

World Food Programme and the Pastoral sector in Burkina Faso, Mali and Niger

Report to the Ministry of Foreign Affairs of the Netherlands (DGIS)

Ruud Bronkhorst
rbronkh@wxs.nl

June 2001

Table of contents

	pag.
Summary	3
Introduction	4
1. WFP policies concerning meat deliveries to Sahelian countries	5
2. WFP deliveries of canned meat and fish	7
3. Advantages and disadvantages related to the local purchase of meat	10
4. Potential supply of meat	13
Conclusions and Recommendations	14
Sources	15
Annexes	
I The pastoral sector	
II Herd size in Burkina Faso, Mali en Niger	
III Domestic meat consumption per head	
IV Livestock exports	

Tables

1. Deliveries of canned meat and fish by WFP to Mali, Burkina Faso and Niger during the period 1990 - '99	7
2. Variations in price in different periods between some categories of animals in FCFA on Léo market	10

Annex II

II-1 Cattle stocks 1.000 head	
II-2 Small ruminants stocks 1.000 head	

Annex III

III-1 Domestic meat consumption in Burkina Faso, Mali en Niger in 1994	
III-2 Domestic meat consumption during the period 1984 - '86	

Annex IV

IV-1 Cattle exports during the years 1994 - '98	
IV-2 Carcass wt beef and veal in kg	
IV-3 Export of beef and veal in MT	
IV-4 Number of cattle exported from Burkina Faso and Niger according to CEBV	
IV-5 Quantities of beef and veal exported using CEBV data	
IV-6 Exports of small ruminants from 1994 - 1998	
IV-7 Exports of small ruminants from 1994 – 1998 according to CEBV	

Graphs

1. WFP deliveries of canned meat and fish during the period 1990 - 1999	8
2. Share of each country in WFP's deliveries of canned meat and fish during the period 1990-1999	8
3. Exports of beef and veal and WFP deliveries	9
4. Export and domestic consumption of beef and veal and WFP deliveries of canned meat and fish in MT in 1994	13

Annex IV

IV-1 Exports of beef and veal in MT according to data by FAO and CEBV	
---	--

Summary

This report concerns the effects of the delivery of meat by World Food Programme to the Sahelian countries Burkina Faso, Mali and Niger. It shows that these countries have an abundant supply of meat, which is an important export product for them. Because of that it is recommended that the delivery of meat to these meat producing Sahelian countries should be terminated. Because of the advantages, first of all for the producers, but also for the other citizens and for WFP itself, imported meat should be replaced by either locally purchased pulses or by locally produced meat. Should the choice in local purchase be made to buy meat instead of pulses, it is recommended that the local meat factories should be supported with advice that will enable them to upgrade their skills in order to be able to fulfil the necessary hygienic conditions. In that case WFP can purchase local meat instead of importing it.

Introduction

This report deals with World Food Programme (WFP) policy with regard to its effects on cattle-owners in three Sahelian countries (Burkina Faso, Mali and Niger). It proposes solutions in terms of what the Dutch government could do to influence WFP policy, in order to bring their policy more into line with development needs.

The way livestock is kept in these countries consists for the main part of pastoral cattle raising (Annex I), carried out by Fulani (Peulh) and Touareg among others. The problems of the Touareg have received ample attention for some time because of the so-called Touareg revolt in the nineties. Besides the many people who fled to the cities or to other parts of their own country, an estimated over 10.000 Nigeriens fled to Mali, Chad, Algeria and Burkina Faso, while about 150.000 Malians in their turn sought refuge in Niger, Mauritania, Algeria and Burkina Faso.

Peace negotiations finally resulted in agreements between governments and rebels. On the 27th March 1996, during a great ceremony in Timbuktu, arms surrendered by the rebels were burnt in a great fire (Flamme de la Paix). On this occasion the Minister of Development Cooperation of the Netherlands, then Mr. Pronk, promised assistance to the northern zones. The truce still holds, but is very weak and new problems can occur any moment.

Economically the northern zones of Burkina Faso, Mali and Niger are suited for almost nothing but pastoral cattle raising. Although this sector is in a crisis (Annex I), pastoral cattle raising remains for the moment the best solution for the inhabitants of these regions.

There are possibilities, however, for supporting pastoral cattle raising in a rational way, thereby making a small contribution to the solution of a great problem. To do so, the support of WFP is required. Until now, through its role in providing meat, WFP has conducted a policy that does not take the interests of the pastoralists sufficiently into account. Its policy has been slightly adjusted recently, but I think that WFP needs a little push in the right direction so that with its co-operation in future the suffering pastoral sector can be assisted as well.

The purpose of this report is to suggest means to achieve this goal.

For this study I will concentrate on the countries Burkina Faso, Mali and Niger because these three countries have much in common. All three are land-locked. They are therefore confronted with huge transportation costs for all their imports and exports. The countries have common borders and pastoralists do not bother about borders very much. There are few good roads to the area and within it, so that all goods have to be transported over the same roads. These countries have, too, relatively easy access to each other. These are also the countries (esp. Mali and Niger) where the Touareg rebellion has been most severe.

In the first part of the report (Chapters 1 and 2) it is argued that WFP deliveries of meat to the meat producing countries in the Sahel should be stopped. Meat deliveries should be replaced by either pulses, or by locally purchased meat. In the case of pulses these should be locally bought as well, whenever possible.

