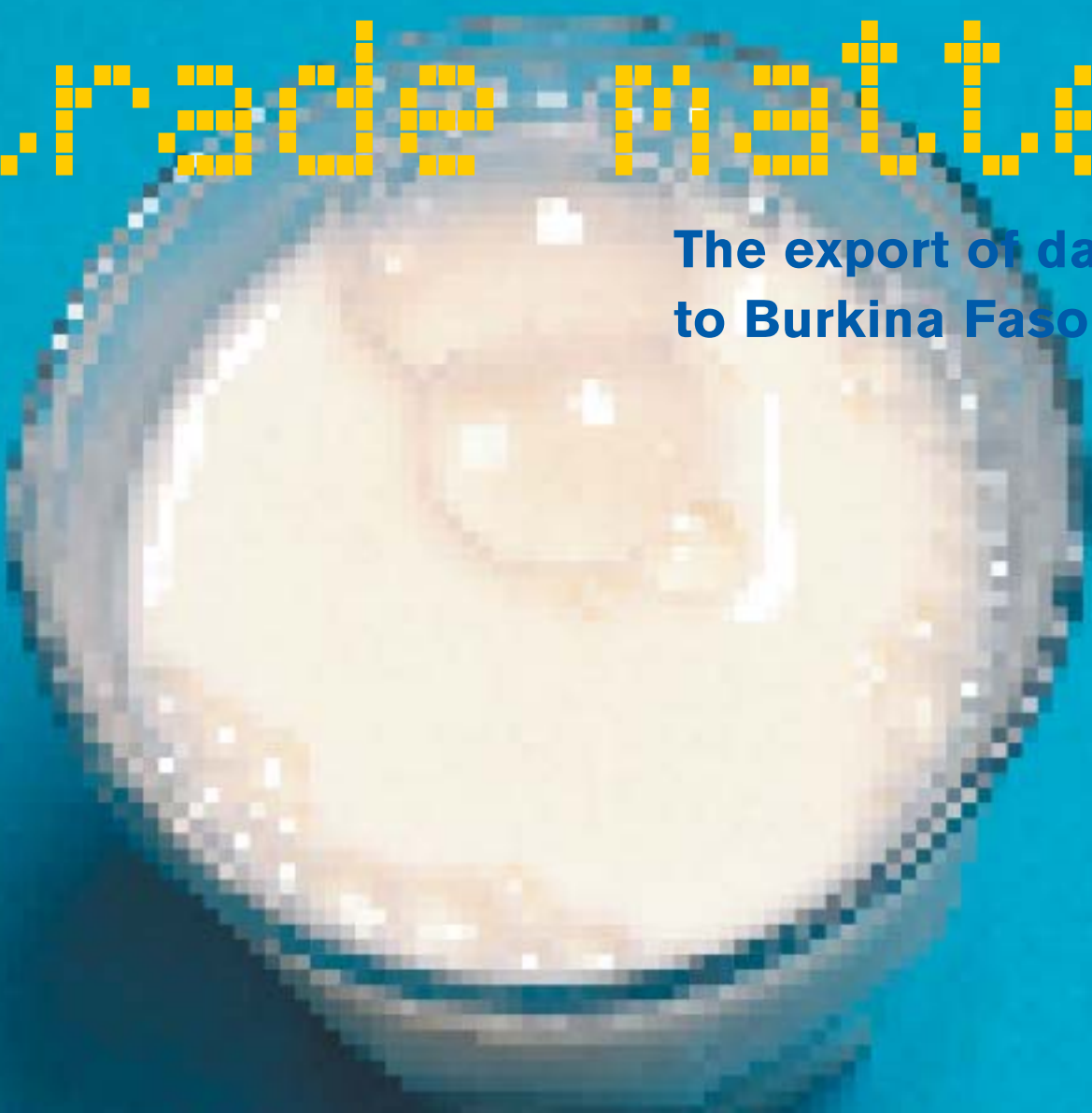


Trade matters!

**The export of dairy products
to Burkina Faso and Tanzania**





TRADE MATTERS!

The export of dairy products to Burkina Faso and Tanzania

Introduction:

page 1 - 2

1 EU agriculture policy under reform:

page 3 - 6

2 Socio-economic impacts:

page 7 - 11

3 Environmental impacts:

page 13 - 15

Recommendations and conclusion:

page 16

Introduction



Trade Matters!

Trade and foreign direct investment are important instruments in the fight against poverty and ecological degradation. It is an undisputed fact that trade and investment flows can play a positive role in reducing poverty and in halting biodiversity-loss. What is disputed, however, is how these flows should be regulated and organised. Finding ways to maximise the positive contribution of trade and investment flows for sustainable development is certainly one of the greatest challenges of this decade.

