

West African Borders and Integration Frontières et Intégrations en Afrique de L'Ouest

FOOD SECURITY AND CROSS-BORDER TRADE IN THE KANO-KATSINA-MARADI (K²M) CORRIDOR

CILSS / FEWS NET / OCHA / SWAC / UNICEF / WAMIS-NET / WFP

Joint mission report

www.africacrossborder.org



WABI/DT/30/06

LAUNCHING AN INITIATIVE

The West African Borders and Integration, or WABI, Initiative was launched following a workshop on border cooperation held in Ouagadougou in July 2003. It is supported by a State structure (the National Frontiers Directorate of Mali, DNF), an NGO (ENDA-Diapol) and an international organisation (the Sahel and West Africa Club, SWAC-OECD) which provides funding.

The WABI Initiative is based on the convergence of these three institutions and the sharing of information among a network of partners around one joint concern: the promotion of cross-border cooperation as a driver of regional integration, development and peace.

COMMUNICATING LOCALLY AND REGIONALLY

One of WABI's roles is to promote the collection and sharing of information on border cooperation issues. This is made possible by the publications and the "West African Borders and Integrations" Website:

- Concept Notes. fieldwork results, meeting reports, forums.
- Key issues: presenting local, national or regional initiatives; discussing the regional dimension of various issues: cotton, transportation, conflict, etc.

Both publications are now available on CD-Rom.

 - Website http://www.afriquefrontieres.org: an information centre dedicated to cross-border cooperation and regional integration, by sharing field experiences, networking agendas, publications, and press review.

Contact Us, Join Us

Enda Prospectives Dialogues Politiques

BP: 7329 Dakar, Senegal

Tel: + (221) 823 53 47 - Fax: + (221) 823 67 13

Website: www.enda.sn/diapol Contact: Mohamadou Abdoul E-mail: diapol@enda.sn Sahel and West Africa Club/OECD 2, rue André Pascal 75775 Paris Cedex 16, France Tel: +33 (0) 1 45 24 89 68 - Fax: +33 (0) 1 45 24 90 31

Website: www.oecd.org/sah Contact: Marie Trémolières E-mail: marie.tremolieres@oecd.org

CILSS / FEWS NET / OCHA / SWAC / UNICEF / WAMIS-NET / WFP

FOOD SECURITY AND CROSS-BORDER TRADE IN THE KANO-KATSINA-MARADI K²M CORRIDOR

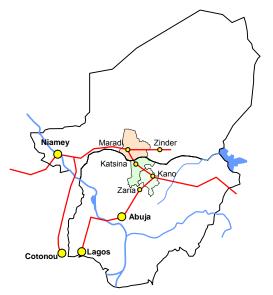
JOINT MISSION REPORT

JULY 2006

Table of contents

FC	OREV	WORD	7			
IN	TRO	DUCTION	9			
1.	THE	E CROSS-BORDER TRADE IN CEREALS	10			
	1.2 1.3 1.4	DESPITE A DIVERSIFICATION OF SUPPLY SOURCES, NIGERIA REMAINS A MAJOR SUPPLIER TO NIGER DETERMINANTS AND OBSTACLES TO CROSS-BORDER TRADE CROSS-BORDER CEREAL FLOWS THE ACTORS AND THEIR STRATEGIES QUESTIONING THE FUNCTIONING OF THE CEREALS MARKET	12 15 16			
2.	THE	E LIVESTOCK SECTOR	20			
	2.2 2.3 2.4 2.5 2.6	BACKGROUND. THE MARKETS AND THEIR SEASONALITY. THE OPERATORS AND THEIR STRATEGIES. DIFFICULTIES. THE CURRENT SITUATION SUPPLY, DEMAND AND PRICE. THE PERSPECTIVES.	20 23 24 26 27			
3.		THE RELATIONSHIP BETWEEN THE CEREALS AND LIVESTOCK SECTOR AND CROSS-BORDER COOPERATION				
	3.2 3.3	THE CONTEXT	30 33			
4.	CR	OSS-BORDER TRADE AND ITS IMPACT ON FOOD SECURITY	36			
	4.2 4.3 4.4 4.5	WHAT ARE THE STAKES FOR FOOD SECURITY? THE CONCEPTUAL FRAMEWORK: CROSS-BORDER FLOWS AND FOOD SECURITY. CEREAL AVAILABILITY. ACCESSIBILITY. THE IMPACT OF THE AVIAN FLU ON POULTRY MARKETS. CONCLUSIONS RELATED TO THE CYCLICAL FOOD SECURITY SITUATION.	36 36 39 43			
5.	CR	OSS-BORDER COOPERATION AND FOOD SECURITY: SOME COURSES OF ACTION	46			
	5.2	IMPROVE THE QUALITY AND THE DISSEMINATION OF INFORMATION ON CROSS-BORDER LIVESTOCK AND CEREAL MARKETS	46 47			
	5.4	THE FACILITATION OF CROSS-BORDER TRADES FLOWS	48			

Kano-Katsina-Maradi: some indicators



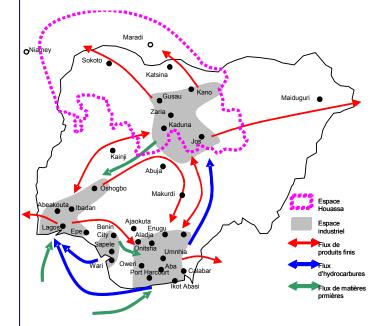
The K²M area is made up of the states of Kano and Katsina in Nigeria and the province of Maradi in Niger.

Together, these three cover a land area of 83,000 km², a territory slightly larger than Sierra-Leone. It has a population of about 19 million inhabitants, equivalent to the population of Ghana. With more than 200 inhabitants per km², it is one of the most densely populated areas in West Africa.

An area with a network of dense and urban centres organised around the city of Kano. The area illustrates the phenomenon of the polarisation of Niger's economy by that of Nigeria, which can be witnessed the length of the 1,500 km border between the two countries.

This is the heartland of the Hausa lands, a vast and populous area of economic activity straddling northern Nigeria and southern Niger. Its industrial centre, one of the most important in Nigeria, is arranged around four major cities: Kano, Zaria, Kaduna and Jos.





The intensive trade that thrives here is in agricultural products, especially in livestock from Niger, cereals and manufactured products from Nigeria and, above all, products re-exported to Nigeria via Niger coming from Benin/Togo.

Source: SWAC/OECD 2004



With the advent of the 2005 food crisis in Niger, some experts contributing to the ensuing discussion raised the issue of the role played by markets and cross-border trade in the difficulties relating to access cereal production. While 2004 cereal production in Niger was relatively low (11 % below the average of the five preceding years), mainly due to insufficient rainfall and a locust invasion, it reached 2.6 million tons, 35% higher than in 2000 (the last year considered as "bad", but which did not give rise to major food security problems). This situation compelled the WFP, FEWS NET and the CILSS, to carry out an assessment on the available information as regards this subject¹, before launching a series of studies on markets and on cross-border trade flows in cereals and cash-crops, the sale of which allows the population to buy cereals.

The SWAC/OECD animates jointly with ENDA-Diapol the WABI² network and works with ECOWAS on the implementation of the Cross-Border Initiatives Programme (CIP). The SWAC proposed FEWS NET to analyse cross-border trade in livestock and cereals in the Kano–Katsina–Maradi area (K²M), between Nigeria and Niger, an area which has been the focus³ of earlier work carried out by the WABI network.

Joined by the WFP and CILSS, SWAC and FEWS NET decided to send a joint mission to the K²M region to:

- Better understand the cross-border trade in livestock and cereals and its impact on food security;
- To prepare an eventual Niger–Nigeria cross-border cooperation process in these two sectors (and food security).

The United Nation agencies in Niger equally offered to add two representatives of OCHA and UNICEF to the mission. The mission further included a member of the West African Market Information Network (WAMIS-NET). The authorities of Niger and Nigeria were associated in organising and provided support in facilitating the mission.

Made up of eight members⁴ and representing seven institutions, this mission demonstrates the willingness of the multilateral system to undertake an in-depth collaboration at operational and, in particular, analytical level. This cooperation is at the origin of the present report, which is the result of permanent interaction and joint writing of its different members. Containing both structural and cyclical analysis of trade in livestock and in cereals and their impact on food security, it has the ambition of accompanying a certain number of initiatives which the governments of Niger and Nigeria, supported by their partners, may undertake. It contains recommendations that may nourish a process of cross-border cooperation between the two countries.

Cf. Noëlle Terpend, "Bilan des connaissances sur le commerce et les marchés impliqués dans la sécurité alimentaire en Afrique de l'Ouest", December 2005, available on www.wfp.org/operations/Emergency_needs

West African Borders and Integration. See the website www.afriquefrontieres.org/).

See the document WABI/DT/21/04, "Maradi–Katsina–Kano: A Development corridor?", Mohamadou Abdoul, Karim Dahou et Marie Trémolières. Study financed by CRDI and carried out by ENDA-Diapol in collaboration with SWAC/OECD. The reading of this study can be completed by reading the document WABI/DT/20/04: "Malanville–Gaya Trading Post and Speculation Corridor (Informal Cross-Border Area)"; Guy Michel Boluvi. Study carried out by the SWAC. The studies are available in French and English on the website www.africacrossborder.org (www.afriquefrontieres.org/).

The team was composed of Mr. G. Beekhuis, WFP; M. Cisse, CILSS; K. Dahou, consultant SWAC; S. Djumapili, OCHA; P. Heinrigs, SWAC; L. Ibrahim, FEWS NET; S. Ibrahim, WAMIS-NET, and Chegou, UNICEF.

These recommendations should be discussed at the occasion of a cross-border workshop, bringing together representatives from local and central authorities, traders, transporters, entrepreneurs, farmers and livestock rearers from both countries and their technical and financial partners.

While anticipating this workshop, what remains to be done is to deliver this report and hope that this initiative will help to sustainably improve trade in cereals and livestock between Niger and Nigeria, in the interest of the sectors concerned, in the interest of the two countries, and in the interest of food security in the area.

In addition, this work is part of a larger process, which seeks to shed more light on the dynamics of trade and to reinforce cross-border initiatives. It is in line with the context of the joint WFP/FEWS NET/CILSS study and its outcomes will equally be capitalised upon by CILSS in the process of setting up a permanent system for monitoring cross-border trade in the region.

ntroduction

Despite a diversification of Niger's sources of cereal supply since the mid 1990s, Nigeria remains its major supplier in periods of food shortages. Besides the proximity of the areas of production and the relatively cheap price of fuel in Nigeria, reducing transport costs, many other factors relating to the size of its market and its production structure explain the competitiveness of products from Nigeria. In addition, traders from Niger and Northern Nigeria understand each other perfectly, belonging to the Hausa area with 50 million Hausa speakers. They share 1,500km of common border and are often related by family, religious and lineage links.

In this context, an analysis of production and trade in cereals and their impact on food security cannot be limited to just one country. The southern part of Niger and northern Nigeria form one cereal production basin in which markets are perfectly integrated and products circulate easily, sometimes even in contravention of national laws. The Kano–Katsina–Maradi corridor represents the axis around which the whole area gravitates. A major trade corridor in West Africa, it has for a long time linked the Gulf of Guinea to North Africa and the Middle East.

If these circumstances justify our interest in cereals, it emerged indispensable to include the livestock sector in the analysis, due to its significant impact on food and nutritional security. Marketing of cash "products" allows the populations to earn revenue, which can be used to buy cereals on the market. Livestock is the principal cash "earner" of Niger and 97 % of its livestock exports are to Nigeria.

This report describes cross-border trade in cereals (I) and (II) livestock products between Niger and Nigeria, the relationship between the two sectors (III), and the impact of this trade on food security (IV). It concludes by proposing a certain number of suggestions, recommendations and fields of action (V) aiming to strengthen food security in the two countries and the region and outlining a development dynamic based on cross-border cooperation.

1.

The cross-border trade in cereals

Cereals constitute a strategic staple food in West Africa, and especially in the Sahel and in Niger where it represents 60 to 90 % of calorie intake depending on the country. While the devaluation of the CFA Franc in 1994 led to the development of large production basins (notably the SKBo⁵ area) and stimulated trade between countries of the CFA Franc zone, Nigeria remains the largest producer accounting for 59 % of total regional cereal production. Nigeria has comparative advantages, certain linked to agro-climatic conditions, but also to the adaptation capacity of its farmers. The latter have been able to modernise their production system, thanks to the development of regional trade and also to the support policies put in place by the government.

Table 1: Production, imports and exports of cereals (average 1994–2003)

	Production (1000t)	Importation (1000t)	Exportation (1000t)	Consumption kg Per head
Nigeria	20,648	2 499	48	149
Niger	2,598	214	1	212
West Africa	35,235	7 137	184	146

Source: FAO.

Among West African countries, Niger has the highest rate of cereal consumption per inhabitant, with an official consumption standard of 250 kg per inhabitant per year for rural dwellers and 200 kg per inhabitant per year for urban and nomadic populations. The country regularly records production shortages and has to import from other countries in the region to meet its consumption needs.

1.1 Despite a diversification of supply sources, Nigeria remains a major supplier to Niger

1.1.1 Niger recently began to diversify its supply sources

Imports of local cereals from Nigeria, notably millet and maize, have for a long time constituted the majority of, if not the only, external supply to Niger. These imports were then distributed throughout the entire national territory. This can partly be explained by administrative control over trade in cereals and the ban on exports, which some countries maintained until the early 1990s. While most Sahelian countries were able to enforce the ban, the Niger–Nigeria border has always been characterised by a certain porosity which seemed to prevent the strict enforcement of legislative and regulatory mechanisms.