In order to enable the local purchase of meat, in the second part (Chapters 3 and 4) it is proposed to give advice to local factories in order to enable these factories to fulfil the necessary hygienic requirements. In that case WFP will be able to purchase locally instead of importing. Finally conclusions are drawn and recommendations are formulated.

1. WFP policies concerning meat deliveries to Sahelian countries.

WFP has been supporting development projects in Sahelian countries for several decades, i.e. in the form of food-for-work projects. This kind of assistance implies that people who are working on development projects are being paid for their labour by means of food rations. For long time it has been a point of discussion whether people who are working on a development project from which they will benefit themselves, should be paid. Food instead of money is often chosen as an intermediate solution. Usually canned meat or fish are part of the food ration in order to provide the necessary proteins.

Recently WFP has taken a more critical attitude towards the supply of food aid in the form of canned meat to Sahelian countries. The reason for this was the diminishing willingness of donors to provide food for these countries. This led WFP to a reconsideration of its policies for these countries: in the case of food purchase the choice is made for "low-cost, high-value" food. This means in practice that where WFP has to finance the purchases itself, meat is being replaced by pulses. This is because pulses contain as much proteins as meat and fish. CSB, corn/soy blend, in particular, which is 80% corn and 20% soy, is a good nutritional supplement that contains all the necessary vitamins and minerals.

For example (Source: WFP): In 1999 WFP purchased meat in Italy for distribution in Kosovo. Costs \$ 850 per ton. In comparison yellow/split peas were \$ 210/220 per ton. The total cost, including costs of transportation, for shipping these to the Sahelian countries would have been \$ 1050 per ton of meat, versus \$ 410/420 per ton of peas.

Local purchase of niébé beans in Niger was even cheaper: \$ 300 - 387 per ton, delivered respectively Tahoua, Agadez and Dosso, and Niamey.

However, the meat that was delivered to the Sahelian countries consisted of gifts in kind. That means that WFP costs in these cases were only the \$ 200 transportation costs.

The choice for pulses is very rational. It is a pity though, that this choice has been made only recently, at a moment when WFP was in a financially weak position. It has also become evident that the local population itself prefers fresh meat to WFP canned meat.

The intended move of WFP Western-Africa HQ's from Rome to the region (Dakar) in September 2001 will probably lead to a critical review by WFP of existing policies, and the formulation of new policies.

The question that should be discussed is whether there is a justification for providing meat to a meat producing area.

If these shipments do have any effect on the local economy, it is a negative one. Additional supply to a market not in crisis is not favourable for local trade. Besides, meat is not a common food for the majority of the local people: it is only eaten at special occasions. If, then, meat is consumed, fresh meat is preferred above canned meat. By shipping meat instead of purchasing locally either meat or pulses, a good opportunity to strengthen local markets by local purchases is lost, and local markets are weakened.

The fact that in most cases WFP ships meat that consists of gifts from donors, so that WFP only has to pay for the cost of transportation, does not remove WFP from its responsibility of having a critical look at the effects of the shipments of meat, and of informing the donor that this gift is not appropriate in this particular country.

For the reasons above it will be important to have a close look at the formulation of WFP future Sahel policies, and to take action in time so as to redirect these policies appropriately. If this formulation of policies is left entirely to WFP, the interests of donors

and WFP itself will prevail again.

To summarise:

- a. the local population prefers fresh meat to WFP canned meat,
- b. the effects of shipping WFP canned meat are negative for the local economy,
- c. the costs in case of meat purchases outside the region are much higher than for pulses, whereas the nutritional value is the same,
- d. The local purchase of pulses can be cheaper than purchase outside the region, and local purchase stimulates the local economy.
- e. WFP has adjusted its policies only when its own financial resources were at stake,
- f. There is a need to influence WFP policies concerning shipment of meat to the meat producing Sahelian countries.

2. WFP deliveries of canned meat and fish

During the period 1990-1999, WFP has distributed canned meat and fish to Burkina Faso, Mali and Niger as part of its total food distribution. Quantities may change from year to year, and there were some years during which a specific country did not receive any canned meat and fish at all, but on the whole there was a continuous flow of canned meat and fish to Burkina Faso, Mali and Niger.

The next table shows the total deliveries of canned meat and fish by WFP to Burkina Faso, Mali and Niger during the period 1990 – '99. Fish and meat are taken together because WFP provides both meat and fish as part of a balanced diet (proteins), and meat and fish are in that sense changeable.

Table 1 Deliveries of canned meat and fish by WFP to Mali, Burkina Faso and Niger during the period 1990 - '99