The following case study is part of a series produced by IUCN-National Committee of the Netherlands (IUCN NL) and Both ENDS to provide more insight into the relationships that exist between economic policy (such as trade and investment policies), the achievement of sustainable livelihoods in poor countries, and halting the loss of biodiversity. Each case describes a specific example, and offers

recommendations on how to move forward. The cases are intended to support the current discussions worldwide on how globalisation can benefit all life on earth.

The Common Agricultural Policy, world market and the WTO

“I admit I was wrong”

Sicco Mansholt, 1995.

Sicco Mansholt, the first European Agriculture Commissioner and the man behind Europe’s Common Agricultural Policy (CAP), believed in the feasibility of shaping agriculture in the European Union (EU), but later realised that the agricultural policy he created had surpassed its objectives.

By the end of his life, he concluded, “What did we do in Europe? We rendered

the agriculture market inoperative by fixing the grain price, and by doing so, we obtained surpluses of up to forty million tonnes a year. We dumped these surpluses on the world market with expensive export subsidies against remainder prices, forcing Third World farmers into slums and despair”¹.

Mansholt observed the limits of Europe’s agriculture, but simultaneously acknowledged the important role that agriculture can play in the framework of nature conservation – something that is increasingly being recognised.

This case study will attempt to describe the tension between liberalisation of a non-level playing field and the impact this has on farmers and the ecological conditions of Burkina Faso and Tanzania. These countries are to shape their sustainable agricultural development policies whilst confronted with unfair competition from Europe.

We will delve into the specific developmental problems faced by Burkina Faso and Tanzania, and will look at how EU trade policies affect the livelihoods of farmers in these countries, and how these policies could influence the environment. Special attention will be given to the effect of European (export) subsidies in these countries.

¹ Westerman, F. 1999 / De Graan Republiek [The Corn Republic] / Atlas, Amsterdam



1 EU agricultural policy under reform

The Common Agricultural Policy (CAP) was created in response to scarcities in post-war Europe in 1959. The policy aimed to guarantee stable incomes for farmers, and enable their self-sufficiency in basic foodstuffs.

The policy was very successful. In fact, within a decade of its inception, the European agricultural sector produced far more food than Europe could consume. Subsequently, the so-called 'lake of milk' and 'mountain of butter' became synonymous with Europe's abundance of agricultural products.

Table 1:
Share of the EU in world trade in a selection of dairy products (2004)

1.000 tonnes	World Trade	EU share
Butter / butter oil	920	33%
Skimmed milk powder	1.300	17%
Cheese	1.370	37%
Whole milk powder	1.730	28%
Condensed milk	450	48%

Source: Hofstetter, 2004 / Anforderungen an eine Reform der EU-Milchmarktordnung aus der Sicht bäuerlicher Organisationen in Nord und Süd. / ABL-Germanwatch, Hamm-Binn

Trade in agricultural products between the EU member states is free, although the European Council sets common prices against which products can be traded. The most important common price is the floor price, against which farmers can sell their produce to intervention warehouses, if certain quality measures are taken into account. Intervention warehouses are obliged to buy the farmers' produce against the intervention price as soon as the floor price is reached.

The Commission was often confronted with large stocks of certain products, so it found a solution in the payment of export refunds or export subsidies, which cover the difference between the EU price and the price paid in the world market.

The EU policy was reformed several times after the mid-1980's, when surpluses became almost unmanageable. Unfortunately, these reforms didn't solve the problems and international pressure is mounting for more drastic changes. The most recent reform (2003) tries to shift the focus from maximised productivity towards long-term livelihood of rural areas, by rewarding farmers for delivering foodstuffs that meet the three main priorities of the CAP, being quality, safety, and concern for the environment.

The budget spent on the CAP is expected to decrease over the coming years (including 2005). Meanwhile, critics consider the changes too small and the progress too slow.

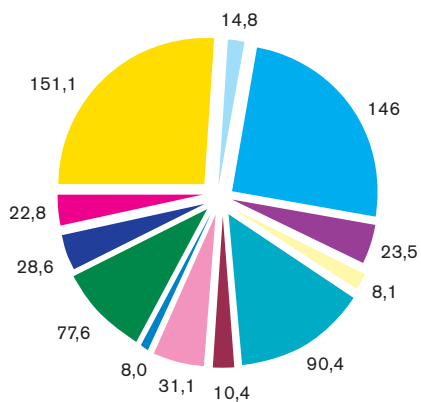


Figure 1:
Share in world production of milk



Source figure 1: Hofstetter, 2004 / Anforderungen an eine Reform der EU-Milchmarktordnung aus der Sicht bäuerlicher Organisationen in Nord und Süd. / ABL-Germanwatch, Hamm-Binn

² Borell, B., Hubbard, L., 2000 / Global economic effects of the EU Common Agricultural Policy / Institute of economic affairs / Blackwell Publishers, Oxford

