INTERIM REPORT: NIGER – ANALYSIS OF CEREAL MARKETS IN 2004–2005

EMERGENCY NEEDS ASSESSMENT BRANCH (ODD)

AUGUST 2005

I. INTRODUCTION AND METHODOLOGY

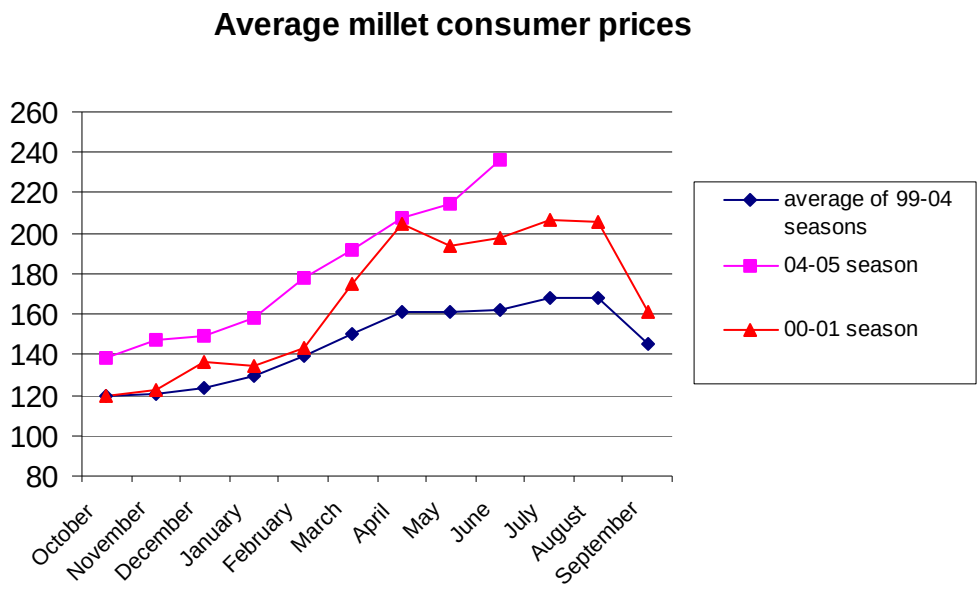
1. Markets are of crucial importance to the current food security situation in Niger. According to the preliminary results of the WFP Comprehensive Food Security and Vulnerability Analysis,[1] 86 percent of the population were dependent for their millet consumption on market purchases in April and May 2005. In June 2005, WFP launched an analysis of the Niger cereal markets, funded by the Strengthening Emergency Needs Assessment Capacities project (SENAC). The main objective was to enhance understanding of market operations, establish tools to monitor market indicators and explain changes in prices since the last harvest in October 2004. This interim reports deals with this last element only, focusing on the role of the market in the current food crisis.

2. The conclusions are based on a review of market studies and other secondary data, discussions with WFP partners and a preliminary analysis of primary data collected during interviews with about 100 traders and 20 smallholders. Collaboration with the Agricultural Market Information System (SIMA) has been established and will continue. It should be noted that the conclusions have yet to be verified through analysis of the 120 questionnaires and other information not yet analysed.

II. CEREAL PRICE DEVELOPMENTS

3. Monthly prices of millet, the staple, sorghum and maize in the 2004–2005 agricultural season are substantially higher than the average for the previous five seasons, and exceed even the highest prices recorded during the last bad harvest in 2000–2001.[2] Figure 1 shows national average monthly millet prices, which currently average FCFA39 per kg, 37 percent higher than the five-year average.[3] June 2005 data show a national price level of FCFA74, 45 percent above the five-season average.

Figure 1: National millet prices



Source: SIMA, July 2005.

[1] Funded by SENAC.

[2] Monthly sorghum prices are 25 percent higher in the current season than the average of the five preceding seasons, or FCFA35 per kg. Monthly maize prices are currently 23 percent higher than the average of the five preceding seasons, or FCFA38 per kg.

[3] *Communauté financière africaine* (CFA) West African franc.

4. Millet prices in the districts most affected in terms of decreases in production are approximately FCFA9 per kg higher than the average national millet price, which corresponds to the difference between prices in structural deficit zones and national averages during 2000 and 2004. It can be assumed that FCFA9 per kg covers transport costs and margins for traders moving millet from surplus to deficit zones. The 40,000 mt subsidized sales by the Government have had little impact on national and regional prices.