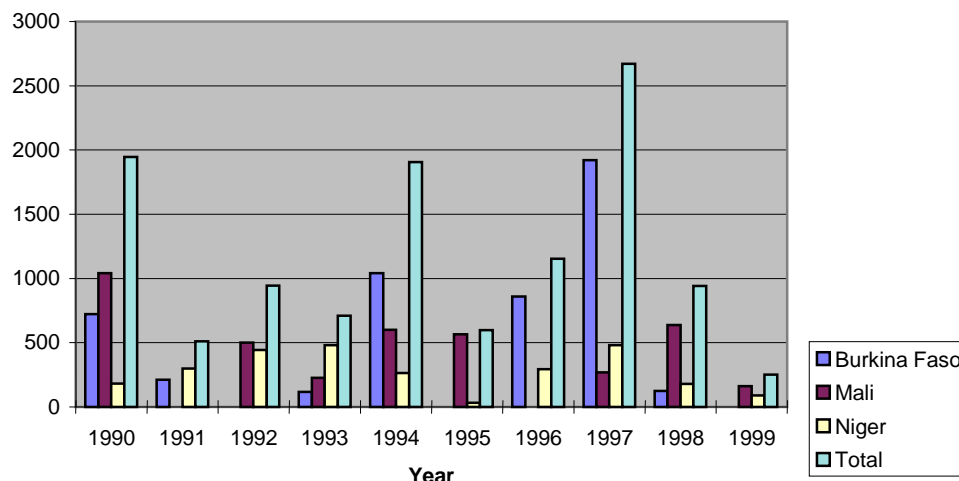
Quantities in MT				
	Burkina Faso	Mali	Niger	Total
1999	-	161,14	89,76	250,9
1998	125,65	638,29	179,11	943,05
1997	1921,9	269,9	480,15	2671,95
1996	860,21	-	293,85	1154,06
1995	-	566,43	31,43	597,86
1994	1040,85	599,55	265,03	1905,43
1993	116,28	227,97	481,31	709,28
1992	-	501,15	442,7	943,85
1991	212,06	-	299,8	511,86
1990	721,91	1041,43	181,99	1945,33

Source: WFP/INTERFAIS

On average, this amounted to 1.163 MT a year over this 10 year period, and over the period 1994 - '98 it even rose to 1.454 MT a year.

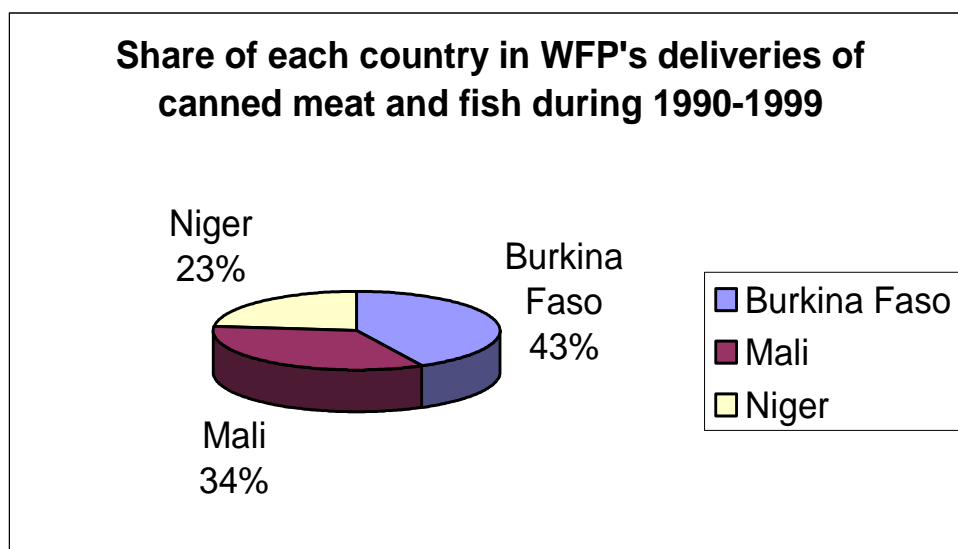
Totals per country are shown in next diagram.

Graph 1 Deliveries of canned meat and fish by WFP to Mali, Burkina Faso and Niger during the period 1990 – 1999.



Sorted out country-wise it appears that during these ten years most of canned meat and fish has been shipped to Burkina Faso, 4.999 MT, followed by Mali with 4.006 MT and that the smallest quantity has gone to Niger, 2.745 MT.

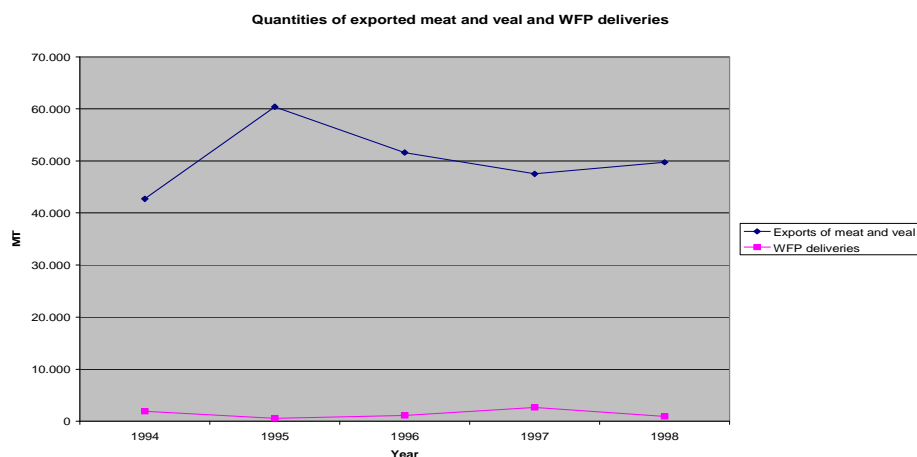
Graph 2



It appears that the quantities of canned meat and fish distributed by WFP are very small compared to the quantities of cattle exported, namely an average of 1,454 MT which WFP supplied a year over the period 1994 - '98, against an average export of 50.403 MT of beef and veal (source: FAO) a year during this period (Annex IV). As a percentage that is only 2,9 %. Should we use the data of CEBV (Annex IV), the percentage would be even lower. The percentage would diminish even further, if we also take into consideration small ruminants. In 1994 the value of cattle exported amounted to 19,9% of total export values of the three countries taken together (Annex IV).