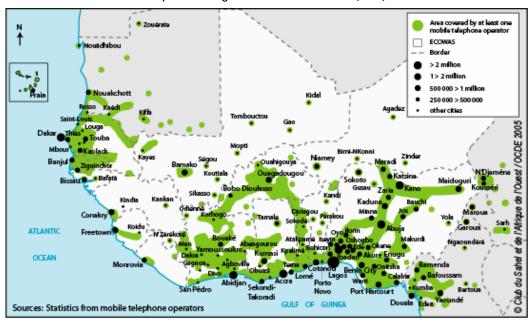
Although, the Maradi region continues to be supplied exclusively from Nigeria to compensate for insufficient production in Niger, some other regions have for a few years developed new sources of supply. In particular, the Savannah regions in Côte d'Ivoire, the south of Mali and Burkina Faso, and, to a lesser extent Benin, Togo, and Ghana constitute today alternative sources of supply⁶.

⁵ Sikasso (Mali), Korhogo (Côte d'Ivoire) and Bobo Dioulasso (Burkina Faso) area.

⁶ A trader from Niamey explains that he has a network of agents in the principal areas of production and orders in the region where available quantities are highest and hence prices lowest.

For traders the underlying reasons for this evolution, that begun in the mid-1990s⁷, are the following:

- <u>The devaluation of the CFA Franc</u>, which increased the prices of cereals imported from the world market and benefited producers in the CFA Franc zone (see infra).
- The progressive stabilisation of the Naira exchange rate, which reduced the price competitiveness of Nigerian cereals. Nigerian exports to the CFA Franc zone have long benefited from the continued fall in the Naira exchange rate, a trend that reversed in 2003⁸. This being probably related to the increase in oil prices⁹ at the end of the 1990s¹⁰
- <u>The spectacular rise in oil prices combined with a 25 % increase in Nigerian oil production between 1999 and 2005</u>, has stimulated domestic demand in Nigeria, thus favouring national consumption over exports.
- <u>The production of the Sikasso–Korhogo–Bobo Dioulasso (SKBo) area increased,</u> driven by the cotton boom between 1985–1995, cereals being cultivated in alternation to cotton.
- <u>Trade and agro-industrial policies of Nigeria</u>, are regularly placing a ban on the export of maize in order to promote domestic transformation and the poultry industry, both large consumers of this cereal¹¹.
- <u>The sub-regional cereals market is increasingly integrated</u>. A result of strategies adopted by traders as well as through the reinforcement of regional integration mechanisms (creation of WAEMU, ECOWAS regulation on raw materials, etc.). Other factors also facilitated contacts and communication between traders: annual CILSS and MISTOWA meetings on trade opportunities in West Africa and the very rapid spread of GSM telephone usage.



Map 1: Coverage of GSM in West Africa (2005)

⁷ The more exact date of 1997 was mentioned.

The value of the Naira continued to fall at the beginning of the 2000s, going from 160 to 260 Naira for 1000 FCFA at the parallel market between 2000 and 2003, and stabilised since then within the range of 250 to 275 Naira to 1000FCFA.

⁹ Petroleum products represent 95% of Nigeria's exports.

Besides, federal monetary policies no doubt played a role in the stabilisation of the value of the Naira.

A trader at Dawano market estimates that approximately 20% of all maize stocked on the market is used to supply the poultry industry.

1.1.2 Powerful factors determine the volume of production in Nigeria, which remains the major source of supply for Niger.

Nigerian supplies benefit from proximity of production areas and the low cost of fuel reducing significantly transportation costs, that stifle products imported from other countries of the subregion. Although, the lower cost of transportation plays an obvious role, the proximity of Kano, which houses the largest sub-regional cereals market, also explains the significant volume of trade flows towards the region of Maradi. Other powerful factors that determine the importance and competitiveness of Nigerian production are:

- <u>The size of the Nigerian market</u>, which increases business opportunities and stimulates production;
- A significantly higher urbanisation level especially around the Sudano Sahelian belt – than in other countries of the sub-region, <u>exercising a strong demand-pull effect</u> on agricultural production;
- The availability of credits, and especially subsidised credit 12 for agricultural production;
- The availability of agricultural installations, in particular irrigation;
- Agricultural mechanisation and the cheap cost of fuel;
- Subsidised inputs¹³;
- The availability of water resources, relatively more abundant than in Niger;
- Intensification of production 14, especially in the context of agro-industrial complexes;
- The high number of cereal processing and packaging industries;
- <u>Government revenues from oil exports</u> (fifth largest exporter in the world) which finance voluntaritistic policies in support of agricultural production.

1.2 Determinants and obstacles to cross-border trade

1.2.1 Factors for cross-border trade

The Naira exchange rate

The continuous fall of the Naira/CFA Franc exchange rate made Nigerian agricultural exports attractive. It remains to be seen if the recent stabilisation of the Naira will be sustainable and what will be the resulting effects. Experience has shown that Nigerian markets have a strong capacity to adjust to world markets. If the Naira appreciates, internal prices in Nigeria fall in nominal value and when the Naira depreciates, internal prices increase in nominal value.

Production volume and prices on both sides of the border

Whenever regional production is abundant, significant volumes of Nigerian cereals are exported towards the neighbouring regions of Niger, which are structurally deficient in cereal

¹² Cf. in particular, the Agricultural Credit Guarantee Schemes [ACGS], a mixed public-private credit scheme, guaranteed and controlled by local authorities – of which Katsina State is the "best" user.

The subsidised price of a 50 kg bag of fertiliser oscillates around 1,000 to 1,500 Naira (in addition to the federal government subsidy, there exist local subsidies which varies depending on the States), compared to 3,200 Naira on the free market. The quantity of subsidised fertiliser per farmer has diminished over the past years and is today one bag of fertiliser for 3 persons.

Due to the mechanisation of production, many farms in northern Nigeria record grain yields of about 10 tons per hectare, against only 2 tons in the SKBo area.

production. On the other hand, when production is low, not only does Nigeria consume a large share of its own production, but may even import cereals from other countries in the subregion. The disruption of cereal flows from Nigeria towards Niger can hence expose the deficit in Niger. However, the available quantity of cereals on markets is not the only determinant of prices. For example, consumers can substitute between products, e.g. maize for millet, while agro-allied food industries, which are developing rapidly in Nigeria, have lesser substitution possibilities. The demand from the agro-allied food industry is therefore less price sensitive and can lead to more significant price increases, especially during crisis years 15.

The Mastery of the market by traders of both countries

Large traders from Niger have information on Nigerian markets and buy in Nigeria to replenish their stocks. The Nigerian traders on their part have effectively adapted their strategies to the characteristics and dynamics of the Nigerian market, thus competing with Maradi traders during the harvest period and stocking some of the cereals in the city of Maradi in anticipation of the lean season ¹⁶.

Socio-cultural affinities

Socio-cultural affinities between Hausa traders and officials of Niger and Nigeria, especially those of Maradi, Katsina, and Kano constitute a major determinant in cross-border trade between the two countries. These affinities lead traders of one country to stop at the border and transmit their merchandise to their counterparts of the other. The latter will then take responsibility for transporting the merchandise to its final destination and carry out the necessary negotiations with national administration agencies. Without this "border-relay" road harassments would surely reduce the transaction volume. Socio-cultural links also help to explain the successful circumvention of regulations limiting cereal exports on both sides of the border.

The production choices of Nigerian Farmers

Given the volume of the Nigerian cereal production¹⁷ its farmers' production choices, i.e. cash-crops versus food-crops, have a direct impact on supply in Niger. If the acreage cultivated under cash-crops increases, consequently reducing that of cereals, availability of Nigerian exports to Niger could diminish¹⁸.

Import and Export Policies

Generally, Nigeria follows protectionist trade policies to shield national industries from competition of imported products and to promote domestic value added. Although, the evolution of oil prices impacts on import composition and volume, government intervention is having significant effects on imports and exports. Concerning cereals, Nigeria has two objectives: one, to satisfy national demand and two, develop agro-industries through local processing. These same objectives lead the government to ban rice imports so as to promote domestic rice production, or to ban the export of maize to assure the supply of local processing units and the poultry industry. The government of Niger, for its part, pursues the objective of food security which leads it to ban the export of cereals.

_

The existence of an important number of agro-industries around Kano probably explains that in 2005, the increase in the price of millet was more pronounced in Nigeria than Niger.

¹⁶ Sometimes also referred to as "hunger" season.

¹⁷ In 2004, Nigeria produced 16 million tons of cereals compared to 14 million tons for CILSS countries combined, of which 2.6 million tons in Niger.

For example, the correlation between the world price of cotton and the acreage allocated to cereals in cotton producing areas is established, especially for large scale farms.

However, these prohibitions are regularly circumvented, limiting their effect on the cross-border trade in locally-produced cereals.

1.2.2 The obstacles to cross-border trade

Road-related harassments

The transport impediments to the movement of goods, referred to here as "road-related harassments" are, according to a large number of traders, linked to the accumulation of complicated rules and regulations, which are lengthy and expensive to fulfil.

Large traders do not seem particularly sensitive to these customs and transport obstacles. Most of them find the duties relatively negligible compared with other costs in the commercialisation chain, and do not complain much about the attitude of officials ¹⁹.

In practice, the harassments seem to obstruct in particular small traders, trading on small volumes with lower profit margins and thus making them more sensitive to informal taxes. The sometimes important volumes of millet flows from Niger to Nigeria, and flows of maize from Nigeria to Niger despite the bans, respectively, imposed by the Niger and Nigeria government, should lead one to think that not only small traders engage in smuggling. The negotiation power of large traders plays without a doubt a determinant role in their relations with the authorities.

The language barrier

Most economic actors mentioned increasing complications the further away one moves from the Kano–Katsina–Maradi axis. Gradually, the language barrier reigns over socio-cultural affinities. Outside the Hausa lands, this language barrier becomes impossible to overcome, explaining why only a few traders decide to cross the border. Apart from petty trade, the majority of transactions bring together two groups of actors linked by economic and/or cultural, social, family, religious relations, etc. That is why one can talk of a trade that takes the form of a "relay race" in which one group of traders takes the goods to the border, while another group takes the goods from there to wholesale or consumption markets. Each group is indeed specialised in negotiating with officials of their country²⁰. This also being the reason why border markets, and "discharging points", flourish along all ECOWAS borders.

Insecurity

Insecurity on transport corridors and markets also seems to constitute an important obstacle to the movement of goods and persons. This problem leads many traders from Niger to refuse to travel to Nigeria, except when their activities make it an absolute necessity. That is the case for traders who engage in re-export and sell goods on the Nigerian market that only transited Niger. Most cereal traders from Maradi prefer Nigerians to come and transact business in Niger. Explaining in part the organisation of trade in networks based on a mutual trust and lineage.

A large trader from Niamey mentioned that he contacts the Ministry of Commerce, whenever one of his transporters signals major difficulties on an axis he regularly uses. This helps to achieve a fast reduction in the number of road blocks on the section concerned.

The Federal Government of Nigeria tries to avoid the stationing of members of the security forces (especially customs) in the areas of their origin. Consequently, the customs officers in Katsina are not necessarily of Hausa origin.

The absence of compensation mechanisms

This absence is felt most at the level of banks and insurance. Even though the Naira exchange rate stabilised about 3 years ago, exchange rate fluctuations have lasting psychological effects leading traders from Niger to continue having reservations to being paid in Naira. Some traders only accept payment in Naira because they buy goods on the Nigerian market to sell in Niger. The absence of instruments to hedge against exchange rate risk surely limits the volume of transactions between the two countries. In addition, no effectively functioning assurance against transport accidents of trucks carrying goods in the neighbouring country exist.

1.3 Cross-border cereal flows

Concerning dry cereals, especially millet and maize, and to a lesser extent sorghum, Niger in general and the region of Maradi in particular, regularly import from Nigeria to balance the deficit in domestic supply. Cross-border flows of cereals are difficult to quantify because, unlike the trade in livestock, they are not subjected to custom registration procedures at borders.

There is ample evidence that the circumvention of regulations and legislation preventing the import or export of certain products is abundantly practiced along the Kano–Katsina–Maradi axis. Apart from numerous concordant testimonies by many stakeholders, this is further confirmed by the impressive volume of goods banned for import in Nigeria – textiles, rice, second-hand vehicles, etc., transiting through Niger, whereas the Lome–Cotonou–Lagos axis is much shorter.

It can be estimated that some hundred thousand tons of cereals cross the border between the two countries each year, the majority of which - but not exclusively – from Nigeria to Niger. Some estimates talk of around 200,000 tons of Nigerian millet and maize having been sold in Niger²¹ each year during the 1990s, underlining the importance of Nigerian imports. Pending an effective system for quantifying informal trade flows, a description of the direction of seasonal flows is possible.

1.3.1 From September to December: harvest/collection season

Whereas Nigerien traders rely exclusively on a network of collectors limited to Niger, Nigerian traders procure in the entire cross-border production basin. Part of the cereals bought by Nigerians in Niger is also stocked there, in anticipation of speculative gains during the lean period, displaying an adaptation of strategies to the chronic shortages of Nigerien production.

Part of the Nigerien millet and sorghum production harvested close to the border is sold in Nigeria (disregarding existing regulations²²). In some cases, e.g. a bad harvest in Nigeria, the volumes can be important. This can be explained by the higher financial resources of Nigerian traders, allowing them to stock larger quantities of cereals than their Nigerien counterparts.

Maize, being mostly cultivated in the Sudanian climate zone in the southern parts of the cross-border basin, takes the opposite direction. It is a more exigent crop in terms of inputs, which advantages Nigerian farmers. Flows from Nigeria to Niger take place all year round, but reaches its peak at the beginning of the lean season (see infra). However, some Nigerian traders/farmers begin to sell their production with the beginning of the collection period in order to raise a rolling capital for speculation in other cereals. Some large-scale traders buy and stock cereals in the villages situated in the production areas where they own warehouses.