5. Marketable output, which of course determines prices, is only a small part of national production, effective demand and imports. The main reasons for the relative price rises in 2004–2005 are: (i) reduced supply from domestic sources as a result of a significant fall in production in more than half of 33 rural districts; (ii) increased demand among the rural population for basic staples as a result of household production shortfalls; and (iii) reduced imports mainly from Nigeria, and from Mali and Burkina Faso. These elements will discussed in more detail later.

III. MARKETS AND VULNERABLE GROUPS

6. The cereal market chain consists of smallholders selling produce, primary and secondary collectors, wholesalers, transporters, retailers and about 50 large traders who also import and export. In an average production year, millet and sorghum collected during the three or four months following the harvest in the surplus regions of Zinder and Maradi are sold in Niamey, Tahoua, Agadez and neighbouring deficit zones. From January, domestic supply is gradually replaced by imports: Nigeria supplies Niamey and eastern and central parts of the country; Mali and Burkina Faso supply millet, maize and sorghum to western areas, including Niamey. Markets can be classified as consumers' markets, collector markets, border markets or wholesale markets. In Niger, Nigeria and other neighbouring countries markets are well integrated. More information on the market structure will be presented in the Niger market profile, which will be available in late August 2005.

7. Smallholders typically produce less millet than they need for household consumption and use revenues from sales of commercial crops or livestock to fill the gap. Smallholders are therefore often buyers on the market, particularly after a bad agricultural season, even if their revenues are lower. After the harvest, some smallholders may sell part of their millet production to pay taxes or buy clothes, but this practice is limited to producers of a single crop who have no other source of income or to larger smallholders when there is a good harvest. Smallholders often encounter high prices on the market in years that they are buyers, as for example after the October 2004 harvest, and lower prices when they are selling excess production. Livestock holders are in a similar unfavourable position: in bad years, they sell their animals at lower prices to purchase food at higher prices. Since January 2005, sheep and goat prices have decreased by 23 percent, whereas millet prices have increased by 49 percent, significantly worsening the terms of trade for livestock holders.

8. In July 2005, during the current mission, national, regional, district and communal markets all had quantities of cereals for sale. The amounts are difficult to evaluate. Village markets appear to be less well supplied because of inaccessibility, high transport costs, insecurity and weak local demand. The vastness of the country and the poor roads increase transport costs, which affects prices: a 100 kg bag of millet in Niamey, for example, currently costs FCFA28,000; it costs FCFA28,500 in the district capital, FCFA30,000 in the communal capital and FCFA31,000 in a village. Transaction costs during a bad harvest year such as the current one are likely to increase, because transport costs for collection and imports increase when quantities are smaller and because margins per kg increase as traders maximize return on capital when dealing with smaller quantities. This will be confirmed after detailed analysis of the questionnaires.

9. Smallholders and other rural groups currently face substantial problems in purchasing cereals, because prices are very high. Purchases of millet have become rare in July, as rural households prefer to switch to maize because prices are lower – FCFA28,500 compared with FCFA31,000 or FCFA32,000 for millet or rice. In towns, rice purchases have also substituted millet. Rural groups who still own assets such as animals or clothes present themselves as buyers on the markets,

financed by the sale of assets. Rural groups without animals or other assets, who may also be far from markets, resort to eating leaves and wild fruits such as *anza* (Acacia senegalais) or food aid distributed to them.

10. The 100 traders interviewed all indicated that they had far less stock this year than last year; some were close to zero. There is no evidence that traders have speculated by accumulating substantial stocks of millet until the lean season, hoping to benefit from higher prices: no large quantities have come on to the market recently, even when the Government and partners have tried to purchase stocks of millet on the market during the last few months. At various times, traders were unable to deliver quantities up to the terms of the contract. Millet is available in the large and medium-sized markets.

IV. CEREAL PRODUCTION

11. National cereal production[4] increased from 1.8 million mt in 1985 to 2.7 million mt in 2004, an annual growth rate of about 2 percent below annual population growth. Average production reached 2.3 million mt during the same period; the main crops were millet (78 percent) and sorghum (19 percent). Production levels depend on rainfall patterns; variations of 30–40 percent are not uncommon. Smallholders producing for their own consumption are the main source of domestic production.

12. In 2004, cereal production was 19 percent above the 20-year average and 11 percent above the 15-year average, but 9 percent below the last five-year average. This may qualify as a good harvest, but district-level production figures show wide variations in production: about 20 of the 33 rural districts had a lower-than-average harvest; five districts were over 50 percent down, eight were down by 25–50 percent, and another nine were below the average. Market flows supposedly offset local availability imbalances, but the fall in production impacts heavily on the purchasing power of the poorest smallholders.