The next graph shows (according to FAO) the exported quantities of beef and veal, compared to the quantities of WFP imported canned meat and fish over the years 1994 - '98.

Graph 3 Exports of Beef and Veal and WFP deliveries



From Chapters 1 and 2 the following conclusions may be drawn:

1. WFP has been shipping meat to countries where meat is one of their few resources and even an important export product
2. The import of meat should be terminated, and this should become official, written policy
3. The policy that has already been initiated by the WFP staff, namely to replace imported meat by pulses, is a step in the right direction
4. Whenever possible, it should be practice to purchase locally
5. It should be examined whether it is cheaper to purchase meat or pulses locally

In the next chapters it will be argued that, in order to enable the local purchase of meat, efforts should be made to create the conditions that will make this possible.

3. Advantages and disadvantages related to the local purchase of meat

In order to stimulate development, it is desirable that as much value as possible is added in the country of origin of the product. In the case of meat, this could be done by supporting existing local meat factories (such as those where meat is dried and smoked) with advice about hygiene so that they become able to fulfil WFP criteria.

Should WFP in future purchase from these local factories instead of importing, this would be a great help to these factories.

It would not only be positive for the factories, as it would also increase demand for cattle and therefore the chances of survival of the pastoralists.

When examining the advantages and disadvantages for the region connected to the establishment of such a meat factory, a striking advantage is that processed meat can be kept for a longer period. This gives the factory the possibility to purchase at the most convenient time, which will often be when prices are low. For the livestock-owner this is beneficial as well, because it creates the possibility for him to sell in drought years when he is obliged to sell because he cannot keep his cattle anymore. This will have a stabilising impact on prices. This is especially important in years of continuing drought when cattle prices go down very rapidly and the terms of trade cattle/grain deteriorate very fast. In these years, the possibility of selling to the meat factory will lay the basis for a certain bottom price.

The fact that prices can fluctuate largely within one year can be illustrated by prices in the market of Léo in Burkina Faso. In particular, the price difference for a bull between the end of the dry season and the rainy season is very large (67%).

Table 2 Variations in price in different periods between some categories of animals in FCFA on Léo market (estimations PDCS, 1991)

	âge (ans)	fin saison sèche	saison de pluie
BOVINS			
taureau, bonne état	5	42.000	70.000
vache	5	25.000	30.000
PETITS RUMINANTS			
chèvre, bon état	>2	3.000	3.500
mouton, bon état	>2	2.000	3.000

Source: De Boer et Kessler 1994, estimations PDCS, 1991.

Price differences in drought years can even be much higher, sometimes even dramatically so.

The higher prices livestock-owners can receive in drought years through the presence of the meat factory, can prevent income from falling too rapidly. Since there will be no dramatic fall in income of the cattle-owners they will be less reliant on food aid. Their capacity to rebuild their herds after the drought is higher as well, so that they don't have to wait for well-meaning relief agencies to come to their support.

At the national level, higher income for cattle owners will lead to higher tax revenues after some time, and this in turn will eventually lead to a higher standard of living in the country.

Imported meat will be replaced by locally purchased meat. Food aid is a kind of assistance that should be used very carefully in order not to disturb local markets. In the case of grains, it is usual to check whether the quantity of grain imported does not have a negative effect

on the local grain markets. In the case of meat, checking might be a bit more difficult, because it is not obvious whether imports by WFP affects local demand, or that meat which wasn't part of the diet before enriches the diet.

The amount spent on purchase of cattle, however, is now spent within the country and remains there, instead of in the donor's country. Although the donor will provide the same value of food as before, it brings him less benefit because now the domestic demand in Burkina Faso, Mali and Niger is stimulated rather than his own domestic demand, and an additional market is lost.

The growth of such a factory depends on a number of limiting conditions. It must be able to generate a profit, otherwise no entrepreneur will put any money into it. It is at this stage that WFP could play a positive role: *if* meat remains part of the WFP food basket, this meat should be bought locally. If WFP continues to deliver meat to its beneficiaries and purchase this meat locally, the factory would have a solid basic turnover.

Hygiene will probably be the most difficult problem to solve. It should be kept in mind that not only local hygienic demands must be met, but WFP (high) hygienic norms as well. This requires a high degree of expertise within the factory which in turn requires assistance through education.

If local meat factories were stimulated so that WFP could buy its meat from these factories, this would have the following advantages and disadvantages:

Advantages

At the international level *for WFP*

- lower transportation costs
- less complicated logistic operations
- because of the increase and stabilisation of income to the cattle-owners, lower demand for emergency food aid

At the national level *for the citizens of Burkina Faso, Mali and Niger*

1. improved marketing possibilities for local produced cattle
2. better marketing possibilities for cattle during drought periods as well, preventing prices from falling too low
3. these improved marketing possibilities enhance the possibilities of survival for a population threatened with regard to its traditional way of living, with none or very few alternatives outside pastoralism
4. creation of added value
5. capital enters the country as money instead of food
6. higher tax revenues
7. because of the increase and stabilisation of income to the cattle-owners, less demand for emergency aid
8. this part of the food-basket can be distributed more rapidly
9. (a bit) less dependant on fluctuating exports
10. the meat that will be distributed meets the local preferences better than imported meat.

for WFP

part of the food aid basket can be distributed more rapidly

At the local level

1. growth of the meat factories
2. training for the employees

Disadvantages

At the international level

for donors

- fewer possibilities for donors to get rid of their surpluses
- capital expenditures destined to buy meat do not remain in the donor country

To assist the factories more in their development, the possibilities for exporting meat instead of cattle to the coastal countries should be (re-)examined. It seems that in Ghana they would prefer to import meat from the Sahelian countries instead of cattle, as is the case now¹. Should this be correct, this would provide additional possibilities for these factories.