Subsidised dairy exports and the world market

The EU is the largest producer of dairy products in the world, with a total fluid milk production of 146.5 million tonnes. Only 7% of the total milk produced globally is traded on the world market (approximately 42 million tonnes). About two-thirds of these exports originate from the EU, followed by New Zealand and Australia. The EU and New Zealand are the world's biggest exporters of milk powder. Some of the other leading dairy importers include the Russian Federation, Mexico, and Japan. Europe uses most of its milk to produce cheese, which is more lucrative than milk powder. In the last years New Zealand increased its dairy exports,

especially to the growing Chinese market. At the same time, countries with developing economies offer growth prospects for dairy products. The demand for value added dairy products in these countries is influenced by factors related to growth in household income, urbanisation, and economic conditions. Recent years have shown an increase in exports to growing African economies.

Small amounts, big impact

Despite the fact that the total share of dairy products traded is extremely small when compared to the total production of milk, the impact of this trade is considerable. The most important reason for this lies in the fact that some of the major dairy

producing nations subsidise their dairy sectors and export their surpluses to foreign markets, fiercely competing with locally produced dairy products. In the case of the EU, its common agricultural policy (CAP) has encouraged an increased production of agricultural products in the European member states. This has reduced imports and has increased exports, while higher consumer prices have discouraged consumption, which has further encouraged export².

The CAP not only has an impact on the EU's economy and consumers, but it also affects other countries. The reduced import demand related to the CAP and the use of export subsidies have lowered world prices substantially – especially

those of dairy products. As a result, non-EU producers have had to lower their production, and many underwent drastic reforms in order to be able to compete with European exports, New Zealand being a prime example. At the same time, subsidies have rendered the agricultural market inoperative, because supply does not react on demand, but more on the amount of (export) subsidies available at a certain moment. The EU, however, is not the only culprit. Borell and Hubbard estimate that US and Canadian dairy policies bear a downward influence of over 70% on agricultural world market prices³.

WTO, dumping and the challenge of liberalisation

Multilateral negotiations have tried to tackle the issue of agricultural support for decades. One of the main issues has traditionally been the dumping of food products on the world market. Dumping can be defined as the sale of goods abroad at less than the cost of production.

The rules of the World Trade Organisation (WTO) that prohibit dumping (article 6 of the General Agreement on Tariffs and Trade) are very complicated, which makes it difficult to establish anti-dumping guidelines. Poor countries often lack the legal tools to fight these practises and lack the

funds to hire international law firms that can file a complaint at the WTO. Subsequently, a decade after the enactment of the WTO's Agreement on Agriculture, dumping is still common practice.

As production costs of milk vary, due to all kinds of external reasons, across the globe (see table 2), it is difficult to determine the real cost price of milk. Yet the economic debate focuses only on costs of production. This limits the discussion to one that cannot address other, also important, goals of the economy, which are contributing to environmental and social developmental objectives. Generally, the costs of implementing these objectives are not taken into consideration when discussing actual production costs.

Agriculture is a fiercely debated issue, both in- and outside the WTO. Some people argue that the WTO should not deal with agriculture within the framework of free trade negotiations, as the agricultural sector plays a unique role – both as food supplier and as an important engine of a country's economic development. The free trade principles that underlie the WTO are said to be incompatible with the basic human right to food and the right to choose the origin of your food

³ Borell, B., Hubbard, L., 2000 / Global economic effects of the EU Common Agricultural Policy / Institute of economic affairs / Blackwell Publishers, Oxford



(food sovereignty). Others argue that agricultural subsidies in developed countries tend to benefit the wealthy farmers and multinational agricultural companies and do not prevent small European farmers to disappear⁴. Furthermore, strong evidence suggests that subsidised dairy export affects the lives of dairy farmers in many developing countries⁵. These countries are not able to protect their markets, and are often coerced into following liberalisation policies imposed by the international financial institutions that they go to for financial support. At the same time, agricultural reforms, both in the developed countries as in the framework of the WTO, are slow and do not recognise the needs of developing countries sufficiently. In India, for example, dairy farmers are under threat after the US won a WTO appeal that forced India to stop protecting its dairy farmers.



⁴ Wiggerthale, M., 2005 / What's wrong with EU agricultural subsidies? / www.fairer-agrarhandel.de/ / Hofstetter, 2004 / Anforderungen an eine Reform der EU-Milchmarktordnung aus der Sicht bäuerlicher Organisationen in Nord und Süd / ABL-GermanWatch, Hamm-Binn / Oxfam International, 2002 / Milking the CAP / http://www.oxfam.org.uk/what_we_do/issues/trade/downloads/bp34_cap.pdf.

⁵ Subsequent cases in Jamaica, the Dominican Republic, and South Africa illustrate the adverse effects of dairy product dumping.