Traders from Dawano Market talked about their complicity with customs officials, translating into convoys of goods crossing the border at night.

²¹ Cf. Sahel and West Africa Club/OECD, "Prospects for trade between Nigeria and its neighbours", Paris, OECD, 2001.

1.3.2 From January to April: the pre-planting/pre-lean season

The replenishment of stocks is done during this period when traders have a more precise idea of the ensuing situation during the lean season, adjusting their stocks based on forecasts made for the lean season. From this period onwards, the significantly larger Nigerian stocks are more accessible then the more expensive Nigerian. Many wholesalers and semi-wholesalers from Maradi begin to buy in Nigeria. However, in crisis years, Nigerian prices can be too high to be attractive for Nigeriens.

Nigerien traders send their collectors to get supplies from Nigeria, on collection markets or bulk markets like Dawano. Nigerian traders also honour direct orders made by Nigerien traders and deliver the goods to Niger.

1.3.3 From May to August: the lean season

This period allows for the highest profits, but also bears the highest risks. Starting in May/June, prices generally collapse as early as August, which leaves one to two months to do business which will determine the volume of profits or losses for whole the year. The risk also increases with the amount of interest payments accruing on credits obtained from banks (at the beginning of the commercialisation campaign).

The large traders of the two countries stock at the beginning of the agricultural year (harvest period) and supply villages during the hunger season. The cereal stocks on both sides of the border are used indifferently to supply the two countries, depending solely on demand.

In general, Niger is regularly experiencing cereal shortages and the trade flows are from Nigeria to Niger. However, in exceptional circumstances, part of Nigerien production can be sold in Nigeria, despite insufficient domestic supply. The only condition for this is a higher price in Nigeria than in Niger, which has sometimes been the case during recent years. Nevertheless, it is necessary to make a distinction between millet and sorghum on the one hand and maize on the other. The first two can occasionally be exported to Nigeria, despite a ban on exports, whereas the second, predominantly produced in Nigeria, supplies constant flows towards Niger.

The largest flows of Nigerian maize to Niger take place during the lean season. Rural population in Niger appreciate it less and consume it only as a last resort and in years when millet prices are very high. However, in urban areas the number of permanent consumers is increasing assuring some relatively stable demand.

1.4 The actors and their strategies

- <u>The retailers</u> get their supplies from semi-wholesalers in large wholesale markets or from small rural collection markets. The role of retailers in cross-border trade should not be underestimated along a border of 1,500 km, where the aggregation of many small quantities can result in large volumes.
- The semi-wholesalers carry out the transfer of cereals from excess areas to deficit areas. They do not stock and have a high turnover rate. Semi-wholesalers generally trade quantities ranging from five to thirty tons a week from production areas to wholesale markets. The peak period of their activity is towards the end of the pre-lean and beginning of the lean period. Some semi-wholesalers from Maradi get their supplies from Dawano and sell as far as Niamey. Semi-wholesalers sometimes also engage in production to establish a rolling capital by selling a part (generally two thirds) of their harvest. The benefits realised during the marketing campaign are then used to

finance investments in production. They do not have access to credit facilities from banks, which explains why they finance their activity by selling their own produce and do not stock. However, they can get supplies on credit from wholesalers whom they will reimburse after the sale.

• <u>The wholesalers</u> have large private funds; mortgage guarantees and access to bank credit. Hence their stocking capacity is considerable. Wholesalers from Maradi can stock quantities of up to 5,000 tons, while those from Dawano can exceed ten thousand tons²³. The large-scale traders, particularly those from Dawano, buy their supplies from farmers and collection markets, but prefer to buy from large mechanised farms being able to supply large quantities of cereals, although margins made are higher on the former. They also build warehouses in collection areas to increase stocking capacities. Wholesalers are able stock cereals for long periods: currently some sorghum stocks at Dawano are three years old.

Mutual trust constitutes a fundamental determinant in the relationship between traders in a market that remains largely informal. Explaining firstly, that wholesalers supply the majority of semi-wholesalers on credit and, secondly, that retailers do not pay semi-wholesalers until the goods have been sold. It is also trust that makes it possible for a large Niamey based trader to order and receive within a few days several thousand tons of cereals from Burkina Faso, without having to pay in advance and without any form of guarantee. In addition, it is the need to reproduce one's network of clients and to avoid non-payment that determines social investment in the immediate or extended kinship²⁴.

Traders access strategic market information, notably prices and quantities produced in different supply areas through their network of collectors who buy on small collection markets as well as directly from farmers. Nevertheless, today Niger traders arbitrage between many producing countries (see infra). The initial decision to import is determined by the existence or not of a deficit in the provinces of Maradi and Zinder and at the national level. This information is made available early by the Ministry of Agriculture and determines the level of stocks and credit.

Traders stock as much as possible in anticipation of the lean season, the season offering the largest profits. Nigerian traders have purchasing and stocking capacities that by far exceed those of the Niger's. The Nigerian stocks serve to replenish the majority of stocks maintained by Nigerien traders. The latter then supply rural markets.

1.5 Questioning the functioning of the cereals market

The cereal markets function largely on speculation. However, this does not mean that they are only controlled by unscrupulous, voracious traders, on the contrary. Traders can also incur significant losses as a result of unpredictable price movements during some years. They are far from being the only ones responsible for this situation. The absence of credit for agricultural production in many countries - especially in Niger – also points to the responsibility of banks and governments.

In actual fact, the root cause of the problems lies within the chronic vulnerability to climatic hazards, underlining the absence of investments in production and the absence of information that disrupt the market functioning.

One trader at Dawano stated having three warehouses of a capacity of 4,500 tons each.

²⁴ A trader/farmer of Maradi distributes in this way the totality of his cereal production – 30 tons of millet and 5 tons of sorghum.

1.5.1 The importance of credit for agricultural production

Although, almost all Nigerien banks have branches in Maradi none is providing credit for agricultural production. In the past, only Sonibank and BIA opened credit lines for financing the marketing of cereals. The success of which, highlighted by loan reimbursement rates of close to 100%, has apparently stimulated interest from competitors. Other banks, such as Ecobank have opened local branches, with the declared intention of providing credit facilities for cereal marketing. These new institutions, not well known by the entrepreneurial families of Maradi, have started with opening current accounts, the correct management of which serving as criteria for awarding credit facilities. All financial institutions only grant loans upon presentation of collateral, in general property rights. There exist several financial products corresponding to the different levels of the cereal marketing chain. Ecobank for example, envisages creating three products: 50, 250 and 500 million FCFA. One exception being, the roughly fifteen largest traders who dominate the regional market can have access to larger loans.

Bank credit towards marketing campaigns should not be questioned because they indirectly determine import volumes and constitute hence an essential safeguard during deficit years.

The lack of banking credit for agricultural production in Niger constitutes a major handicap to growth in the cereals sector. The absence of public or private support schemes for agricultural production increases the vulnerability to unpredictable climate conditions, that cannot on their own be hold responsible for the stagnation in cereal production. In contrast, Nigerian farmers have benefited from numerous public support and training schemes. Significant investments in the agricultural sector have been made, especially in irrigation, limiting the impact of inconsistent rainfall²⁵. The SKBo area witnessed rapid growth in cereal production as a result of rural credits being allocated to cotton production.

However, increased competition between financial institutions for the same segment of the cereals sector, that of marketing, threatens, in the absence of support for production, to reduce banks profits. In addition, many large scale traders, with access to credit facilities, are producers at the same time and are thus able, in theory, to provide banks with credit guarantees.

This underlines the importance of initiatives promoting credit and loan facilities for cereal production. Such initiatives necessitate first of all, strong political commitment at highest level, as well as the participation of development banks and private financial institutions. The stakes of food security in Niger, have for a long time, seemed sufficiently important - and recurrent – in order to come up with (and adopt) long-term responses.

1.5.2 The importance of complete and reliable information

<u>Poor quality of information</u> undoubtedly plays a role in market imbalances. It appears that Nigerian cash-crop production has, under government instigation, several times increased in recent years, in order to assure the supply of local processing industries (oil mills, textile industries, etc.) and selling the remainder on the world market. These increases have let to a reduction in acreage under cereal cultivation and hence, to an increase in prices of the latter. The local processing industries, however, did not absorb the totality of production²⁶, which caused a sharp fall in prices of cash-crops and a reinvestment in cereals, causing renewed movements in prices. Farmers as well as some traders are complaining about this instability.

-

However, price stability in Nigeria has not been achieved through administrative measures, unlike in Europe, or through continual functioning of the market. The principal factor of price instability reside less in the vulnerability to climatic factors, than in the poor anticipation of farmers and traders, putting responsibility with public services who should provide clear signals on market evolution.

²⁶ Probably due to an overestimation of demand in processed products.

which does not allow optimising investments in production or marketing of cereals. Therefore, it seems important to have complete and reliable information on acreage cultivated, production, quantities used for auto-consumption and marketed, volume of stocks, etc.

1.5.3 In what conditions can states (and their partners) intervene?

The government of Niger and Nigeria maintain strategic reserves to cope with emergencies in crisis situations and not - as they used to in the past - to influence the market. Simultaneously, international aid agencies, bi- and multilateral and Non Governmental Organisations (NGOs), buy cereals on markets to supply populations faced with food crisis. As happened in 2005 when food shortages led to cereal purchases from the beginning of the year through to the lean season in Niger and Nigeria. Given Niger's cyclical difficulties, some NGOs active in the region regularly purchases each year in anticipation of the lean season.

In general, external interventions in the play of market forces have no impact during crisis periods. This is for example the case for sales of government stocks, that are too small to significantly influence prices. On the other hand, purchases can, in shortage situations, have an amplification effect on prices, similar to traders' stocking strategies.

The increase in credit for cereal marketing, motivated by the success of stocking and selling strategies, can only further encourage the same strategies and hence magnify their impact on prices. Normally, this dynamic should be restraint by competition among traders. But, how strong is competition in an oligopolistic market where several dozen actors dominate? The answer to this question is twofold. First, those big actors are family businesses that are very jealous of each other; one cannot therefore say they operate as a cartel in terms of price fixing. Second, no reliable information exists on Nigeria, not on harvests, not on quantities marketed and in particular not on volume of stocks. One could imagine that if such information is known and made available, it would contribute to more effective market mechanisms.

In addition, local cereal buying interventions, or rumours of such, seem to increase speculation on shortages and lead to extensions in the stocking period, which in turn provoke higher prices than that would have prevailed in its absence! In a highly speculative market rumours play a significant role, similar to "self-fulfilling expectations" in financial markets. Once again, information is essential. Furthermore, interventions on local markets should take place sufficiently early or in some cases, depending on production volumes in Nigeria and in Niger²⁷, even be avoided. It is also necessary that (i) the different protagonists coordinate their actions, and (ii) the decision not to buy on local markets are explained and communicated. If traders do not receive these signals, they are likely to defer the sale of stocks in expectation of higher margins²⁸.

-

From the pre-hunger season onwards, Nigerian stocks are used to supply the Nigerien market so that price effects of exogenous interventions on one market easily spread to the other. This is what happened in 2005, when prices increased first in Nigeria and then in Niger. Even though volume of stocks in Nigeria being significantly larger then in Niger, demand also is, partly explaining the increase in Nigerian prices over the last years.

During special market conditions significant gains can be made. At the peak of the 2005 crisis, 100 kg bags of millet were sold at 35, 000 FCFA.

2.1 Background

The livestock/meat sector is very important for both Niger and Nigeria and most especially for populations along the border basin of K²M. The sector has been subject of many studies and regular meetings between Niger and Nigeria.

Niger exports mainly livestock to Nigeria, but since 2006 it envisages promoting the export of meat to Nigeria and central Africa. Many studies and strategic documents have been produced with a view to developing this sector, especially to regulate commercial activities (tax rates, standards etc), however, despite the efforts made, the sector remains largely informal.

Some modern companies are being formed, indeed operational, particularly as concerns meat exportation and milk processing: BIODIX, VIVANDI.

Generally, Niger has a comparative advantage in this sector, especially in the K²M area, due to abundant land for grazing, the quantity of livestock, the quality of the meat produced, and relatively low cost of transportation towards Nigeria (which benefits from the joint transportation of cereals and livestock feed to Niger). However, this sector is very sensitive to Naira/CFA Franc exchange rate fluctuations and faces tough competition from northern Nigeria, Chad and, since the beginning of the Ivorian crisis, Burkina Faso and Mali.

Livestock **Imports Exports** (x 1 000 heads) (x 1 000 heads) (x 1 000 heads) Consumption of cattle and small ruminants meat Small Small Small (kg per inhabitant) Cattle Cattle Cattle ruminants ruminants ruminants 15 200 51 000 350 780 0 Nigeria 0 4.6 Niger 2 2 6 0 11 400 3 1.5 74 309 7.3 45 518 1 450 264 5.2 West Africa 143 563 606 1 171

Table 2: Import and export figures for cattle and small ruminants

Source: FAO.

Nigeria is the most important market in the sub-region (more than half of total imports). It is a market that will continue to expand due to demographic growth and to increases in demand per capita, which still is below the regional average.

2.2 The markets and their seasonality

Unlike cereals, livestock is not sold in bulk. Producers' supply is in small numbers of animals, one or two on average, based on food needs. Supply is grouped in moving from markets in the north, to those in the south of Niger where large wholesale markets are situated along the border with Nigeria. From there, supply is sufficiently large to be transported to export markets in northern Nigeria, like Jibia and to consumption markets in southern Nigeria such as Lagos, Ilorin, Ibadan, Port-Harcourt, etc.