It appears from above that local purchase has many advantages, and this would provide a good stimulus to pastoralists as well as to local factories. These factories do need assistance, however, to meet the requirements.

Another possibility would be to stimulate the creation of a regional meat factory. This factory could provide WFP with meat for the entire region. Besides the traditional techniques of meat preparation, such a factory could eventually can meat as well.

However, there are complications involved in such a regional factory. Practice shows that even with grains it is not easy to transport food from one country to the next. That's why WFP effectuates its local purchases of grain within the country where the food-assistance is needed. This means that grain for Niger will not be purchased in Mali, but only in Niger itself. The reasons for this are:

1. border-crossing is too difficult; bad roads, many delays at the borders
2. truck rates to go from one country to another are too high
3. hygienic standards vary from country to country, and that leads to great problems at the border.

Where these problems already exist with the transport of grain from one country to the other, it is obvious that these will occur even more in the case of transport of meat.

Further research will have to show whether a regional factory will be feasible, or if it will be better to support factories at national level.

¹ Such was the impression of Nancy Morgan, FAO, after her return from a mission to Ghana

4. Potential supply of meat

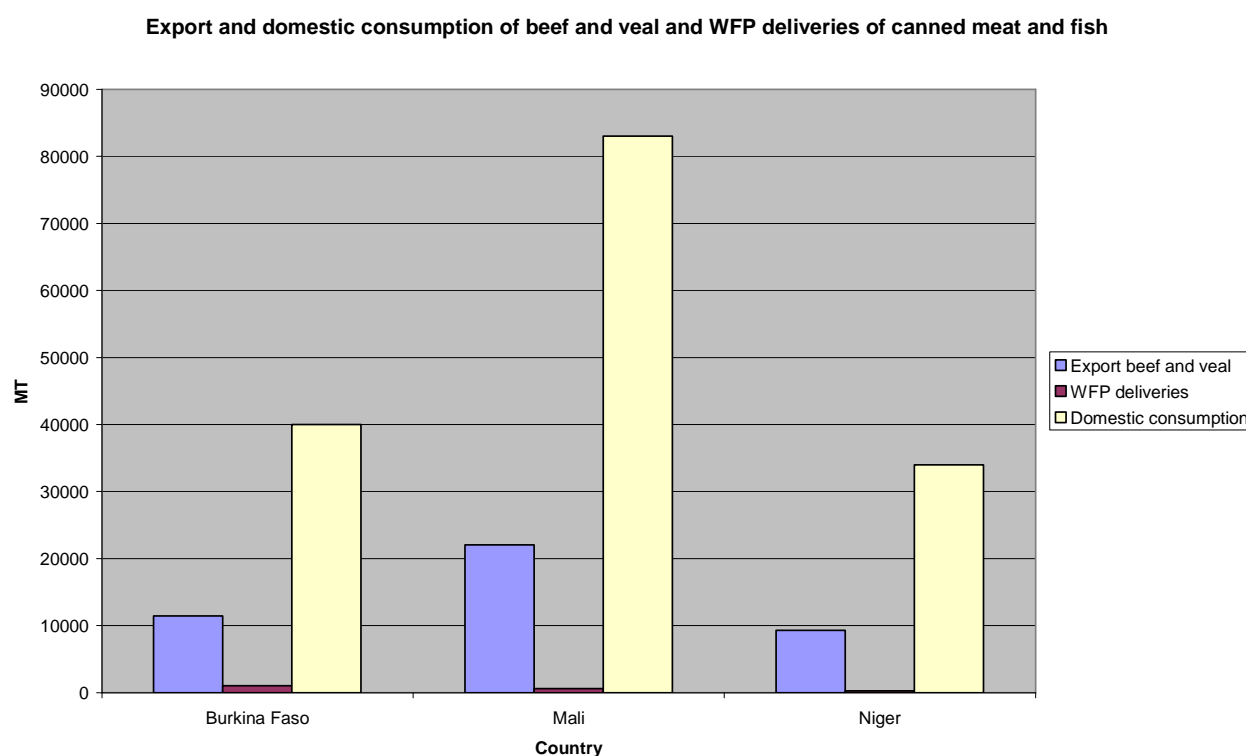
In this chapter the question will have to be answered whether the supply of cattle will be sufficient to replace the quantities of canned meat and fish that is actually distributed in the WFP projects.

In Annex III it is shown that the quantity of domestic production is sufficient to cover the needs of domestic consumption, and in Annex IV that there is even room for a considerable exportation of cattle.

Chapter 2 indicates that the quantities of canned meat and fish by WFP are very small compared to the exported number of cattle, namely 2,9% by the most unfavourable data.

The next graph shows schematically country-wise domestic beef and veal consumption and exports (according to FAO) and WFP deliveries of canned meat and fish for the year 1994.

Graph 4 Export and domestic consumption of beef and veal and WFP deliveries of canned meat and fish in MT in 1994



The conclusion is that the number of cattle potentially available is more than sufficient. Supply to the meat factory will not change either domestic consumption or the export position significantly, whereas it will lead to a certain stability in price. Besides it will add value by the additional processing and attract foreign currency in case WFP purchases from the factory.