Table 2:
Production costs in selected countries 100 litre / € (2003)

Japan	920	Croatia	38,00	South Africa	23,35	New Zealand	38,00
Switzerland	1.300	Canada	37,76	Mexico	22,14	Chile	37,76
Iceland	1.370	EU	28,60	India	17,00	Russian Fed.	28,60
Norway	1.730	USA	24,46	Australia	16,18	Ukraine	24,46

Source: Hofstetter, 2004 / Anforderungen an eine Reform der EU-Milchmarktordnung aus der Sicht bäuerlicher Organisationen in Nord und Süd. / ABL-Germanwatch, Hamm-Binn

Table 3:
Selected statistics for Tanzania, Burkina Faso and the EU

	Tanzania	Burkina Faso	EU
Surface square kilometres	886.000	274.000	
Population size	36.700.000	18.000.000	
Annual growth	1,83%	2,90%	
Economic growth	5,80%	8,00%	
Percentage of population below the poverty line	36,00%	45,00%	
Share of agriculture in GDP	45,00%	31,00%	1,6%
Share of agriculture in export revenue	46,00%	40,00%	

Source: see Table 2

2 Socio-economic impacts of dairy exports to Tanzania and Burkina Faso



Traditionally, milk consumption has been quite low in Africa. But, with population growth and further urbanisation, demand for dairy products has significantly increased. The African dairy sector is struggling to meet this rising demand; this is primarily caused by its own low productivity. The competitive pressure it faces from cheap imports further enhances this problem. Most African countries, with the exception of South Africa, are importers of dairy. This import of milk powder has impacted the development of Burkina Faso and Tanzania in several, perhaps unexpected, ways.

Agriculture in Burkina Faso and Tanzania

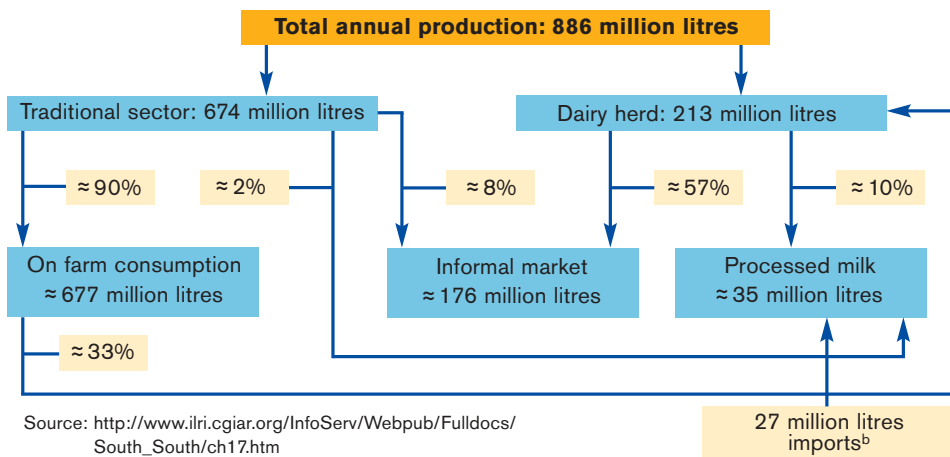
Burkina Faso and Tanzania rank high on the United Nations list of Least Developed Countries. The high rate of population growth in these countries has led to an increased demand for food. Moreover, while the number of rural people is still high compared to developed countries, increasing urbanization has increased the urban demand for food. Nonetheless, food security remains an issue. Although these countries' economies are predominantly agriculture-based, they are net food importers, also of dairy products.

Marketing dairy: local production versus imports

In Tanzania and Burkina Faso agriculture is dominated by subsistence farming, as farmers consume most of what they produce themselves. This means that only 5% of the total milk production reaches the formal market in Burkina Faso, while 15% is traded in the informal sector. Farmers consume approximately 85% of Tanzania's milk production themselves. Subsequently, only 15% of the locally produced milk reaches the market⁷.

Local dairy products face competition by imports mainly in the formal market (supermarkets and other milk resellers in the urban areas). Imported subsidised dairy products, which are sold as milk powder or milk made from reconstituted milk powder in local milk processing units are usually cheaper than the locally produced products. The inability to compete is further exacerbated by factors such as climate, lack of suitable dairy technology, and infrastructure problems (bad roads, lack of water facilities, electricity dropouts etc.). Investments need to improve the local dairy sector are thus at least initially high. Yet the low prices on the market, will make an adequate return on the investment insecure. With low investment, there is little innovation in the local market. As such, one can argue, that the subsidies of the EU and the liberalization policies of the WTO, the IMF and the World Bank has placed a strong glass-ceiling on the agricultural development of Tanzania and Burkina Faso.