13. Table 1 shows cereal production figures for the last five years compared with 2004. Total and per capita production in 2004 were below the average but higher than the last bad harvest in 2000–2001. Per capita cereal production was 16 percent below the average, but 15 percent higher than in 2001. It can be concluded that the 2004 harvest was bad but not the worst ever. National food-supply shortfalls are common and imports compensate unmet needs: this will be discussed in the next section.

Table 1 : Cereal production

Year	Production	Production per capita
	(x 1 000 mt)	*(kg)*
1999	2 839	282
2000	2 125	206
2001	3 110	293
2002	3 338	306
2003	3 575	319
Five-year average	**2 997**	**281**
2004	2 719	236
Variation (kg)	**-278**	**45**
Variation (%)	***-9***	***-16***

Source : Ministry of Agriculture.

V. IMPORTS

14. The annual import of 145 000 mt of millet, sorghum, maize and rice is a crucial element in determining food security in Niger. For example, officially recorded millet imports account for only 5 percent of national production in 2001 but more than 50 percent of the national cereal deficit. Given that only a small percentage of national production is traded, imports are significant in determining availability and accessibility; they generally act as a valve, increasing substantially

[4] Millet, sorghum, rice and maize.

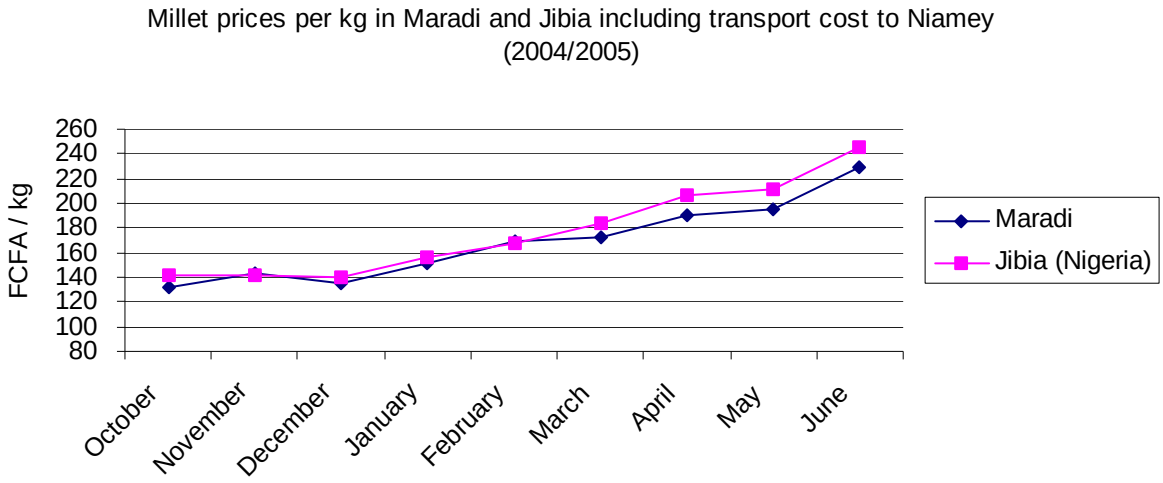
in the year after a bad harvest. The quality of import data is poor, however, and substantial informal flows are not registered by the authorities. Official data provide some sense of the evolution of imports, however.[5] Monthly data for the first five months of 2005 compared with 2004 indicate that cereal imports actually fell from 39,000 mt in 2004 to 14 000 mt in 2005; imports of millet alone fell from 5,000 mt to 3 200 mt in the same period. Imports did not increase to balance the 800,000 mt fall in production between 2004 and 2005.

15. Nigeria is the single most important trading partner: in 2001, 75–80 percent of millet and sorghum imports and 20 percent of maize imports came from Nigeria; Benin accounted for 20 percent of maize imports, Burkina Faso for 14 percent of millet and sorghum and 58 percent of maize, and Mali accounted for 7 percent of millet and sorghum. In recent years, Burkina Faso and Mali have become more important, while Nigeria seems to have lost its competitive edge.

16. Trading patterns between Nigeria and Niger are a result of structural factors such as the long border, the shared culture across the border, the economic power of Nigeria and a well established network of Nigerian traders in Niger, and of cyclical factors such as the countries' trading policies and procedures, exchange rates, rainfall patterns and related relative price developments. All these factors have an influence on whether net imports from Nigeria relieve or add to market tension in Niger.