Conclusions and Recommendations

1. In the past WFP policies for the meat producing Sahelian countries paid too little attention to the interests of the cattle-keeping population in these areas ,
2. The promise that the then Minister Pronk gave to assist the peace process, makes support for the pastoral way of cattle raising important,
3. It is necessary to exercise influence on WFP policies concerning shipment of meat to the meat producing countries in the Sahel,
4. The recently started, but not formally approved, WFP policy to replace imported meat by pulses, is a step in the right direction,
5. Being an important donor of WFP, the representative of the Netherlands should propose in the Executive Board that WFP formally decides not to send any meat to the meat producing Sahelian countries anymore so as not to disturb the local market,
6. It should be decided upon from case to case whether the local purchase of meat or pulses is preferable,
7. In order to be able to purchase meat in the meat producing countries of the Sahel, research should be done regarding what concrete possibilities exist for the local purchase of dried or smoked meat, or whether assistance should be given to the creation of a regional factory that can produce canned meat as well,
8. In order to augment the possibilities of local purchase of meat, the Dutch Government could assist factories by providing advice on matters of hygiene,
9. Assistance could also be provided for the study of possibilities for exporting processed meat to the coastal countries and the harmonisation of hygienic regulations in the different countries,
10. Should possibilities exist for purchasing meat locally, WFP should commit itself to purchase locally instead of importing meat,
11. As a general rule, WFP as well should support efforts to add value locally.

Sources

- Boer, Fred de et Kessler, Jan-Joost: Le système d'élevage Peulh dans le sud du Burkina Faso, Université Agronomique de Wageningen, Dépt. De la Foresterie, 1994
- Bronkhorst, Ruud: Pastoralisten in de "(semi-)aride" gebieden in Afrika, report to the Netherlands Ministry of Foreign Affairs, 1991
- CEBV, Internet 2001
- FAO 1: Production Yearbook vol.52, 1998
- FAO 2: Trade Yearbook, vol. 52, 1998
- FAO 3: Food Balance Sheet 1991
- FAO 4: Food Balance Sheet 1994, Internet 2001
- FAO 5: FAOSTAT Database Results, © FAO 1990-1998, Internet 2001
- IMF; Balance of Payments Statistics Yearbook, vol 50, 1999
- WFP: - Jamie Wickens, Deputy Director Operations Department (OD)
 - Oscar Sarocca, officer previously responsible for Sahel policies
 - William Hart, Head MSPT, Food Commodity Procurement
- WFP/INTERFAIS

Annexes

Annex I The pastoral sector

For many centuries the livestock sector in Burkina Faso, Mali and Niger has been the domain of so-called pastoralists. A common characteristic of pastoralists is movement with herds. This can vary from complete nomadism to being partly sedentarised whereby part of the production-unit² leaves part of the year with the herd to other grazing areas (transhumance). The reason that until recently livestock was almost exclusively kept in the northern parts of the Sahel was the presence of animal diseases (trypanosomiasis), that prevented raising animals in the more southern areas.

The pastoral way of living, however, became more and more difficult to sustain over the years. Borders prevented their free circulation, based on the movement from one pasture and waterpoint to the next pasture and waterpoint. Besides, and this was fatal to both man and animal, in the seventies and eighties of last century great droughts occurred. Thousands of animals died and because of that the basis fell away from the pastoral economy, all the more because the terms of trade animals/grains deteriorates very fast in drought periods. To this should be added the growing population pressure in the Sahel. Because the population in the rural areas is growing, more and more land is brought into cultivation, including land that because of its situation on the borders of the Sahara, isn't suited for cultivation at all. The consequence of the growth of the area of land taken into cultivation is a diminution of pastures. Horticultural projects were started near waterpoints, with the consequence that animals couldn't get near the water anymore. Therefore more animals have to live on less and, importantly, less suitable land, which in itself leads to overgrazing and degradation of the environment.

Outside the area of livestock keeping, there are few possibilities for the pastoralist to generate an income. In case, forced by circumstances, he sedentarizes, only the most marginal land is available for him. Sedentarisation means changing to agriculture, for which he lacks the necessary specialised knowledge. Socially a consequence of all changes is diminishing social structures that are not replaced by good alternatives.

So unfortunately, the possibilities for the pastoralist of surviving with his herds are diminishing, without there being many alternatives available to him for earning a living. This disappearance of social and economic structures with pastoralists is a potential source of great problems, as illustrated some years ago by the Touareg revolt in Mali and Niger. An intervention on behalf of these people therefore is not only economically important, but also in order to retain political stability.

² The production-unit is the unit within which decisions concerning production are taken. This unit can consist of one or more households.

Annex II Herd size in Burkina Faso, Mali and Niger

FAO data indicate that over the years 1994 - 1998 there were on average 12.185.000 cattle spread over the total area of the three countries.

The herd of small ruminants in these years achieved an average of 15.566.000 sheep and 21.575.000 goats.

It should be realised, however, that errors may be very large, due to the near impossible task of getting to know the real numbers in these vast areas.

Besides these animals there are large quantities of chickens, pigs, camels etc.

The human population in 1994 was 10.022.000 in Burkina Faso, 9.681.000 in Mali and 8.805.000 in Niger. In total 28.508.000 persons.