Figure 2:
Milk flows in Tanzania⁶



Source: http://www.ilri.cgiar.org/InfoServ/Webpub/Fulldocs/South_South/ch17.htm

⁶ The 'traditional sector' refers to pastoralists, while 'dairy herd' refers to non-pastoralists. The distinction between the 'informal market' and 'processed milk' is that the former is trade in raw milk, while the latter refers to processed dairy products.

⁷ International Livestock Research Institute, 1998 / The Tanzanian Dairy Sub-Sector. A Rapid Appraisal. Vol.2 - Targeting Dairy Development. Morogoro, Dar Es Salaam / MOAC, SUA and ILRI, Nairobi

Tanzania: protecting the market

Tanzania has been trying to develop its dairy sector for a long time, with little success. The country has focused on developing smallholder dairy since the mid-1980s. Although this has led to positive improvements in the sector (according to the FAO⁸ smallholder dairy farming clearly benefits women and helps to alleviate poverty), local production hasn't been able to keep up with rising demand (production grew from 300 million litres in 1970/71 to 600 million litres in 1994/95). This has led to a decrease of annual milk consumption per capita from 22 to 20 litres⁹.

Table 4:
Tanzanian dairy imports in tonnes

Year	Dairy products
1997	3.469
1998	3.869
1999	5.565
2000	4.876
2001	3.942
2002	4.354
2003*	4.869

Source: <http://www.fao.org/docrep/meeting/008/J2088e/J2088e00.htm> - P119_18218

*Customs data, 2003 incomplete

Tanzania also imports dairy products from South Africa¹⁰ and the EU. The EU accounts for 20% of (direct) dairy imports, with the Netherlands as the largest supplier¹¹. These imports consist mainly of milk powder, which represented 71% of imports in 2002¹². Between 1995 and 1998 imports amounted to 27.4 million litres per year (in equivalent litres of liquid milk).

Due to the threat posed by dairy import to the local dairy sector, fifteen private dairy processors joined to form the Tanzanian Milk Processors' Association (TAMPA) in 2001. TAMPA argued that if one of the processors decided to produce milk based on milk powder, all other processors were forced to do the same, in order to be competitive. They managed to lobby the government to impose a ban on imported milk powder. However, milk powder importers and the Tanzanian Confederation of Industries succeeded in lobbying the government to have the ban lifted, which happened the same year it was imposed. The ban was replaced by a suspended duty of 25% and an import tariff of 25%, which was reduced to 20% again in 2002¹³. Van der Mast concludes that some dynamics coincide with the imposition of the duty and tariff: imports of milk products (table 4) have dropped and

⁸ Kurwijila, L.R., Boki, K.J., 2003 / Assessment of dairy development in Tanzania / FAO, Rome

⁹ <http://www.tanzania-online.gov.uk/Agriculture.htm#Livestock>

¹⁰ A large share of the import from South Africa does not originate from South African dairy farms, but is imported into South Africa by multinational companies and re-exported to the African continent, thus possibly originating from the EU as well.

¹¹ http://www.fao.org/docrep/meeting/008/J2088e/J2088e00.htm#P119_18218

¹² FAO: Committee on commodity problems, inter-governmental group on meat and dairy products, 20th session, Winnipeg, Canada, 17- 20 June 2004, Impact of import surges: country case study results CCP: ME 04/2 http://www.fao.org/docrep/meeting/008/J2088e/P119_18218

¹³ Van der Mast, S., 2004 / Coherence Capped; Investigating coherence between Common Agricultural Policy and dutch development policy; A case study of protection in the Tanzanian dairy industry / University of Groningen

¹⁴ Ibid: 36

the price of milk has risen. At the same time milk sales of Tanga Fresh, a local dairy company, increased from 297 million in 2000 to 736 million Tanzanian shillings in 2002. Van der Mast clearly links the increase in sales after the imposition of the tariff and duty to the improvement of the competitive position of locally produced milk versus imported milk powder¹⁴. This is supported by the FAO, that concludes that even though imported quantities

**Table 5:
Imports in milk equivalents and in percentage of consumption**

Year	1999	2000	2001	2002
Litres equivalent milk	40.508.530	25.138.814	22.788.132	13.897.478
Year	1980	1990	2000	
Imports as % of consumption	44	22	20	

of dairy products are small compared to total production, they are significant when compared to the share of domestic production which is marketed in urban and niche markets. Imports, whether they are small or large in quantity can thus have adverse effects on the growth of domestic production and processing industries. Given the fact that dairying contribute significantly to rural economic development and that it thus provides opportunities for resource-poor households, limiting imports of dairy products, for example by imposing an import duty has been beneficial to many farmers in Tanzania. However, policies like the one that was implemented by the Tanzanian government are increasingly challenged by the liberalisation policies pursued by International Financial Institutions and by countries in the WTO and in Regional and Bilateral Trade Negotiations.