Supply is largest at the end of the harvest and before the lean season when breeders amass their cereal stocks and their financial needs increase and during the period of traditional festivals such as (Eid el Kabir, the end of the Ramadan fast, Easter, Christmas and New Year)

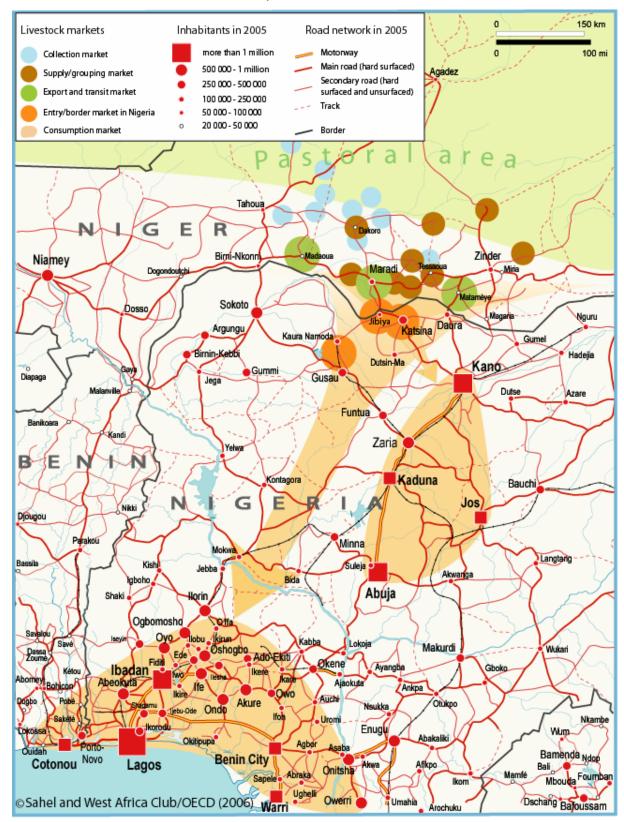
when demand is highest. Supply is lower during the rainy season when herds move north to reproduce in the pastoral areas, further away from markets. Generally, its seasonality is presented as follows:

- From October to December: This is the harvest period and the animals having remained in the pastoral areas move south to consume the remnants of the harvest. Several breeders sell animals in order to restock cereals and livestock feeds when prices are low. At the same time, demand is relatively low, traders are more concentrated on the marketing of agricultural products (cereals, cow-peas, etc.). There is hence low export trade.
- From December to May: Nigerian demand increases. It is at this time that the presence of Nigerian traders is felt most on markets. Export flows become more significant.
- From June to September: It is the quiet period, that of wintering. Trade between Niger and Nigeria are at their lowest because Nigerien livestock is situated in the north of the pastoral area and supply to the border markets is drastically reduced.
- Special festival seasons: The flow of sheep, cattle and goats increases with the approach of festivals like Eid el- Kabir (Tabaski), the end of Ramadan, Easter, Christmas and New Year.

The markets engaged in livestock trade in the Kano–Katsina–Maradi area can be grouped into five categories:

- Collection (initial supply) markets: they are generally situated in the south of the
 pastoral areas of the Maradi, Tahoua and Zinder regions. They are Tchintabaraden,
 Abalak, Chadawanka, Ibohamane, Tamaske markets in the Tahoua region, Ajecoria
 Atchitalakia, Intuila, Korahame, Bermo, Combadji, Gadabeji Sakabal, Goula Soli in the
 Maradi region and Gandou and Issanwane in the Zinder region. In these markets
 supply is essentially provided from breeders and the buyers are local traders who are
 responsible for the next stage, which is the supply to grouping markets.
- **Supply / grouping markets**: they are situated in the northern part of the agricultural area near the K²M basin. Rearers and small-scale local traders provide the supply of livestock. In some cases, these markets are also patronised by export traders from Nigeria who bring in supplies of cereals and livestock feeds. The major markets of this type in the region are in Dakore, Guidan Roumdji, Tanout, Damagaram, Balbeji, Sabon-Machi, Tessaoua, Mayachi, Tchadoua, Aguie, Bakan Birgi and Tekeita.
- Transit / export markets from Niger to Nigeria: these are mainly the Tounfafi, Maradi and Matameye markets. Supply is provided by local traders and rearers. These markets directly supply Nigerian markets situated just on the other side of the border.
- Entry / border markets in Nigeria: they are set up all along the border and receive livestock from Nigerien transit and grouping markets. They are regularly patronised by Nigerian traders who bring cereals and livestock feeds. The most important markets in the Kano–Katsina region are Chinkafi, Gada, Labao, Jibia, Dankama, Katsina and Mai-Adua.
- Consumption / terminal markets: they are situated in large cities in southern Nigeria like Lagos, Ibadan, Ilorin, Benin City, Warri, Port Harcourt, etc., and in certain big cities in the north such as Kano, Abuja and Kaduna.

Kano also centralises the flow of livestock from Niger, Chad and Cameroon, to provide regular supply to big southern cities. An international market was built so as to play this role. Unfortunately, this market is not operating due to conflicts associated with the choice of site and a divergence of politico-economic interests.



Map 2: Livestock market

Sources: Information collected by the team SWAC/OECD

In all of these markets, the actors carry out their business directly or through middle men (Dillali). Generally relatives who earn a commission looking after the livestock. The purchases and supply in the markets are guided by an information network which provide systematic information on the terminal markets, prices and types of livestock most demanded. The exporters in the grouping markets are thus informed on what to buy and at which market.

2.3 The operators and their strategies.

There are as many Nigeriens as there are Nigerians, even if the Niger government favours its nationals. In Niger, livestock export is only authorised for Nigerien nationals who can also benefit from additional advantages depending on whether they are declared or not. These advantages are indeed used to persuade them to regularise their activities for tax purposes.

Livestock traders from this zone are individuals from family businesses where this activity is usually passed on from father to son. Many operate informally and often do not have any accounting mechanisms. Contrary to cereal traders, there are few large scale livestock traders. The majority of actors trade between 30 and 150 heads of small livestock and 50 heads of cattle. This is not only due to the specific characteristics of livestock trade, like once purchased, charges accrue to maintain the livestock in order to preserve their value, which increases with the number of heads, but also to limited financial capacities of many rearers. Generally, actors intervene alone or in a group to constitute large enough supply in order to be able to share the cost for transportation to the consumption or exportation markets.

2.3.1 General strategy

Throughout the year there is relatively strong regional demand for Nigerian traders to provide meat and livestock as well as by-products like animal skin and leather. They developed a trade strategy based on the valorisation of their comparative advantage; a strategy that has significant impact on Niger. Their major advantages are access to capital²⁹, the availability of fodder and industrial by-products³⁰ as well as the low cost of transportation. In Niger there is regular demand for livestock feed and cereals, this demand leads to a form of integration of the two markets and a reduction in transportation costs. This factor is also advantageous to Niger and it constitutes a comparative advantage vis-à-vis competing countries like Chad, Cameroon, Burkina Faso and Mali, that are practically livestock feed auto-sufficient.

This integration strengthens Nigerien livestock rearers' position on the Nigerian market. It also helps to optimise profits and reduce Naira/CFA Franc exchange rate fluctuation risks.

2.3.2 Specific strategies

As regards breeders it is easily noticeable that animals for sale in the markets are mainly males and females at the end of their respective cycles. Animals are sold based on the financial needs for breeders and their families, in particular for sustenance needs. The livestock/cereal terms of trade also significantly influence the number of animals sold and how often.

As regards traders, specific strategies in place relate to:

 Trade being carried out in habitual areas with a network of loyal partners (suppliers, transporters, forwarders at customs, middle men etc.). This is done firstly to maximise profits, because transaction costs are lower when operating within a familiar zone and with trusted people. This prevents any disputes which are frequent in the livestock

_

²⁹ More available in Nigeria thanks to more developed banking facilities than in Niger.

³⁰ Cereals, wheat bran, cotton seed, etc.

business, where one can easily acquire sick or stolen animals. This trust also allows a thorough understanding of the market trends and to develop relationships which indirectly contribute to the maintenance of the business.

- Taking into account prices on consumption/terminal markets and exchange rate trends in fixing livestock's selling price
- Specialisation according to animal species: goats/sheep, camels, mules and poultry.
- Accepting small profit margins with a willingness to carry out frequent and rapid rotations between terminal markets and supply markets. This practice protects traders from the high costs of maintaining acquired animals while enabling them to monitor regularly the evolution of supply, demand and prices in different markets.

2.3.3 Net profits

Very difficult to obtain, profits realised generally seem low³¹. Under favourable conditions, they seem to be between 5 and 10% of the selling price of an animal, that is, between 3 000 to 10 000 CFA Franc per head depending on species, market conditions and harassment encountered along the route. The possibility of accruing zero- and negative net margins exists.

2.4 Difficulties

Livestock traders in the Kano–Katsina–Maradi zone face many difficulties; the most notorious problems are set out below:

2.4.1 Lack of working capital

Lack of working capital is a constraint more widely faced by Nigeriens. Livestock trade requires significant working capital which is not always easy to acquire. Transporting twenty cattle from Maradi to Lagos, requires a minimum of 3 million CFA Francs. It is not easy to obtain such a sum within the context of family businesses with low revenues. This constraint creates an entrance barrier limiting demand and price levels on supply markets.

2.4.2 High risk in a context of total lack of insurance

Traders operate within a very risky context due to the following two factors: 1) the highly competitive consumption/terminal markets where numerous actors negotiate without any form of organisation (in such a context, though prices are determined through supply and demand, they are unstable and fluctuate greatly; 2) exchange rate fluctuations.

These two problems render livestock trade in the K²M zone uncertain and result in many bankruptcies of its operators. Under the combined effect of these difficulties, a trader who has an initial capacity to trade 50 cattle may progressively be forced to reduce to 40, 30, 20 or even less than 10 until he finally ceases business. This explains part of the unwillingness of the banking sector to enter this type of business.

2.4.3 Exchange rate fluctuations

Exchange rates vary significantly and impact on the operators' margins. Since January 2006, the Naira depreciated about 10% to the CFA Franc. This is an important amount considering the margin which Nigerien operators make.

³¹ Traders are reluctant to divulge this type of information. Some more detailed studies are required.

2.4.4 Taxes and other hindrances on the roadways

Taxes are significant and in certain cases constitute the major factor deterring operators from doing business formally. According to testimonies of some operators, sometimes the official tax rates fixed by customs as a basis for tax payment are not respected.

Table 3: The rates fixed for tax statistics in Niger

	Product	Taxable value
	Horses	100 000 F
	Camels	100 000 F
	Cattle	100 000 F
	Asses	30 000 F
Livestock products	Sheep	20 000 F
Livestock products	Goats	10 000 F
	Skins, hides, raw skins of cattle	1 000 F/kg net
	Dried skins of poultry	1 000 F/kg net
	Tanned skin of poultry	1 500 F/kg net
	Goat skin	500 F/kg net

Source: DGD

FCFA/ head

25,000 - - - - -

10,000 - -

5,000 -

The difficulties related to applying these regulations can be found at several levels:

- Application of a higher value than that appearing in the table;
- Possibility of purchase price for animals inferior to those set out in the table;
- Lump sum payments unassociated to any regulations.

Cattle

These taxes and hindrances are a significant trade determinant in the zone. The graph below shows their levels and their distribution.

Graph 1. Charges and taxes borne by exporters

□ Fodder

_ - -

Customs Nigeria

■ Transport

■ Customs Niger

20,000 ---- Commission seller

FCFA/head 25,000 - -■ Nigeria 20,000 -15,000 -■ Niger 10,000 5,000 - -Sheep Cattle

Graph 2. Distribution of charges and taxes per country

■ Taxes passed States

Source: Interviews carried out during the mission

Sheep

2.4.5 Insecurity on the roads

Livestock traders have experienced insecurity on the roads for a long time. To address this insecurity, operators must adopt strategies which aggravate their transaction costs.

2.5 The current situation

2006 is characterised by good supply of livestock feed. The terms of trade favour rearers not prompting them to frequently sell their animals in the markets. The improvement in terms of trade for livestock rearers is not only the result of an improvement in livestock prices but also a decrease in cereal prices.

Compared to 2005, the number of animals put on the market has dropped, notably cattle and goats which were in high demand during the food crisis.

Generally, and on the basis of data presented in the figures below, the supply of animals has always been greater then demand on the markets in the Maradi region. The goat markets are more regular in terms of supply, demand and prices. This confirms the strategic importance of this species for food security, considering its ability to generate revenue regularly and to provide meat for consumption.