Source: FAO 3

Tables 1 and 2 indicate the herd sizes of cattle and small ruminants (sheep and goats) in the three countries

Table II-1 Cattle stocks 1.000 head

	Cattle					
	Stocks 1.000 head					
	1989-91	1994	1995	1996	1997	1998
Burkina Faso	3.937	4.261	4.346	4.433	4.522	4.550
Mali	5.007	5.380	5.541	5.708	5.882	6.058
Niger	1.712	1.968	2.008	2.048	2.089	2.131
Total	10.656	11.609	11.895	12.189	12.493	12.739
Source: FAO 1, FAO 5						

Table II-2 Small ruminants stocks 1.000 head

	Stocks 1.000 head					
	Sheep					
	1989-91	1994	1995	1996	1997	1998
Burkina Faso	5.048	5.686	5.800	5.950	6.207	6.350
Mali	6.072	5.173	5.431	5.703	5.950	5.975
Niger	3.100	3.678	3.789	3.849	4.151	4.140
Total	14.220	14.537	15.020	15.502	16.308	16.465

	Goats					
	1989-91	1994	1995	1996	1997	1998
Burkina Faso	6.563	7.242	7.400	7.550	7.914	7.950
Mali	6.072	7.380	7.748	8.135	8.550	8.525
Niger	4.974	5.566	5.716	5.869	6.025	6.307
Total	17.609	20.188	20.864	21.554	22.489	22.782

Source: FAO 1, FAO 5

Annex III Domestic meat consumption per head

In spite of the fact that so many animals are kept, meat consumption per caput is low. Meat is a luxury product that is eaten only occasionally. The next table shows domestic meat consumption, split into Beef and Veal, Mutton and Goat meat, and Total meat consumption. Total meat consumption comprises also pigment, poultry meat etc. In countries like Mali and Niger pig meat consumption is because of religious reasons very low. The origin of domestic meat consumption is completely from domestic production.

Table III-1 Domestic meat consumption in Burkina Faso, Mali en Niger in 1994

	Meat and Veal in MT	Meat and veal per caput in kilograms	Mutton and Goat meat in MT	Mutton and Goat meat per caput in kilograms	Total meat consumption (incl. pig meat, poultry meat etc.) in MT	Total meat consumption per caput in kilograms
Burkina Faso	40.000	4,0	31.000	3,1	105.000	10,4
Mali	83.000	8,6	45.000	4,6	179.000	18,5
Niger	34.000	3,9	34.000	3,8	114.000	12,9
Total	157.000		110.000		398.000	

Source: FAO 5

When comparing these data with the average over the period 1984 - '86, it appears that total meat consumption has risen from 317.000 MT in 1984 - '86, to 398.000 MT in 1994. This can largely be attributed to the population growth, however. Total meat consumption per caput has risen in Burkina Faso from 9,9 to 10,4 kg, and in Mali from 16,7 to 18,5 kg. In Niger however, consumption per caput has gone down from 17,2 kg in 1984 - '86 to a mere 12,9 kg in 1994, as shown in table III-2.

Table III-2 Domestic meat consumption during the period 1984 - '86

	Meat and Veal in MT	Meat and veal per caput in kilograms	Mutton and Goat meat in MT	Mutton and Goat meat per caput in kilograms	Total meat consumption (incl. pig meat, poultry meat etc.) in MT	Total meat consumption per caput in kilograms
Burkina Faso	28.000	3,5	13.000	1,7	78.000	9,9
Mali	58.000	7,2	34.000	4,2	134.000	16,7
Niger	34.000	5,5	44.000	7,2	105.000	17,2
Total	120.000		91.000		317.000	

Source: FAO 3

These data indicate consumption resulting from local production, which means that food aid is not taken into account.

Annex IV Livestock exports

According to FAO the total number of cattle exported in 1994 was 351.400, with a total value of US \$ 84.000.000

For small ruminants the number of exported animals was 1.010.000, with a value of \$ 47.400.000. Therefore, the total value of cattle and small ruminants amounted to \$ 131.400.000.

The total value of all exports of these three countries in 1994 was \$ 776.600.000 (IMF: Balance of Payments Statistics Yearbook, vol. 50, 1999). This means that the value of the export of cattle and small ruminants amounted to 19,9 % of total export value.

It can be concluded that the export of animals is a very important source of income of these countries.

Over the period 1994 - '98 the total number of cattle exported for the three countries had gone up to an average of 409.406 animals, with a value of \$ 106.160.000. The export of small ruminants had gone down to a yearly average of 949.646, with a value of \$ 42.507.000. For cattle and small ruminants together the yearly average value had risen from \$ 131.400.000 in 1994 to \$ 148.667.000 during the years 1994 - '98.

Table IV-1 indicates number and value of cattle exported for each of the three countries.

Table IV-1 Exports of **Cattle** during the years 1994 - '98
in numbers

	1994	1995	1996	1997	1998
Burkina Faso	103.900	160.654	100.000	100.000	100.000
Mali	169.500	222.000	229.000	200.000	200.000
Niger	78.000	116.000	89.000	83.000	98.678
Total	351.400	498.654	418.000	383.000	398.678
in value (1.000 \$)					
	1994	1995	1996	1997	1998
Burkina Faso	10.000	19.901	12.000	12.000	12.500
Mali	50.000	75.000	75.000	70.000	70.000
Niger	24.000	35.000	27.000	25.000	13.397
Total	84.000	129.901	114.000	107.000	95.897

Source: FAO 5

FAO gives also data on Carcass Weight for Beef and veal slaughtered in the country. Use of these data for animals exported, gives an indication to the quantity of beef and veal that has been exported.