Burkina Faso: an open market

There are almost 5 million heads of cattle in Burkina Faso, mostly cows located outside urban areas, of which around 20% are used for milk production¹⁵. Livestock farming is an important sector for the economy, accounting for 12,3% of the GDP¹⁴ and ranks second (after cotton) in terms of export revenues¹⁶. Since most of the agricultural activity consists of subsistence farming, the sector is also important for people's livelihoods. After all, dairy farming provides farmers with a regular income since milk is sold on a daily basis. Dairy animals can also provide cheap manure for the production of cash crops in a mixed farming system. Moreover, drinking milk has health-benefits in countries like Burkina Faso where the nutrient-intake is low. Buying cows is considered a relatively safe investment as their value won't decline very suddenly.

Source: FAO 2004 / Livestock Sector Brief / FAO, Burkina Faso



Milk production is relatively low in Burkina Faso (around 177kg of milk per year), especially when compared to the production figures for the US and the EU, at 7.564kg and 5.610kg respectively¹⁷. Most of the milk (approximately 80%) is consumed by the producers themselves, or is sold on the informal market (15%), while only a small percentage reaches the commercial market (5% of total production). According to FAO figures, the total milk production for 2002 was 179.800 million tonnes, while total consumption was 227.570 million tonnes (FAO statistical Database: www.fao.org).

The EU is Burkina Faso's main trading partner (mainly the Netherlands and France). There has been a strong downward trend in the amount of milk powder imported over the last couple of years, however this could be due to a decrease in food aid, which was provided in the

form of milk powder and counted as imports as well¹⁸. Despite this declining trend, imports still impact the local dairy market, especially considering the size of the commercial market compared to the total production and consumption figures. Dependency on imports for milk consumption stood at almost 20% in 2000. The import of milk powder rose strongly between 2002 and 2003 – the EU exported 967,073 tonnes of milk powder in 2002, reaching 1.579.745 tonnes in 2003¹⁹.

As mentioned before, more milk is consumed in the urban areas, where the demand is mostly supplied with imports²⁰. This means that external providers dominate the commercial market for milk and other dairy products, and that local producers only play a marginal role in their own domestic market. This can be explained by the low productivity of their cows, poor infrastructure, and lack of advanced technology. However, the difference between the price of imported milk powder and locally produced milk (see table 6) is often underestimated as a contributing factor. The presence of a reliable market is also important for the development of the sector, and seeing that locally produced milk is more expensive than imported milk products, this stability

Table 6:
Prices for different types of milk in Burkina Faso in 2005

Products	Price per litre/CFA*
Reconstituted milk from milk powder – sack of 25kg.	200F
Fresh milk produced locally and delivered to milk transformation unit	300F
Reconstituted milk from milk powder, for family use	400F
Locally produced milk, pasteurised in the transformation unit	500F
Locally produced milk, pasteurised in food stores	600F
Imported Ultra High Temperature milk	800F

Source: M. Oudet

*CFA is a currency (the CFA franc) used in 12 formerly French-ruled African countries

¹⁵ FAO, 2004 / Livestock sector brief / FAO, Burkina Faso

¹⁶ Institut National de la Statistique et de la Démographie (INSD)

¹⁷ International Dairy Federation (IDF) / Bulletin of the IDF, No. 361 and FAO, 2004 / Livestock sector brief / FAO, Burkina Faso

¹⁸ <http://www.mra.gov.bf/statistiques/laiteries.htm>; we also need to take into account that import figures are not always reliable.

¹⁹ UN Commodity Trade Statistics Database: <http://unstats.un.org/unsd/comtrade/>

²⁰ Metzger R., Centres J.M., Thomas L., Lambert J.C., 1995 / L'approvisionnement des villes africaines en laits et produits laitiers / Etude FAO Production et santé animale / FAO, Rome

²¹ SOSFAIM, 2004 / Défis Sud, No. 63 / http://www.sosfaim.be/Defis-Sud/ds63/06-07_defi_sud_63.pdf

isn't currently present. The inability of small-holder farmers to compete with the imported products leaves local producers little incentive to improve production and become more competitive. Investments to solve problems and find solutions have

been lacking. Subsequently, one could argue that the presence of milk imports has prevented any development in the dairy sector from taking place since the independence of Burkina Faso²¹.

3 Environmental impact of dairy in the region



The dominating livestock keeping system in Burkina Faso and Tanzania is the transhumance system: Herds are moving from one pasture to another to meet their food requirements. In the following part of this study the impact of dairy development and the specific requirements of intensification will be looked at in depth. The situation in Burkina Faso is used as example.