17. A comparative analysis of millet prices in Maradi and Jibia in Nigeria shows that price differences are in general very small; Maradi millet is more competitive between October and December; Jibia millet is more competitive from January onwards. Figure 2 shows that since October 2005, millet from Nigeria landed in Niamey has not been competitive compared with Maradi millet. Millet prices in Nigeria have apparently been very high this year, undermining the valve function of Nigerian imports during the current difficult year in Niger.

Figure 2 : Millet prices in Niger and Nigeria



Source: SIMA, July 2005.

18. The FCFA/Naira exchange rate on the parallel market is an underlying factor that impacts heavily on changes in price differentials. The nominal exchange rate appreciated by 39 percent between 2000 and June 2005, indicating that exporting to Niger was becoming favourable. But analysis of the real exchange shows a 24 percent loss in competitiveness for exports from Nigeria to Niger. This seems to correspond to the general opinion that Nigerian millet exports have been become less competitive.

[5] Statistics from the *Direction protection végétaux* (Office of Crop Protection), Ministry of Agriculture.

19. There has been confusion resulting from the "tax on cereals" discussion. It was widely reported that value-added tax (VAT) and import taxes would be imposed on all cereal imports from 1 January 2005, but no there is no evidence of this. Since 2000, all official imports of millet, maize and sorghum have been subject to a 5 percent duty and various smaller charges and taxes imposed by the West African Economic and Monetary Union (UEMOA) and the Economic Community of West African States (CEDEAO), but not VAT. Because of the food crises, however, the Government decided on 11 March 2005 temporarily to exempt all cereal imports, excluding rice, of any tax, charge or duty. It is therefore unlikely that tax changes have contributed directly to the price surges in 2005, but the confusion and the socio-political tension linked to the higher prices might have increased market tension and thus caused prices to rise.

20. Although information is scarce regarding imports and exports of cereals, higher prices in Nigeria and limited imports from Burkina Faso because of the informal ban are established facts, leading to lower imports during the current year. The only available evidence from the authorities shows that during the first five months, imports were approximately 60 percent below the same period in 2004; imports do not seem to have counterbalanced the production shortfall in 2005.

VI. DEMAND

21. Demand is driven by the consumption needs of urban populations and of smallholders producing below their needs, a major factor in the current year. No evidence of substantial exports of millet has been found, although rice and maize re-exports have been reported, including the rice given as a grant by Japan. Urban demand is likely to be stable, but rural demand fluctuates according to individual production shortfalls and available purchasing power. After the bad 2004–2005 harvest, rural populations owning assets have sold them to buy millet, augmenting demand and driving up prices. As argued elsewhere in this interim report, it is unlikely that big traders have established large millet stocks to speculate on a price rise during the lean season.

22. Since the 2004 harvest, the Government and partners have tried to purchase millet and sorghum on local markets; no information is available on purchases by institutions other than the Government and WFP. WFP purchased millet and sorghum only once in Niger, directly after the harvest in 2004; as the quantity was very small – less than 0.2 percent of national production and about 1 percent of all millet marketed, assuming that 20 percent of national production is marketed – it cannot be held responsible for the price increase since October 2004. The Government has tried to purchase about ten times the WFP quantity since January 2005, but succeeded only in buying three times the amount. These efforts may have had some impact on prices, but it is only a minor factor in explaining the millet and sorghum price increases. A preliminary conclusion is that increased demand from rural populations, including smallholders, has contributed to the increased tension on the millet market, in particular immediately after the harvest when they reconstituted their stocks.

VII. MYTHS

23. **The 2004 harvest was not bad**. Cereal production fell only by about 9 percent compared with the five-year average, but 12 districts – representing 3.8 million people – experienced losses of between 25 percent and 90 percent. For small subsistence farmers, who generally depend to a small extent on market purchases, a loss of 25 percent is significant: they have to buy on local markets at inflated prices and with reduced purchasing power. In view of the rapid population growth, per capita production/availability provides a better picture than total production figures: in 2004, cereal production per capita was 16 percent below the five-year average; millet production was 23 percent below average.