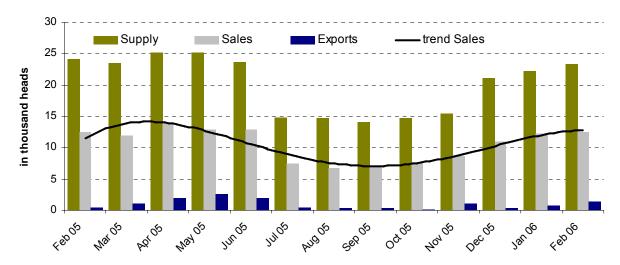
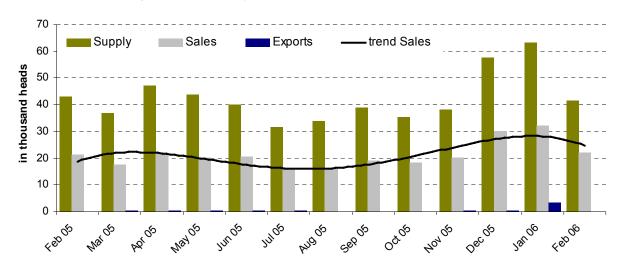


Figure 3: Cattle supply, sales and controlled exports in Maradi Province





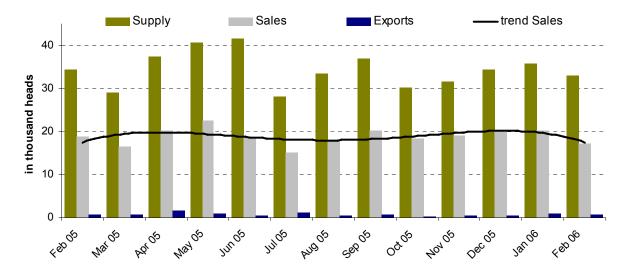


Figure 5: Goat supply, sales and controlled exports in Maradi Province

2.6 Supply, demand and price

The following graphs show that the price of livestock is not only determined by the relationship between the number of livestock heads on supply in a particular market and the number of livestock heads actually bought (sales) in that same market (supply/demand relationship), it is observed that:

- On one hand, depending on the time of year, price varies remarkably while the supply/demand relationship is the same. This seasonality is explained by the following factors: 1) during the lean period prices reflect breeders' "need to sell"; 2) the quality of animals varies remarkably according to the availability of pastures.
- On the other hand, the level of prices in Niger is also influenced by the trends on consumption/terminal market, especially in Nigeria.

This last point can partly explain why the price of livestock did not collapse, even though it dropped drastically during the 2005 crisis. This also takes into account the regular contacts by cellular telephone between traders working in network and who are spread across both consumption and supply markets.

The price improvements noticed this year compared to those of 2005 are essentially due to the hefty condition of the animals as a result of sufficient availability of forage.

Figure 6: Cattle: Supply, sales, price on grouping markets in Maradi Province

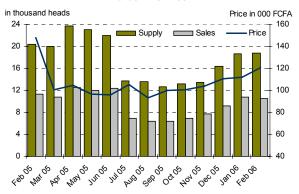


Figure 7: **Sheep**: Supply, sales, price on grouping markets in Maradi Province

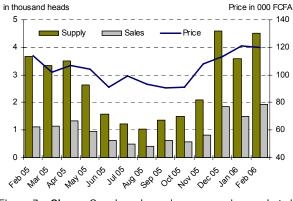


Figure 6a: Cattle: Supply, sales, price on grouping markets in

Maradi Province

Figure 7a: **Sheep**: Supply, sales, price on grouping markets in Maradi Province

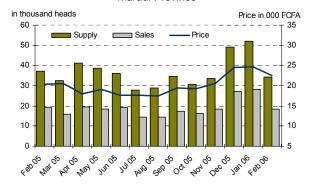


Figure 8: **Goat**: Supply, sales, price on grouping markets in Maradi Province

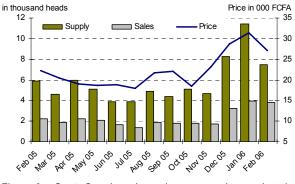
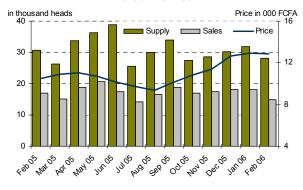
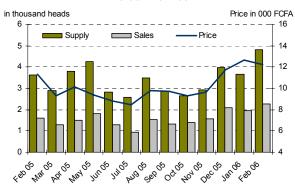


Figure 8a: **Goat**: Supply, sales, price on grouping markets in Maradi Province





Source: FEWS NET.

2.7 The perspectives

Nigeria's demand for animal products will continue to increase as a result of its urban and industrial development, its demographic growth, and the improvement of the populations' living conditions, notably under the effect of a high crude oil price trend. At the same time, Niger has the capacity to respond to a large portion of this external demand due to its significant livestock herd.

However, the conditions in which the majority of livestock trade takes place carries great risks linked to lack of capital and banking credits. Furthermore, this sector is very sensitive to exchange rate fluctuations which negatively affect the animal product trade.

In addition, if the Nigerian market continues to grow and the Nigerien livestock sector is willing to remain its main supplier, what is the realistic capacity of the Nigerien livestock sector to follow and to satisfy Nigerian demand? What changes should it undertake? In analysing the average price structure on the neighbouring markets of Maradi and Jibia, a clear difference in quality between the animals presented on both markets is emerging. The quality is average at Maradi and good for exportation at Jibia. Strong and continuous Nigerian demand will certainly have a positive impact on this sector, where some informed producers will strive to consistently supply quality animals to the market, in accordance with market standards which will not take long to emerge. However, to seize these opportunities cross-border initiatives must be supported which aim to capitalise on the complementarities of production systems of both countries.

Niger and Nigeria each want to establish modern slaughterhouses along their shared border. Apparently these efforts are not concerted. A cross-border cooperation process would be very useful in this regard

Lastly, there is a lack of data regarding the various trade flows. The mission noted the severely underestimated data provided by public services at border posts in the Maradi region. A tradeflow monitoring mechanism should also be set up through cross-border cooperation (See Chapter 5).



The relationship between the cereals and livestock sector and crossborder cooperation

3.1 The context

In most West African countries the cereals and livestock sector are closely linked together. In the Kano–Katsina–Maradi region, this link is particularly pronounced because of the complementarities in production systems of Niger and Nigeria. The K²M axis is one of the main corridors of cross-border trade between the two countries, whether in local products, products from other countries in the region or re-exported products from world markets. Historically a livestock producing country, Niger imports dry-cereals (millet, maize, sorghum) from Nigeria to make-up for a large part of its structural production deficit. In the opposite direction, the quasitotality of livestock exports from Niger, 97% according to official sources, is towards Nigeria, where they satisfy an enormous demand in major urban centres, mainly in the south 3². Cash-crops (cow-pea, nut-grass, sesame) are also mainly exported to Nigeria.

The complementarities between the two countries are based, on one hand, on ecological and politico-economic factors and, on the other hand, significantly amplified by a strong horizontal integration of the sectors. This integration is evident at each level of these sectors: production, marketing, processing and sectoral and trade policy, which produce among them cumulative effects. Consequently, the strategies of farmers, rearers and traders of this zone are based on the analysis of production, marketing and processing characteristics in the entire K²M production basin. Highlighting a level of coordination that national policies are still far from achieving.

In addition, if one examines the interactions between the livestock and cereals sector from a "food security" perspective it seems sensible to think that the two form one single "complex".

3.2 The complementarities

3.2.1 Production

At the level of farmers, the link between cereals and livestock are myriad and further intensifying across the whole Sudano-Sahelian region. In the large cereal production basins, the livestock sector occupies an increasing part in the production system. The distinction between farmers and livestock rearers is no longer very marked. This trend towards a diversification of production and revenue sources is illustrated in the K²M area, a major cereal production basin. As a result of intensification of agricultural production, like the use of animal traction and organic fertilizers, farmers devote an increasing amount of time to livestock rearing activities³³. Animal husbandry represents an important tool for saving and revenue diversification and thus reducing vulnerability to climatic hazards³⁴. The activities of livestock rearers (in agro-pastoral areas) have also changed during the last decades, the majority among them now growing cereals for their consumption needs³⁵.

According to estimates between 80 and 90% of cattle imported from Niger have as destination the major cities in the southern Nigeria, Lagos absorbing the largest share.

Today, West African livestock densities are higher in agricultural production basins, than in pastoral and agro-pastoral areas. FAO data on livestock herds, cattle, sheep and goat combined indicate 66 million heads in Nigeria and 14 million heads in Niger in 2005

³⁴ See FEWS NET Niger, "Rural livelihood profiles" for data on monetary revenues in this area.

A member of the Kano branch of the "All farmers Association of Nigeria" mentioned the presence of Nigerien livestock rearers who buy plots of land in Kano State to cultivate cereals for auto-consumption.

From a food security and early warning system perspective, animal husbandry and in particular transhumant, depends on the quality and the availability of pastures and is therefore subjected to the same climatic conditions as agriculture.

In addition, one of the key characteristics of the K²M zone is its high urbanisation rate. Its urban centres generate a strong and exigent demand having strong "pull" effects on all rural activities: stimulating increases in cereals and livestock production. This also leads to an intensification of production with the illustrated effect on integration between sectors. Likewise, the recent development of a poultry industry in northern Nigeria led to an increase in the demand for maize and its price. This direct effect of the livestock sector on the cereals sector, by providing a large and stable "intermediary" market, increases demand and promotes an augmentation in production. Albeit, the negative impact of the avian flu outbreak on the poultry industry³⁶, its growth will without a doubt continue.

These mechanisms impact on production and on diversification choices of farmers and are naturally reflected at the price-fixing level and consequently also having an impact on food security. It is therefore important to consider the livestock and cereals "complex" as a whole and in an integrated cross-border area context, and no longer on a national scale.

3.2.2 Sectoral and trade polices

Although the K²M zone is a relatively homogenous area, significant differences exist as far as policies are concerned. Nigerian trade policy equivalently tries to promote trade and domestic production, while that of Niger concentrates on trade aspects. In an integrated area, national trade and sectoral polices have impacts on the productive sectors on both sides of the border.

Niger's trade policy consists primarily of implementing WAEMU's³⁷ "common trade policy" (CTP). Its government revenues from trade are for a large part related to re-export into Nigeria. Niger's Poverty Reduction Strategy (PRS) puts emphasis on increasing commercialisation of agricultural and livestock products, notably through the development of markets and in particular export markets. The government's support programme seeks to develop these sectors through investments in the provision of public services (infrastructure, health and social services, training and support programmes).

The livestock sector accounts for around 10% of GDP and 20% of export revenue in Niger. The sector's potential is still largely under-exploited, with a low adaptation and evolution capacity and little public training and/or support. For some time, sectoral policies aimed at promoting the livestock sector are being developed. The Niger Ministry of Animal Resources has recently completed a feasibility study for the rehabilitation of four abattoirs³⁸ along the Nigeria border and supports the creation of a private company for meat export to Nigeria. These initiatives do not only seek to promote value-added in the livestock sector, but also to increase production which remains poorly organised and structured.

Overall, the development of the two sectors remains held up by structural problems, mainly at the level of production: lack of support for the expansion of production, insufficient inputs and infrastructures, low levels of intensification, lack of access to banking services by producers (farmers and rearers), problems relating to commercialisation and administrative harassments at borders...

In Nigeria, trade policy objectives are integrated in the National Economic Empowerment and Development Strategy (NEEDS) and aim to strengthen the competitiveness of national industries by increasing local content and value added. In the agricultural sector, which remains highly protected, representing 26% of GDP and 70% of the labour force, the goal is

Nigeria is not a member of WAEMU.

A total of 450,000 birds were killed.

³⁸ In the cities of Maradi, Tahoua, Zinder and Niamey.

to guarantee food security, self-sufficiency and to diversify exports. Some protectionist measures³⁹ (e.g. the export ban of unprocessed cereals like maize, the ban on importing edible oil and wheat flour) translate a willingness to increase local value added. Complementary, there exist several programmes of direct support to agricultural and livestock production by the state and/or federal governments. These programmes include: the supply of fertilisers and tractors at subsidised prices, the development and provision of high yielding seeds, access to credits for rearers and farmers (in cooperation with private banks)⁴⁰, and an agricultural insurance scheme providing some protection against risk faced by farmers.

There exist therefore important differences in terms of complementarity between trade and sectoral policies between the two countries. To maximise benefits from its trade policy, Niger needs not only to facilitate cross-border trade flows by reducing harassments at borders, but also implement sectoral policies geared towards expanding production. The coming adoption of the Common External Tariff (CET) of ECOWAS will compromise the viability of Niger's trading systems, where many traders live from re-exporting various goods imported through Togo and Benin to Nigeria. At the same time, the CET also represents an opportunity to increase benefits from complementarities and comparative advantages between the two countries. Nigeria's comparative advantages⁴¹ lie in: important ecological resources (higher lying and hence more accessible water tables) and its demography (developed urbanisation, high population density), whereas those of Niger are availability of large pastures and low population density. To this date, public policies have not been able to increase the benefits from complementarities and comparative advantages of the two countries. In some cases they achieved the opposite.

Today, public policies are in need to define strategies based on the complementarities and the socio-cultural, ecological, and geographical homogeneity of a strongly integrated area. A coordination on trade and sectoral policies would allow for: cooperation on sensitive issues (such as transit activities) and to valorise complementarities and productive potential of a shared area. The coordination of sectoral policies needs to take place at central as well as local level⁴².

3.2.3 Marketing

Marketing of products from the cereals and livestock sectors is a key factor in increasing value added and production. Today, the integration of Nigerien and Nigerian markets in the Kano–Katsina–Maradi area is a reality. This is underlined by the development and organisation of the commercialisation chain⁴³. The significant volumes of products crossing the border, officially and unofficially, do not leave any doubts as to the connection of markets; or the capacity of traders to react and adapt. Integration is decisive in allowing the commercialisation chain assure availability of cereals, satisfy demand and increase production and valorisation of the two sectors.

The regular flows of dry cereals along the K²M corridor represent the majority of Niger's imports alleviating its structural deficit. Even if Niger witnessed a diversification of its supply sources during the last ten years, Nigeria remains a major supplier. This dependence was

³⁹ The average custom duty applicable to agricultural imports was 41.4% in 2003 (WTO/TPR/S/147).

This joint initiative by the central government, the Central Bank and the bankers committee has a capital base of 50 billion Naira. In 2005, the majority of loans, 91%, were granted for food stuff production, 7% for the livestock sector and the remainder for cash-crop and fisheries products. In terms of geographical distribution the Federal States of Katsina and Kano received 10% of total loans each

⁴¹ One could also talk of a higher opportunity cost between livestock and agriculture in Nigeria.