Resource limitations

In general, many parts of Africa have poor soil and an unfavourable climate for agriculture. This is especially true for the Sahel – the semi desert fringe of the Sahara that stretches from Mauritania to Chad²². For instance, cereal production has decreased from 150kg to 130kg per capita over the last 35 years, while production elsewhere has increased. This downward trend is even more alarming when you take into account that the population in Sub-Saharan Africa (SSA) increased with more than 3% in the 1980s and early 1990s, while the total food supply increased by less than 2%²³.

Precipitation in SSA can be heavy and erosive, and because of high temperatures, there is a high turnover of organic material. The amount of rainfall is still much lower than the potential of evapo-transpira-

tion (water evaporates quicker than it is replenished through rain), causing distinct dry seasons with limited plant-growth.

During the period from November to December it is harvesting time, and herds can live on crop residues. In the dry season, from January to June, the transhumance system moves the herds from the northern to the southern parts of the country. In the wet season, from July to October, herds generally graze on community pastures.

The quality of the soils is also not favourable. Old rocks are the dominating soil type and there are only few young fold mountains, young sediments and rich volcanic deposits in SSA countries. The situation in SSA is even worse if annual nutrient balances are considered, which are estimated to have a negative balance of Natrium, Kalium and Phosphor for the whole of SSA. Moreover, nutrient depletion is high in most SSA countries, whilst nutrient application in SSA countries is low compared to other parts of the world. Table 7 shows the differences in nutrient application. Soils thus have few natural nutrients for plant growth. The general ecological condition of the Sub-Saharan area therefore requires, if agricultural development strategies are to be successful, intensification of agriculture, using external inputs.

Table 7:
The average nutrient application in different parts of the world

Countries	Average nutrient application (kg/ha)
SSA	10
Africa as a whole	20
World	85
Western Europe and East Asia	200

Source: See note 22

Sahelian farmers, as was shown above, have few incentives to maintain, let alone improve output. Costs are much higher than elsewhere. Poor infrastructure, amongst others, means that fertiliser prices are higher in the Sahel than in Europe. Extensive production and low doses per unit area lead to high transport and distribution costs. Furthermore, inputs used on marginal land are inefficient²⁴. Besides this, the use of external inputs requires market orientated production, in other words, competition.

In Burkina Faso natural vegetation, herbs and browse (high quality food) are the basis of ruminant nutrition. Farmers have, however, access to crop residues and agro-industrial by-products as dry season supplements. Fodder crops²⁵ are still rarely used, despite the fact they could be used for intensification of production. With regard to the quality of feed, the major

constraint is the short growing season, which varies between two and six months depending on the zone. Outside the season of active growth the grasslands have a very poor nutritive value, inadequate for the maintenance requirements of livestock. During that season there is not enough protein in the grass herbage to cover maintenance requirements of grazing animals. In order to balance their intake of nutrients, the ruminants rely on fodder trees and shrubs. In all cases the forages are poor except in the active growing

²² Breman et al., 2001 / Resource limitations in Sahelian agriculture / Global Environmental Change, vol.11:59-68 / Elsevier

²³ See note 22

²⁴ See note 22

²⁵ Coarse food, especially for cattle and horses, composed of entire plants or the leaves and stalks of a cereal crop.

season. Crop residues are therefore an important fodder resource. They include cereals as bulrush millet, sorghum, maize and rice straw as well as the haulms of pulses, cowpeas groundnut and Bambara groundnut. Cowpeas could have potential for development of the dairy sector in SSA countries as Burkina Faso because this type of crop is drought resistant, meaning they produce high protein food even in poor soil²⁶.

Improving the availability and quality of forage has been a preoccupation for those responsible for animal husbandry since the nineteen-fifties in Burkina Faso. Despite some interesting results, the development of fodder growing is very timid. Only dolichos (*Lablab niger*), dual-purpose cowpea and velvet bean (*Mucuna* species) have been well enough accepted by the producers. Despite this acceptance, the area for fodder crop growing remains very small. Generally speaking there are three major kinds of obstacles concerning fodder growing: the problem of land rights, the problem of time in the agricultural calendar and the problem of seed supply. In an uncertain climate as found in the Sahelian and sub-Saharan zones the producers must give priority to food crops. This is why farmers in these regions accept dual-purpose cowpea more readily than purely fodder crops. The agricultural

calendar for fodders is almost the same as that of cereals; there is therefore a clash of demand for labour and the fodder loses out. Finally, the poor availability of seeds is the main constraint to develop sown fodders. The demand is far greater than the supply and the price of imported seed is unaffordable, thus raising the price for dairy, depending on fodder availability.

Commercialisation of the dairy industry and ecology

The current situation of the dairy sector in Burkina Faso is still dominated by the transhumance livestock system. This means that herds are moving from one pasture to another to meet their nutrient needs. As we have seen, the climate makes Burkina Faso rather unsuitable for heavy exploitation of soils, also for grazing. One of the reasons the pastoralists chose to practice transhumance livestock keeping is because the price of feed is too high²⁷. Therefore, the only solution is to make use of the common good of grazing areas. From a commercial point of view, the transhumance system poses problems, as it is unable to supply the urban market permanently, that is to say, throughout the year, with milk.