24. **High cereal prices are a consequence of speculation by a few big traders**. The idea is that following the locust invasion in 2004, traders purchased large quantities of millet to be stocked until prices rose during the lean season. There is no evidence for this. On the contrary, a market analysis of about 100 traders in June and July 2005 showed that stocks are far below the 2004 level. The strategy of purchasing after the harvest and stocking until the lean season is generally

not applied by big traders. Substantial sales of millet on the open market might be expected from the lean period onwards – prices normally start to fall in July and August – but this is not the case. Even institutional buyers such as the Government have recently experienced difficulty in procuring millet and sorghum. Higher prices are mainly a result of reduced domestic production and, crucially, of the reduction in imports to only 21 percent of a seven-year average during the first few months of 2005.

25. **Prices rose by 75 percent to 80 percent compared with the five-year average**. Detailed analysis of data collected by SIMA shows that between October 2004 and June 2005, monthly prices have increased by 37 percent for millet, 25 percent for sorghum and 23 percent for maize compared with the monthly averages of the last five seasons for millet and the last four seasons for maize and sorghum. Price increases on rural markets might have increased more than these averages, but not by 75–80 percent. This last figure is probably based on a comparison of the actual price with an annual average, which overstates the nature of the current problem because prices are always higher during the lean season. Today's prices should be compared to the average situation during the same period, not to an annual average.

26. **New VAT and import taxes have increased millet and sorghum prices.** Since 2000, all official imports of millet, maize and sorghum have been subject to a 5 percent duty and various smaller charges and taxes imposed by UEMOA and CEDEAO, but not VAT. There is no evidence of the introduction of new taxes targeting millet or sorghum. However, a revised budget law adopted in January 2005 introduced taxes on milk and wheat imports and changed the taxes on water and electricity, which affected small users. Because of the food crises, the Government decided on 11 March 2005 temporarily to exempt all cereal imports except rice of any tax, charge or duty. It is therefore unlikely that tax changes have contributed directly to the price surges in 2005, but the confusion and the socio-political tension linked to the higher prices might have increased market tension and hence prices.

27. **Local procurement by WFP in Niger and Nigeria has increased prices, worsening the food crisis**. Since the harvest in 2004, only 522 mt of sorghum have been purchased on the market in Nigeria in April 2005 and 3,700 mt of millet in Niger in October 2004.[6] Because prices in Niger rose mainly from January to June, and because the quantity of millet purchased is limited compared with the quantities traded immediately after the harvest,[7] WFP purchases cannot be held responsible for the price increases. With regard to imported rice, a contract for 2,000 mt was signed at the end of July to kick-start the general food distribution, but no deliveries have yet been made.

VIII. CONCLUSIONS AND NEXT STEPS

28. Cereal price are higher than the average of the last five years and higher than they were during the last bad harvest in 2000–2001 because of increased tension on the market resulting from reduced domestic supply, reduced imports and increased local demand. Imports normally compensate for production shortfalls, but higher prices on Nigerian markets and the slowdown of imports from Burkina Faso have inhibited an increase in external supply to counter domestic shortfalls. Recorded imports were 60 percent lower during the first five months of 2005 compared with the same period in 2004. No evidence explaining the higher prices in Nigeria is available; further research on this topic is necessary.

29. The price of millet, the national staple, has been 27 percent higher than the five-year average since the last harvest; in June it was 45 percent higher than the average of the last five years. Millet prices in rural markets are close to FCFA300 per kg. Rural households that depend on the market for food have recently switched to buying maize at FCFA280 per kg. Only households owning

[6] A further 10,000 mt of sorghum was received from the Nigerian national grain reserves, but were **not** purchased on the market.

[7] Less than 0.2 percent of national millet production and about 1 percent of the domestic marketable surplus, assuming 20 percent of production is marketed.

livestock or other assets are able to sell assets and purchase on the markets; others depend on wild fruit and food aid.

30. Cereal prices usually stabilize during August and start to fall in September. Local prices will have to be monitored closely during the coming weeks to determine whether this takes place or whether institutional food purchases will impact market prices, thereby impeding access to food by vulnerable groups who depend on markets. The effects of free food distribution should be clearly monitored. A temporary system is in place, enabling weekly market updates by WFP in collaboration with SIMA.

31. The lack of reliable information on imports and exports of cereals is serious: it is one of the crucial elements in evaluating food insecurity at the national level and through the price mechanism at the household level. A cross-border monitoring system should be established.

32. A full market analysis report will be prepared in August, based on the report prepared by SIMA for WFP and on analysis of primary data. The purpose is to enhance WFP's knowledge of market functioning in Niger and to propose easy-to-use tools for the country office to monitor market developments.