⁴² The interviews carried out during the mission confirm an interest of the two countries in cooperating at the local level.

⁴³ As shown by the access of wholesalers/traders to credit facilities for the marketing of agricultural products.

strongly felt in 2005, when the announcement of the food crisis⁴⁴ in Niger led to a sharp increase in prices of dry cereals on Nigerian markets and disrupted trade flows⁴⁵. Nigerian traders stopped in fact importing from Nigeria. This event, nevertheless, demonstrates the integration of markets. Trade in cash-crops, notably in cow-peas, nut-grass and sesame, mainly exported to Nigeria, shows the same continuity.

97 % of Niger's livestock exports are to Nigeria, mainly to the large urban centres in the south. With a population of around 130 million inhabitants and a high level of urbanisation, Nigeria represents an enormous market, whose potential is likely to spur the development of the livestock sector in Niger.

Although, the commercialisation of agricultural and livestock products benefits from the socio-cultural homogeneity and the know-how of traders from both countries, it does not realise its full potential because of the many structural and institutional obstacles. Amongst which the co-existence of two currencies — CFA Franc and Naira — and the inconvertibility of the Naira are important ones. The Naira/FCFA exchange rate stabilised during recent years, but the Naira's depreciation continuous to be a significant factor in the competitiveness of Nigerian products. For traders, the fluctuations imply significant exchange rate risks. This problem is worsened by the inconvertibility of the Naira making it impossible to resort to the financial system to hedge against this risk. The absence of official channels for the transfer of funds implies equally that traders and rearers are obliged either to buy Nigerian products for sale in Niger, or to return with large amounts of cash, with the latter implying significant risks in view of the numerous insecurity problems in Nigeria. Other persistent obstacles include harassments along the roads, the heaviness and variability of official import and export regulations as well as language differences.

The majority of obstacles to the free flow and development of cross-border trade and thus the valorisation of production, are identical for the two sectors. Initiatives towards an improvement of trade flows and expansion and securisation of markets should therefore intervene at the level of the cereals/livestock "complex".

3.3 Food security

Food security of populations in the area is increasingly determined by accessibility and nutritional aspects. Concerning the latter, meat and its by-products and especially poultry products and eggs, have a growing importance for the satisfaction of nutritional needs, particularly those of poor households. They constitute the main source of animal protein intake and in addition an important source of revenue for the poor.

Accessibility depends on prices and revenues and consequently, for a large part of the population (especially in pastoral and agro-pastoral areas of northern Niger) on the terms of trade between livestock and cereals.

_

⁴⁴ Many stakeholders in Kano mentioned a doubling of millet prices in the two weeks that followed the first reports on the food crisis in June 2005.

⁴⁵ The Naira/FCFA exchange rate also plays an important role in the competitiveness of imports from Nigeria.

Price in FCFA kg 30.000 180 25.000 150 average price goat 20,000 120 15,000 90 10.000 60 5,000 30 n Mar.OS

Figure 9: Terms of trade millet/goat

Source: DRPA; SIM.

As shown by the above figure, it is with the start of the lean season (May) that prices of cereals and livestock begin to diverge and terms of trade deteriorate for livestock rearers. During crisis years, like 2005, the sharp increase in the price of cereals combined with a decline in livestock prices – due to a lack of grazing lands and hence lower weight and quality of animals - translates into the need to increase the sale of livestock to satisfy food needs. The multiplier effect which results from the supply and demand disequilibrium (because of too high supply ⁴⁶) reinforces the decline in prices for livestock and starts a domino effect.

This weakness of the livestock sector vis-à-vis the cereal sector rests on structural factors and bad valorisation. The structural factors of the vulnerability of nomadic rearing, dominant form of rearing in Niger, are: climatic hazards (strong inter-annual variations of rainfall) which are more pronounced in pastoral and agro-pastoral areas; lack of fodder to make up for non-available pasture during difficult years; distance to consumption markets (animals lose in value, in the best of cases, during the long commercialisation circuits, in particular due to lack of adequate infrastructures). These factors also result in a heightened general vulnerability of the animals raised. In addition, the long-term effects of crisis periods which can lead to a reduction in herd size and/or the sale of reproductive animals are in fact more important in the absence of credit facilities and support for reconstituting herds.

An analysis of the food security situation taking into account the interactions between the two sectors - which influence the fixing of respective prices and exercise mutual multiplier effects - seems therefore essential. The absence of information on cross-border trade flows represents an important gap to be filled.

The importance of the livestock sector to food security should be taken into account in the formulation of food security strategies. An initiative to improve the circulation and marketing of livestock towards Nigeria, major market for Nigerien production, constitutes an interesting option to improve food security.

in rilger, the various types of it

In 2005, in Niger, the various types of livestock supplied increased 22% over 2004, but sales increased by only 10%.

3.4 Cross-border cooperation

The progressive integration of the regional cereals and livestock market allows to better equate supply and demand, to ensure trade between surplus and deficit cities and regions and to stimulate synergies between sectors and to gradually improve conditions of the marketing chain. However, the problems linked to the absence of coordination of sectoral and trade policies, to deficient infrastructures (transport and banking facilities), to administrative harassments, to insufficient information on prices and to the persistent compartmentalisation of certain national markets continue to negatively affect the integration process. These discontinuities, that materialise along national borders and alter the integration process demand actions and solutions that can only have a cross-border approach. Most of the problems which limit the fluidity and extension of cross-border trade flows (and consequently production) are identical for the two sectors. Cross-border cooperation initiatives to expand trade and synergies between the two countries, to increase and secure markets should adopt a joint cereals/livestock approach. Diverse actions and initiatives listed below (see. chapter 5) are likely to promote important improvements to commerce and production in the two countries, to their mutual benefit.

4.

Cross-border trade and its impact on food security

4.1 What are the stakes for food security?

The analysis of cross-border trade in cereals and livestock, as well as their relationship, allows a better understanding of the cyclical food security situation. This fourth chapter will provide elements of the responses to the following three key questions:

- What are the short term risks of a market evolution comparable to that experienced in 2005?
- What is/will be the impact of avian flu on trade and food security?
- How can market evolutions and their impact on food security be more effectively monitored?

To answer these questions, the relationships between "markets" and "cross-border flows" on one hand, and food security on the other, are explored first (4.2). This is followed by an evaluation of the "availability" and "accessibility" components of food security (4.3 and 4.4), as well as the impact of avian flu on food security (4.5). The conclusions are summarised in (4.6) and proposals for improving and monitoring the situation of markets and their impact on food security are presented in Chapter 5.

4.2 The conceptual framework: cross-border flows and food security

Food security in Niger depends largely on cross-border trade in agricultural and livestock products with Nigeria. Without this trade it is hard to imagine how the Nigerien population could experience an environment with relative food security.

Given Niger's recurrent cereal deficit, its food security in terms of availability depends on imports from neighbouring countries, in particular Nigeria. Furthermore, knowing that family production on average barely covers a few months of the household's needs, the ability to buy and sell is a decisive factor for Nigerien households' accessibility to foodstuffs. Lastly, the consumption of foodstuffs and children's nutritional state depend on their availability and accessibility, and are hence indirectly linked to markets and cross-border trade with Nigeria. This document is limited to a global analysis of food security. Household data collection and analyses to confirm the impacts on these households was not included in the mission's terms of reference.

Besides this rather cyclical aspect of food security, cross-border trade enables countries to capitalise on their comparative advantage, to use their resources more efficiently and to increase their wealth compared to a situation in the absence of trade.

4.3 Cereal availability

4.3.1 Agricultural production

The availability of foodstuffs in the K²M area does not only depend on cereal production in this area (Province of Maradi, the States of Katsina and Kano), but also on production outside, notably in the Nigerian production basin and, to a lesser extent, in other areas of Niger such as

the Zinder Province. The production of dry cereals in Nigeria⁴⁷, clearly higher than the combined production of CILSS countries⁴⁸, is the dominant factor as regards cereal availability in the sub-region. Local trade and cross-border cereal flows, being very dynamic, generally quarantee that the deficient areas will be supplied by areas producing a surplus⁴⁹.

The mission was able to obtain provisional agricultural statistics for Niger for 2005 (and previous years) whereas those of Katsina and Kano were not available. The FAO publishes provisional data on agricultural production in Nigeria, but the quality of this data seems questionable: production of maize, millet and sorghum were identical during 2002, 2004, and 2005^{50} .

In Niger, the 2005 rainfed agricultural campaign recorded a gross cereal production of 3,737,800 tons, including the estimates of out of season crops, which represent an increase of 36% compared to 2004. In Maradi, available cereal production rose to 725,000 tons, compared to 525,000 tons in 2004/2005, an increase of 38%. For Nigeria, due to the lack of reliable data, the analyses in this document will be qualitative.

According to the different actors interviewed (traders, representatives of technical services) cereal production in Niger and Nigeria was good during the 2005/2006 agricultural campaign. Traders on the Dawano market evaluate the harvest each year in September/October in order to plan their purchases. If there are substantially deficient areas in the sub-region, arbitrage opportunities exist and traders buy significant quantities of cereal. In October 2005, it seemed that cereal production, for this year's marketing campaign, was good almost everywhere in the sub-region and opportunities for arbitrage were limited. They therefore decided to buy and stock less cereal, compared with the previous year. That is to say that a larger part of cereal stocks in Nigeria is still at collection regions, either in collectors' warehouses or with households. The mission was able to verify that commercial activity was poor at Dawano (May 2006), due to a lack of arbitrage opportunities, whereas this period is normally the most dynamic.

The prospects for cereal production in Nigeria and Niger in 2006/2007 does not only depend on rainfall but also on investments made, especially in Nigeria, including the subsidisation of agricultural inputs, available bank credit, and acreage cultivated. This last point is very important because agricultural farms adjust cultivated acreages in view of expected revenue, hence prices of agricultural products. For example, a rather low price for maize and a high price for cotton this year could lead farmers to plant more cotton than maize. Given the importance of cereal production in this basin, there is a need to monitor all these factors throughout the agricultural campaigns so as to forecast the availability of food stuffs in the K²M area and beyond.

4.3.2 Cross-border trade flows in foodstuffs

The quantity and direction of the cross-border foodstuff flows depend on several structural and cyclical factors⁵¹. Apart from the volume of agricultural production, cyclical factors which determine trade flows are i) the Naira/CFA Franc exchange rate; ii) demand for cereals, determined by agricultural production in Niger and Nigeria and, in a larger context, by economic growth; and iii) prices in Niger and Nigeria.

⁴⁸ 14 million tons in 2005.

⁴⁷ 16 million tons in 2005.

⁴⁹ See the document, "Niger, cereals markets profile", WFP 2005. (www.wfp.org/operations/Emergency_needs)

⁵⁰ www.fao.org/stat

See chapter 1.

Since the end of 2003, the exchange rate fluctuated between 250–275 Naira for 1 000 CFA Franc. Before, annual depreciation was high, 14% on average, whereas in 2004 and 2005 it was more modest, at approximately 7% (see Figure 10). Compared with May 2005, the exchange rate today is at similar level of around 270 Naira for 1 000 CFA Franc, although a depreciation of 10% was recorded since December 2005. This factor is advantageous for Niger's imports, but disadvantageous for the exportation of livestock and cowpeas to Nigeria. However, it is probable that prices in the two countries and at many levels (farmer, collector, consumer) adapt to the exchange rate making it difficult to know who is profiting and who is not.

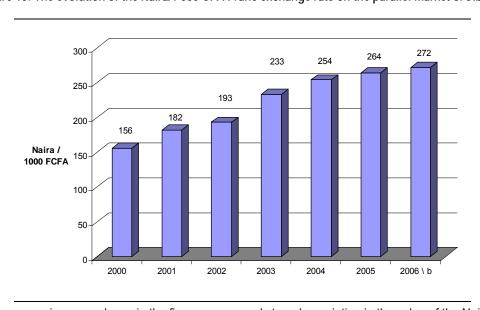


Figure 10: The evolution of the Naira/1 000 CFA Franc exchange rate on the parallel market of Jibia \ a

a: an increase shown in the figure corresponds to a depreciation in the value of the Naira. b: during the field mission in May 2006.

Source: SIMA, Niger.

Although the Nigerien demand for cereals imported from Nigeria seems to have fallen this year as a result of a better harvest in 2005 than in 2004, this hypothesis is difficult to confirm due to the lack of statistical data on household demand. The prices of dry cereals are presently lower in Nigeria than in Niger (see following chapter) which encourages cereal exports to Niger.

The mission was able to verify that this year dry cereals (maize, millet, sorghum) were transported from Nigeria to Niger, which is normal in a year where Nigerian cereal production was satisfactory⁵².

In contrast, last year, there were exports from Niger to Nigeria. Traders based in Jibia confirmed that Nigerien millet was sold in small quantities (one to two tons a week) on the Jibia market during the pre-planting/pre-lean season (April), before the closure of borders by the Niger government. Also traders in Dawano confirmed that at the beginning of the marketing season last year, they bought cereals at Maradi. Lastly, traders based in Tounfafi (Madoua, Niger) told the mission that in April 2005 traders from Nigeria came to the Tounfafi market to buy millet. The export monitoring system of the Niger government did not record these transactions. The lack of reliable data on these transactions for the Niger early warning system (EWS) makes it impossible to be aware, in a timely manner, of an availability problem that can occur as a result of exports to Nigeria.

-

The trade flow mentioned corresponds to net flows.

In examining Table 4, the insufficiencies of the cross-border trade flow monitoring system become even clearer. According to official data, only 5 trucks transporting maize, 10 loaded with sorghum and 35 carrying millet, supposedly left Nigeria for Niger, passing through Dan Issa in 2006. In addition, the data of previous years, especially since 2001/2002 seems negligible in view of the intensity of the commercial activity at the borders. According to DPV data, there were practically no exports of maize, millet and sorghum from Nigeria and Niger through the border post of Dan Issa in 2006.