The negative external costs this system could entail are obviously not included in any cost price. In a non-planned transhumance system, where common grounds are used without (co-)management, livestock keepers compete with each other. Because of the scarcity of grazing grounds and nutritive feed, they try to acquire as much feed for their herd as possible. This obviously leads to unsustainable exploitation of the common grazing

²⁶ International Development Research Centre

²⁷ Ogri, O.R., 1998 / Environmental problems associated with livestock production in tropical Africa / *The Environmentalist*, Vol. 19, No. 2



grounds. In this sense, the current transhumance system causes environmental degradation because increased herding and agriculture have caused excessive removal of vegetation.

Studies have proven that livestock keeping leads to changes in vegetation. In the Sahel, certain types of vegetation were first replaced by other types, which were more resistant to grazing. Then, this type was again replaced by one which was less suitable for pastoralism. Finally the herbaceous layer disappeared. In the end of the process, only small bushes, unsuitable for consumption by the animals, remained. The degeneration of the herbaceous layer went hand in hand with the degeneration of the bushes toward a state of bare soil²⁸. A sedentary system may allow for better soil and water management and agricultural feeds could be used from industrial and agricultural-industrial by-products²⁹. This would relieve pressure from the common grazing grounds. In addition, it might reduce the problems created by competition over ground and water resources as noted by the ministry of livestock resources. Currently, poor management is also a barrier to development of the sector. Improvement of management would not only make the sector more productive and competitive but it could go hand in hand with the resolution of many problems



which are now directly related to poor management. Even though the management problem can be found, both in the transhumance as in the peri-urban system, in the case of the latter soil management is facilitated; manure can be re-used, and straw is available for urine absorption.

Commercialisation of the dairy sector in Burkina Faso could lead to a shift from a transhumance to a sedentary or a semi-sedentary system of livestock keeping. The latter, also called per-urban system, puts herds close to urban centres. In order to commercialise milk, it is important to be close to the formal market, which is found in the urban areas. Due to the perishable character of milk, time is of capital importance in the handling, transporting and processing of the product. Because of the lack of good infrastructure throughout the country it is important to be close to the processing units. This will increase the pressure on the rural areas around the cities even more.

²⁸ Boutrais, J., 1994 / Dynamique des systèmes agraires; à la croisée des parcours; pasteurs, éleveurs, cultivateurs / Orstom, Paris

²⁹ Ogrì, O.R., 1998 / Environmental problems associated with livestock production in tropical Africa / The Environmentalist, Vol. 19, No. 2

Recommendations and conclusion



Agriculture employs the majority of the population in Burkina Faso and Tanzania. Dairy development seems to have potential, but the subsidization of dairy products in the US and the EU is a barrier. As the people in Burkina Faso and Tanzania rely on agricultural activity for their subsistence, gradual development in this sector could alleviate many people from poverty. The lower priced imported milk powder, outcompetes local products, making it difficult for the producers to crawl out of the so called 'poverty trap'. Development

of the dairy sector is further complicated with the difficult ecological environment in which it takes place. The investment required to overcome those ecological barriers is therefore high. Faced with the constraint of strong competition from outside, such investments will not be possible without flanking trade-impacting regulations. If investments in the peri-urban dairy sector succeed, it will contribute to prevent overgrazing and as such also prevent further desertification.

Thus, If the EU is serious about sustainable development, it must:

- 1 Radically reform its export-stimulating Common Agricultural Policy, especially in regard to providing export subsidies;
- 2 Provide governments in developing countries the necessary policy space to protect their markets from imports;
- 3 Assist governments and farmers in finding sustainable ways in developing the dairy sector.

Credits



Stefan Verwer (Both ENDS), **Julien Sunyé**, and **Reanne Creyghton** (IUCN-National Committee of the Netherlands) wrote this case. It depended greatly on the expertise of **Pieter van der Gaag** (IUCN-National Committee of the Netherlands), **Martien Hoogland**, **Burghard Ilge**, **Casper van Nassau** (Both ENDS), **Roel Bosma** (WUR), **Michel Oudet**, and **Saskia van der Mast**.

Editing **Karin Engelbrecht** (Amsterdam) / Design and images **Margo Vlamings** (Arnhem) /
Printing **Drukkerij Advadi** (Arnhem).

© june 2005

This document has been produced with the financial assistance of the Dutch Ministry of Housing, Spatial Planning and the Environment (VROM) plus the European Commission. The views expressed herein are those of Both ENDS and IUCN-National Committee of the Netherlands and can therefore in no way be taken to reflect the official opinion of VROM and the European Commission.