Table IV-2 Carcass wt Beef and Veal in kg

	1994	1995	1996	1997	1998
Burkina Faso	110	110	110	110	110
Mali	130	130	130	130	130
Niger	118,9	119,5	122	126,7	129,1

Source : FAO 5

In table IV-3 the quantity of beef and veal exported has been calculated.

Table IV-3 Beef and Veal exported in MT

	1994	1995	1996	1997	1998
Burkina Faso	11.429	17.671,9	11.000	11.000	11.000
Mali	22.035	28.860	29.770	26.000	26.000
Niger	9.274	13.862	10.858	10.516	12.739
Total	42.738	60.394	51.628	47.516	49.739

That is an average of 50.403 MT of beef and veal a year.

If we use the data provided by CEBV, however, totals will be even higher.

The 'Communauté Economique du Bétail et de la Viande' (CEBV), an institution of the Conseil de l'Entente, is a collaboration of the countries Benin, Burkina Faso, Ivory Coast, Niger and Togo. CEBV, which bases itself on the statistical figures provided by the member states themselves, publicises different data for Burkina Faso and Niger.

Because Mali is not a member state of CEBV, no data are published by CEBV concerning Mali. This means that unfortunately no complete comparison between FAO and CEBV data for the three countries together can be made.

Table IV-4 gives CEBV data concerning the number of cattle exported from Burkina Faso and Niger.

Table IV-4 Number of cattle exported from Burkina Faso and Niger according to CEBV

	1994	1995	1996	1997	1998
Burkina Faso	173.023	147.929	150.351	147.467	134.320
Niger	113.406	64.929	110.435	89.904	83.704

Source: CEBV

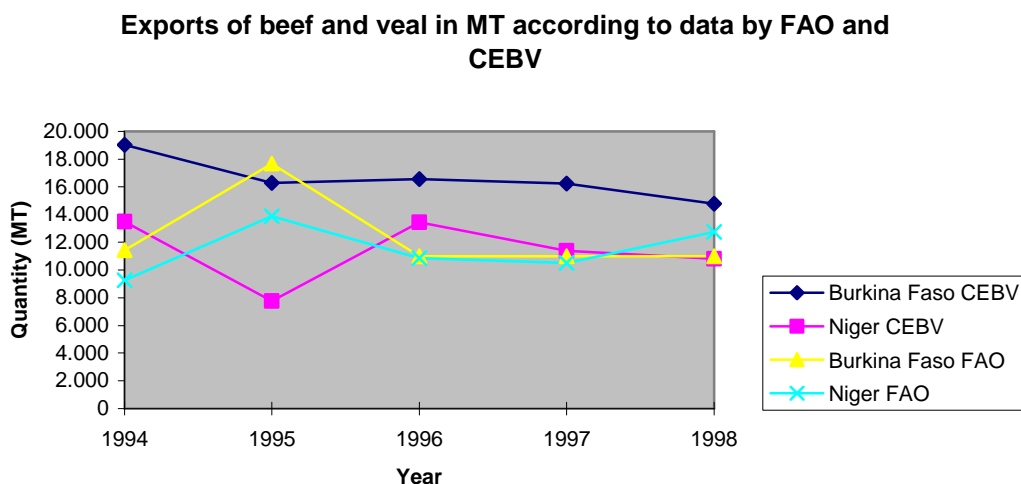
This implies that, using the data on carcass weight from table IV-2, the quantities of beef and veal exported will be (table IV-5)

Table IV-5 Quantities of beef and veal exported using CEBV data

	1994	1995	1996	1997	1998	
Burkina Faso	19.033	16.272	16.539	16.221	14.775	
Niger	13.484	7.759	13.437	11.391	10.806	

The difference between use of FAO data and CEBV data is shown in graph IV-1

Graph IV-1 Quantities of beef and veal exported from Burkina Faso and Niger calculated with FAO data and CEBV data



If any conclusion can be drawn from this difference, it is that figures concerning the livestock sector in these countries are notoriously unreliable. The figures give an indication, that is all.

Turning to the export of small ruminants, FAO provides us with the following data.

Table IV-6 Exports of **Small Ruminants** from 1994 - 1998

in numbers					
	1994	1995	1996	1997	1998
Burkina Faso	200.000	259.557	259.557	259.557	259.557
Mali	560.000	450.000	450.000	450.000	450.000
Niger	250.000	200.000	200.000	200.000	300.000
Total	1.010.000	909.557	909.557	909.557	1.009.557
in value (1.000 \$)					
Burkina Faso	4.400	6.709	6.709	6.709	6.709
Mali	32.000	25.000	25.000	25.000	25.000
Niger	11.000	9.000	9.000	9.000	11.698
Total	47.000	40.709	40.709	40.709	43.407

Source: FAO 5

To compare, again the data according to CEBV

Table IV-7 Exports of **Small Ruminants** by Burkina Faso and Mali from 1994 - 1998 according to CEBV

	1994	1995	1996	1997	1998
Burkina Faso	244.334	249.165	246.760	278.533	343.684
Niger	641.692	224.786	495.018	593.626	508.844

Source: CEBV

Especially striking in the by FAO-provided data on small ruminants is that numbers remain the same for a number of years. This again does not create too much confidence in the figures. As can be seen from tables IV-6 and IV-7, there is quite a difference between the data provided by FAO and those by CEBV.