Table 4: Nigerien imports from Nigeria in tons per campaign (October–September)

Dan Issa	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05 \ a	2006 \ b
Millet	27,607	43,969	147	1,221	2,566	2,047	651
Maize	36,682	8,628	2,683	1,535	566	171	102
Sorghum	9,934	7,519	135	249	270	226	190
TOTAL	74,222	60,115	2,965	3,005	3,402	2,444	943

a: until May

Source: DPV at Niamey and at Dan Issa

The insufficient recording of cross-border trade flows - which are mostly informal, whereas the data collection system remains official - makes it impossible to estimate the quantity of imported and exported products rendering the monitoring of foodstuff availability difficult.

4.4.3 Markets

It should be noted that markets are well supplied. On one hand, the supply of millet, maize and rice are satisfactory and regular on Nigerien markets in vulnerable areas⁵³. On the other hand, the problem on wholesale markets in Nigeria resides in low demand rather than low supply. Physical cereal stocks on Dawano market are not particularly high this year, also related to low demand rather than a lack of supply at the collection regions. Indeed, traders hesitate to accumulate stock this year because they feel that their profit margins will not be very high. They are convinced that cereal prices will fall if the agricultural campaign proves very well.

4.4 Accessibility

4.4.1 Price of foodstuffs

At the consumer level⁵⁴

According to the SIMA Niger monthly bulletin (April 2006) and the *Bulletin conjoint du Niger* No. 2⁵⁵, the consumer prices of millet, sorghum and maize are around 15% lower than the previous year, but close to the average of the last five years. This situation is confirmed around the Maradi region (see the Figure 11 for millet prices; the prices of sorghum and maize show the same trends).

b: January-April

⁵³ See Joint Monitoring of Markets in Vulnerable Areas, Bulletin No 2, related to the second half of the month of April.

⁵⁴ The team could not access data on consumer prices in Nigeria. No institution which collects and analyses prices at retail level was identified.

⁵⁵ Covering week 14 and 15. Produced by SIMA, FEWS NET and WFP.

Due to a good 2005/2006 harvest in Niger and in its supply countries, especially Nigeria, the exceptionally high level of prices recorded on markets between March and August 2005 have re-adjusted. Although at the beginning of the marketing campaign, prices of dry cereals guickly fell below their high level during the month of August, they remained higher than the average of the five previous years. For example, in November 2005 the price of millet in the Maradi region represented 43% of the price in August, whereas it was 10% higher than the average of the previous five years. This is explained by: i) a strong national demand expressed by villagers, urban consumers and traders for reconstituting their stocks and; ii) farmers placing a limited quantity of products on the market because of the good harvest of cowpeas and other cash crops which are marketed first and the reluctance to sell cereals after a bad experience last year⁵⁶.

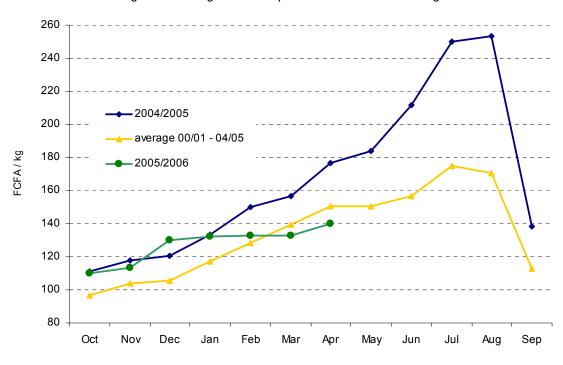


Figure 11: Average consumer price of millet in the Maradi region

Source: SIMA, Niger.

Since then, cereal prices in the Maradi region remained stable, or increased less than the average, in such a way that their levels are lower than the five-year average. This is explained by a good market supply from stocks in Niger and imports from Nigeria. In April 2006, the price per kilogramme of millet, sorghum and maize are well below average: at 140 CFA Franc, 134 CFA Franc and 168 CFA Franc, respectively (source: SIMA).

At the level of wholesalers

In general, millet prices in Nigeria are lower than those in Niger, thus favouring exports from Nigeria to Niger⁵⁷.The figures 12a and b, show the wholesale prices in Jibia (Nigeria) and in Maradi (Niger). As already emphasised⁵⁸, these markets play a major role in trade between Niger and Nigeria⁵⁹. Figure 12a shows that prices in Maradi were higher between January and March 2005, while in April, prices were higher in Jibia. This confirms the change in direction of trade flows suggested by traders of Tounfafi, Jibia and Dawano

See for example the SIMA bulletin for the month of December.

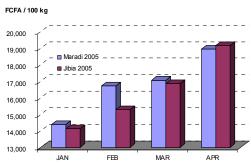
For example for the average of 2001-2004 January-April.

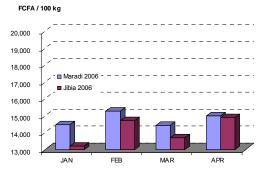
See chapter 1.

Like Dawano market, but no millet prices are available for this market.

Between January and April 2006, prices were lower than in 2005, and the gap between the prices returned to "normal": prices in Maradi are higher than those in Jibia favouring millet exports towards Niger.

Figure 12a and 12b: Wholesale price in Maradi and Jibia, 2005 and 2006





Source: SIMA, Niger.

4.4.2 Production and marketing of cowpeas

Niger is a major producer of cowpeas with an average annual production of 350,000 tons. Production takes place mainly in the Zinder, Maradi and Dosso regions. Cowpeas are essentially for export, notably towards Nigeria and represents Niger's third largest export product after uranium and animal products. In 2005/2006 production reached an exceptionally high level of 480,000 tons of which 75,000 tons were produced in the Maradi region⁶⁰. Producing households sold between October and December 2005 which significantly improved their situation after a crisis year⁶¹. Despite the abundant production, prices remained at an acceptable level at the beginning of the marketing season. Since that time, prices fell to 173 CFA Franc compared to an average of 201 CFA Franc.

The volume of cowpeas exported towards Nigeria is determined by numerous factors comparable to those that influence the cereal trade. Cyclically factors like, the Naira/CFA Franc exchange rate, the production volume in Nigeria and Niger, the demand in Nigeria and prices on both sides of the border play an essential role. The cost of transportation, formal formal taxes and road harassment lead cross-border trade opportunities to vary. This year, the traders of Dawano believe that the price of cowpeas will not increase drastically, because of the good harvest in the region.

The 10% depreciation of the Naira since December has been unfavourable for cowpea exports. However, prices in Maradi remain lower than those in Jibia, which has a positive effect on exports to Nigeria. The figure 13 shows that the consumer price in Maradi was lower than the "wholesale" price in Jibia throughout the marketing season. In April 2006, the "consumer" price in Maradi, was 173 CFA Franc, whereas the "wholesale" price was 208 CFA Franc in Jibia, which constituted an attractive profit margin on the Maradi–Jibia route.

It is likely that prices will continue, as usual, to increase slowly until July. However, an increase in prices comparable to those of last year is very unlikely. Considering that households sell less cowpeas before the harvest, there will not be much impact of this increase on their incomes, whereas it will be negative for households which want to procure cowpeas.

61 See FEWS NET Niger, Monthly report on Food Security, April 2006.

⁶⁰ Provisional results of the 2005/2006 harvest.

⁶² According to the customs office at Dan Issa, export taxes of Nigerien cash crops to Nigeria oscillate between 3 and 10%, depending on the trader's type of customs registration. In Nigeria import duties exists, but is not collected (officially) according to the customs office in Katsina.

420 370 Maradi 2004/5 Jibia 2005/6 320 Maradi average 00/01 - 04/05 FCFA / kg //aradi 2005/6 220 170 120 Oct Nov Dec Jan Feb Mar May Jun Jul Aug Sep

Figure 13: The consumer price of cowpeas in the Maradi region

Source: SIMA, Niger.

4.4.3 Livestock production and marketing

Livestock markets this year are characterised by: i) a small quantity of animals available for sale; ii) higher prices than last year; and iii) a demand that remains strong, particularly in Nigeria. The good quality of grazing grounds, the low price of forage, the favourable animal/millet terms of trade and the good quality of the animals makes it possible for breeders to reconstitute their herds after a difficult year and to limit their sales to a strict minimum. If these conditions remain unchanged, the price of livestock will remain favourable to Nigerien breeders.

According to traders in the Maradi market, the prices of small ruminants and cattle have increased 25% to 35% compared to last year. Demand, essentially from Nigeria, remains high due to strong economic growth spurred by the oil boom. Nigeria's strong demand also keeps the price of livestock at an acceptable level in Niger. This can in part explains why the price of livestock did not collapse during the 2005 crisis, when supply on markets increased.

The 10% depreciation of the Naira since December 2005 reduced the real price of animals in CFA Francs and could have a negative effect on traders' profit margin. But prices will most likely adjust upwards on terminal markets as a result of a reduction in supply. The Nigerian consumer should thus feel the effects of the exchange rate fluctuations most.

4.5 The impact of the avian flu on poultry markets

4.5.1 Present situation

With the appearance of the avian flu in Nigeria and also in Niger in the Zinder province 63, trade in poultry and its by-products declined sharply.

In Niger, restrictions on the sale and transport⁶⁴ of poultry products and the drop in demand and supply almost halted commercial activity during the first weeks of the outbreak. Trade picked up gradually led by a regain in consumer confidence⁶⁵ and a certain flexibility on the part of the Government in enforcing the existing restrictions and also tolerating the informal opening of markets (e.g. Maradi and Tounfafi) and the transport of poultry.

According to poultry traders in Maradi only about 20 out of 300 traders have resumed activities. Also their level of activity witnessed a reduction (25% of the level before the crisis). The mission was able to observe that a portion of the Maradi market stalls were locked, while in some other stalls, chickens and guinea fowl were on sale. According to traders the consumer prices of poultry collapsed at the beginning of the crisis, but after several weeks, the prices rose and have reached 70% of the price recorded before the crisis. Furthermore, the joint Market Bulletin confirmed an increase in poultry prices between the second half of March and the first half of April for the markets in Maradi (in Mayayi and Safo)⁶⁶. It seems that the trade of poultry and poultry by-products are in the process of returning to the national level.

However, according to traders in Maradi the improvements in cross-border trade are more modest. Normally, Maradi traders sell large chickens to Nigeria and buy in return young chickens, but this trade is yet to resume. This point could not be confirmed in Nigeria, because of United Nations Security procedures in force would not allow the visit of poultry markets in Kano and Katsina. According to the authorities in Katsina and the traders on the Dawano Market the impact was felt initially, but the marketing of poultry and of maize, used as birdfeed, is getting back to normal ⁶⁷.

4.5.2 Perspectives: the impact of the avian flu on food security

Everything depends on whether there are new cases of avian flu and the application of transportation and sales restrictions in Niger as well as in Nigeria. If there are no new cases of avian flu confirmed and if the governments continue their tolerant approach as regards the poultry trade, the mission expects that trade will be revived quickly and the impact on food security will be minimal. However, if new cases are detected and/or in case of obstacles to proper market functioning, the impact will be felt by poultry owners and traders⁶⁸.

According to a WFP⁶⁹ analysis, about 50% of Niger's rural population in food insecurity (a total of 3.2 million people) own poultry. Most of the concerned households (more than 90%) own only one to ten animals. In general, the villagers sell most of the eggs produced during wintering (the reproduction period), whereas after the wintering, it is the animals that are

⁶³ No case of avian flu was recorded in the Maradi province during the mission (mid-May 2006).

⁶⁴ Ban on transport between regions, departments and villages, as well as between Niger and Nigeria.

⁶⁵ At the beginning of the crisis, instead of eating poultry, consumers turned to cattle (cheaper than sheep in Maradi), a trend that is reversing.

⁶⁶ SIMA, FEWS and WFP, Bulletin Nos. 1 & 2; 2006.

Normally, 20% of the demand in maize on the Dawano market originates from the poultry industry, demand has fallen to 5% of total as a result of the crisis. Since, demand has been increasing slowly.

⁶⁸ A third effect could be a fall in maize prices due to a drop in demand from poultry farms in Nigeria.

⁶⁹ Carried out from the survey based on food security in April/May 2005. The document is entitled. "Possible impact of the avian flu on food security of rural households in Niger" WFP, Niger.

sold⁷⁰. This strategy makes it possible to face urgent expenses during the lean season and during the harvest. The avian flu and its consequences on marketing poultry products could endanger this "resilient strategy". Furthermore, the value of animals owned by villagers will be less due to a fall in animal prices. It is therefore expected that the deterioration resulting from the sanitary situation linked to the impact of the avian flu on the food security of villages, will consist mainly of (i) a loss of profits from marketing of eggs during the wintering; (ii) a loss of profits form marketing of animals after the harvest; and (iii) a loss of the economic value of poultry. Although these impacts on the villagers are limited, their options to manage situations of insecurity will be made even more difficult.

In case of a deterioration of the situation, traders and auxiliaries, like feather-pluckers and the women who gather cereal grains to sell to poultry traders, will be seriously affected in their capacity to generate profit. On the Maradi market, there are 300 operators, 100 feather-pluckers and 50 cereal vendors/gatherers. Although these numbers are not substantial at the national level, the effects on a household can be disastrous, pushing traders to find other work or continue trading secretly, which can be a weak point in the fight against avian flu.

At another level and according to the traders in Dawano, the poultry industry's demand for maize constitutes at normal times 20% of global demand. With the crisis, it fell to 5%, which contributed to maintaining the price of maize at its present level. This situation, considered favourable for consumers, is not good for farmers whose stocks remain unsold and could negatively affect the farmland cultivated with maize during the next agricultural campaign if poultry industry demand does not increase.

Furthermore, the agents of the regional office of the Ministry of Animal Resources go to the Maradi poultry market every morning to verify if animals have died, but they do not gather data on prices and quantities for SIM livestock because the market is officially closed which makes monitoring and analysis of the impact on food security difficult.

It is clear that the impact of the avian flu on food security must be evaluated regularly. Processing the quantitative data collected within the framework of a more detailed analysis of food security, presently carried out by EWS and its partners could help shed more light on the impacts on households. It is recommended that a new qualitative study be launched in Niger if other avian flu cases are detected.

4.6 Conclusions related to the cyclical food security situation

It is estimated that the risk of a sharp rise in cereal prices and a fall of livestock prices comparable to those experienced last year is negligible. Several reasons justify this assumption: (i) this year agricultural production in Nigeria and Niger were much better (ii) trade flows of foodstuffs into Niger continue (iii) prices were below the five-year average and were increasing at a slower pace than usual (iv) as compared with last year, the pastures and the animals were in good condition, animal prices are higher, forage costs are lower, and demand remains high; and (v) cowpea production and prices during collection were good.

Dry cereal prices will probably stabilise or even drop as from June/July if the agricultural campaign starts off well and if cross-border trade flows can continue to supply deficient areas. Nevertheless, there should be a monitoring of prices, trade flows, exchange rates and the agricultural campaign as well as their impact on food security.

An exception to this case is where pressing monetary needs exist in a household and other revenue sources are unavailable, households are then forced to sell poultry during wintering.

The following elements will probably have a favourable effect on general food security of households: i) lower cereal prices; ii) good cowpea harvest; iii) good prices of livestock and cowpeas. However, this should be confirmed by the survey on food security which is currently being carried out by the Niger government and its partners on 10,000 households. It is also clear, that part of the population will not be in position to profit from these favourable trends because of their distance to markets, lack of livestock and cowpea production.

Concerning the avian flu, it should be noted that trade and transportation of poultry and poultry by-products have resumed gradually. Nevertheless, the danger of a rapid spread of the avian flu and its consequences for trade remains very high. The avian flu crisis is not over!

If the avian flu situation deteriorates, it is expected that it will have the following impact on the food security of villagers: i) a loss of profits from the sale of eggs during the wintering; ii) a loss of profits from the sale of animals after the harvest; and iii) a loss of the economic value of poultry. As already mentioned, the present analysis is limited to a general evaluation of the impact of the avian flu, data collection and analysis on households by the survey currently underway should confirm these estimates. It should also be noted that households which depend on poultry trade will be seriously affected which could lead traders to seek other activities or to continue the trade secretly. The traders will therefore become a weak point in the chain in the fight against the avian flu. A close monitoring will be necessary in this regard.

5. Cross-border cooperation and food security: some courses of action

5.1 Improve the quality and the dissemination of information on cross-border livestock and cereal markets

5.1.1 Monitor the evolution of acreage under cereals cultivation in Nigeria.

West African agriculture is characterised by a diversity of on-farm activities. The choices of Nigerian farmers concerning the relative importance of cereals versus cash-crops determine the volume of cereal production. The volume of Nigerian production is one determinant of quantities exported to Niger. Therefore, production choices of Nigerian farmers, as reflected by acreage under cereal cultivation, have a direct effect on supplies to Niger. Regular monitoring of a representative sample of acreage cultivated seems important. Monitoring of acreage would provide the additional advantage of allowing production forecasts being made well ahead of estimates based on actual production and prices at harvest.

5.1.2 Evaluate quantities auto-consumed, marketed and stocked

It is equally important to have information on quantity of products used for auto-consumption, marketing and stocking, etc.. Today, food security depends as much on a market effect as on a quantity effect, it is therefore necessary to precisely evaluate the main parameters which determine the functioning of markets.

It is very difficult to have a relatively precise idea on prices and quantities available during the lean season, based only on observation of prices and production volumes at the time of harvest. The information available does not account for relative shares of quantities autoconsumed and marketed and the share of the latter stocked in view of the lean season. Some strategic thinking needs to be carried out in this regard.

In the absence of general monitoring of all the markets, a sample of some representative markets should allow for realistic estimations. Dawano market – the largest cereal market in West Africa - is particularly important from this point of view. Today, not all cereals are being systematically monitored at Dawano.

5.1.3 Establish a monitoring system of cross-border trade flows

The cereal markets of West Africa are more and more integrated at the sub-regional level. In this environment, market information systems that remain limited to one country only and which do not take into account the exchanges between surplus and deficit countries do not have any possibility of correctly evaluating the evolution of markets and food security. It is therefore important not only to have a correct idea of production in neighbouring states, but to foresee, as accurately as possible, the likely exchanges and their potential origins. This can only be done through a regular monitoring of cross-border trade which for the most part remains informal. In fact an important part of trade between Niger and Nigeria escapes the statistics collection mechanisms of national administrations.

The monitoring of formal and informal trade in agricultural and livestock products is of relevance to food security for several reasons:

- 1. The cyclical food security situation in Niger depends also on imports; a better evaluation of trade allows for a more exhaustive analysis.
- 2. The early warning system should use information on cross-border trade flows to be more effective.

FEWS NET in collaboration with WFP envisages analysing cereals trade to help CILSS and all its partners to define an effective monitoring system. The Niger–Nigeria border, so important for food security in the sub-region is concerned by this effort, as is the Nigeria–Cameroon and the Chad-Nigeria border. The CILSS will propose a regional monitoring system in August 2006 after a series of missions in border areas of the region.

The mechanism could:

- Cover trade in animal and agricultural products;
- Be integrated in a sub-regional cross-border trade monitoring system;
- Benefit from a strong independence (given that most cross-border trade is informal, that traders and custom officials prefer to avoid official contact at the border and that during crisis periods, tension between authorities wanting to limit the export of food stuff and traders is likely to increase).

5.2 Support to production

Niger's food security problems are cyclical. The country remains extremely dependent on its production which is almost entirely conditioned by rainfall. A reduction in the latter can rapidly lead to cereal production shortages, which in turn can easily result in severe food security problems. Although, the development of markets does not substantially change this relationship, exchanges between surplus areas and shortage areas can help mitigate food crises. The market also offers new opportunities for the development of cereal production. However, a small portion of the population has problems integrating the markets. In particular, the families of agro-pastoral farmers who increasingly depend on markets to access cereals to satisfy their food needs. In these conditions an increase in production is essential, which should be initiated with of a number of public support policies, starting with encouraging rural credit for production.

All things being equal, Niger's production of millet and sorghum, and also maize, predominantly produced in the Sudanian zone, should be as dynamic as Nigeria's. The important differences between the two countries result mainly from agricultural installations in Nigeria, undoubtedly related to the development of markets, but also thanks to important public and private support schemes which have no equivalent in Niger. In particular, banking institutions do not give credit for production activities. There should be no surprise as to cereal production in Niger, lacking investments, not taking off. Yet, progressively a system of share-cropping is being put in place in the Maradi region, where large traders buy land which they rent out to farmers who were initially occupying them. The government of Niger should prioritise, with the help of its technical and financial partners, the development of rural credit.

5.3 The coordination of sectoral and trade policies

Sectoral policies in one country have repercussions in the neighbouring country. It is
therefore important to communicate and coordinate these policies to ensure their
viability in the context of a gradual integration process. Besides central and local
administrations, the existing cooperation bodies, such as the Nigerian-Niger joint
commission, should play the role of information, analysis and coordination⁷¹ platform.

_

The Trade Agreement of 1992 between Niger and Nigeria already envisages, in Article 13, the role of promotion, facilitation and information for the joint commission.

- Nigeria-Niger trade policies demonstrate a variety of conflicts of interest. Nigeria pursues in a variety of sectors protectionist trade policies which its neighbour in the north does not hesitate to undermine, by tolerating the re-exportation from its territory of goods banned for import in Nigeria. The customs revenues from transit trade constitute an important share in the government budget of Niger. Although, the livestock and cereals sectors are not concerned by this trade type, the temporary retaliation measures do have repercussions on these two sectors. To guarantee cooperation based on mutual benefit, it is important that both countries agree on strategies and acceptable conditions. The current situation in Niger which favours commercial and trade interests over the productive sector is not viable. Furthermore, considering the impact of spontaneous and temporary retaliation on the marketing chain of cereals and livestock it is necessary to envisage the creation of quick and effective dispute settlement mechanisms. At the central government level an important role could be assigned to the Joint Commission. At the regional level, the ECOWAS secretariat could benefit from taking an active role in the settlement of commercial disputes between its member countries countries.
- The livestock sector is in the process of integrating horizontally between Nigeria, supplier of livestock feeds and veterinary inputs, and Niger, supplier of livestock and meat. Cross-border cooperation should encourage this type of horizontal integration between the two countries.

5.4 The facilitation of cross-border trades flows

- The importance of demand effects resulting from a multiplication of markets on production and its valorisation, commands a facilitation of cross-border trade flows. Efforts aimed at reducing harassments at borders, simplifying formalities (for example through the creation of "single-clearing" desks on border markets) and increasing security on roads should constitute an important objective of national strategies.
- A system of money transfer allowing the direct transfer from sale points to Niger, will increase trade by reducing exchange rate risks and security risks associated with carrying large amounts of cash⁷².
- Cross-border cooperation can equally create conditions that will minimise livestock marketing and supply risks through modernisation programmes of livestock rearing in the area.

5.5 Proposals for the reinforcement of monitoring and analysis of food security

5.5.1 Price and exchange rate monitoring

Prices in Dawano market: it is recommended that SIMA and its partners incorporate a price analysis into their market bulletin. This information is already been collected for certain crops by traders in collaboration with MISTOWA⁷³, but not yet available on the web. The participating organisations in this mission should assist SIMA in obtaining this information.

48

This system will however force traders to become more transparent regarding volume of profit of their activities. It is probable that some of them will prefer to remain in the informal sector or/and take advantage of exchange rate differentials.

Network of regional market information systems and traders' organisation of West Africa.

- Exchange rate: it is recommended that SIMA and its partners incorporate an analysis of the Naira/ FCFA exchange rate movements on the parallel market into their market bulletin. Raw data is already been collected by SIMA on certain trans-border markets.
- Prices on Niger markets (cereal markets, livestock markets and livestock / cereals terms of trade): it is recommended that SIMA and its partners continue the publication of their joint bulletin, especially to monitor the evolution of markets in villages and small towns that are far from and not well connected to central markets.

5.5.2 Monitoring the evolution of the agricultural campaign

- It is recommended that the government of Niger takes explicitly account of the evolution of the agricultural campaign in Nigeria in monitoring food security in the context of EWS.
- Many initiatives can contribute to this:
 - I. The setting up of an "an agriculture expert group" within the Nigeria-Niger Joint Commission charged with monitoring the campaign.
 - II. The organisation of evaluation missions to Nigeria, which will complement the missions already carried out in Niger. These missions should take place at the beginning of the lean season (April/May), during the campaign (August) and after the harvest (October). They should evaluate the situation on markets (including trade flows) and progress of the agricultural campaign, and be organised, preferably, with the participation of key partners like FAO, FEWS NET, CILSS and the WFP.
 - III. The re-dynamisation of regional coordination frameworks in the K²M area and improvement of information sharing between the decentralised public service agencies in the area.

5.5.3 Local purchases in Niger and Nigeria: analysis, coordination and communication

The experience of the 2005 crisis shows that, during food crisis periods, it is important to:

- I. Intervene sufficiently early, since the closer the cereal buying interventions are conducted to the lean season, the higher the incentives for traders to postpone the sale of their stocks in the hope of making higher profits, through donor interventions.
- II. Coordinate interventions for instance by refusing to intervene after a certain period, for example February to March. It is sufficient for two or three actors to buy a little before or during the lean season to distort the signals send to the market.
- III. Communicate often and clearly. It is not enough to intervene sufficiently early, it is also necessary that traders know and are not expecting higher profits as a result of an intervention.
- IV. Avoid intervening, during crisis, on markets that are already tight. In the K²M area, this means that one should not only refrain from buying non-transformed products in Niger, but also in Nigeria, due to the integration of the two markets. The processed products sector could constitute an interesting substitute...

5.5.4 Monitoring the impact of market evolutions on food security

- It is recommended that an instrument be designed for measuring the impact of price increases and falls on household food security and to monitor this impact regularly.
- The instrument and the monitoring should be based on an analysis and data of lifestyles in Niger⁷⁴, and also on the already existing data collection system of SIMA.
- The instrument should be adapted to the different livelihood systems, especially revenue sources and expenses, and should be a dynamic indicator, changing over time.
- The evolution of this indicator will be calculated based on prices collected by SIMA.

5.5.5 Evaluating the impact of avian flu on food security

With the appearance of avian flu in Nigeria, and also in Niger in the Zinder province, the trade in poultry and poultry products has been sharply hit. It is unlikely that all disruptions will be reversed in the short-term. It is therefore necessary to urgently conduct detailed studies to establish the direct impact of this disease on poor households in the region, in particular on its effects on confidence in consuming poultry products, on the revenue of poor households, children, the food basket composition and substitution products that emerged.

_

⁷⁴ For example: FEWS NET, "Livelihood Profiles Niger"; and WFP "Comprehensive food security and vulnerability analysis".



Permanent Interstate Committee for Drought Control in the Sahel http://www.cilss.bf/



Famine Early Warning System http://www.fews.net/



United Nations Office for the Coordination of Humanitarian Affairs Emergency Fund http://ochaonline.un.org/



World Food Programme http://www.wfp.org



West-African Market Information System Network

http://www.resimao.org/html



United Nations International Children's Emergency Fund http://www.unicef.org