The Cost of being Poor:
Markets, mistrust and malnutrition in southern Niger 2005-2006.

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EXECUTIVE SUMMARY:

The following report describes a two month study undertaken by the consultant on behalf of Save the Children, to examine the origins of malnutrition in Niger, and particularly the crisis of 2005. It explains how, in a year of seemingly undramatic production failure, a combination of long-term structural problems and short-term cyclical factors led to a peak in admissions to feeding centres before, during and after the hunger gap of 2005.

This peak was characterised by an initial inability on behalf of government and aid agencies to define whether the problems belonged within the remit of long term development policies or a short-term relief response, and so formulate an adequate reaction. High year-on-year levels of malnutrition in Niger caused a sense that 2005 was just business as usual for development agencies in the country, while relief agencies called for the situation to be recognised as a crisis. What the clash in perspectives proves is that it is probably unhelpful to filter all understanding of the Niger situation through the artificial lens of the division of labour of aid agencies. The current report, by combining published and unpublished data from both sides of this artificial divide, as well as direct fieldwork, sets out, in Part I a baseline analysis looking at the historical, social and geographic context, before describing in part II the events of 2005 and the reaction of humanitarian actors; the probable causes of the crisis are examined in detail in Part III and and the implications in terms of policy examined in part IV. In this way it aims to achieve a balance between the nutritional analyses and the more structural economic analyses, both of which play a part in explaining why mothers still turn up at feeding centres with malnourished children.

The failure of the early-response mechanisms to untangle whether this was indeed a 'crisis' (and hence the failure to react to the government's November 2004 appeal for 78,100MT of emergency food) meant a long delay in the humanitarian response and by the time they reacted, relief agencies and the government had to wait agonising weeks for imported grain to arrive as all local and regional supplies were already exhausted. There was uncertainty as to whether it was a 'production-crisis', a 'market crisis', 'a crisis caused by long-term poverty' or even a 'crisis of malnutrition caused by cultural practices', and if so whether the solutions were to be found with the government and development agencies or with a relief intervention. All these explanations are examined in the report. The animosity between development and relief perspectives is exposed as being an artificial debate that in many ways prevents a sufficiently nuanced understanding of the many and constantly changing factors that effect the lives of those suffering from malnutrition. The pressure to fit all explanations within the binary division of labour of the international aid structure stands in the way of having structures that accurately characterise, survey, predict and prevent crises from developing.

Nutrition surveys for Niger in 1998 and 2000 (fairly normal years) are quoted to show global acute malnutrition levels between 14-20%. Such figures were often treated as 'normal for the Sahel'. The cause of these high levels of malnutrition are often attributed to 'cultural factors' – including weaning practices, poor diet and failure use the colostrum immediately after birth. These factors are clearly important, and there are undeniable links between poor health and high levels of malnutrition. The costs of healthcare, and high levels of malaria and diarrhoea all contribute to malnutrition and high levels of infant mortality. However, they do not explain why there should have been a peak of admissions in 2005, nor what makes Niger different from many other countries that share the same cultural practices without suffering the same levels of malnutrition.

The long term vulnerability caused by high endemic levels of malnutrition, was also combined in the agricultural areas of Niger with increasing land shortages and soil infertility and the withdrawal of agricultural incentives as part of government policies from the 1990's under the phase of structural adjustment . There is no evidence that these areas, though they were particularly effected during 2005, are structurally more vulnerable than the agro-pastoral and pastoral areas where the previous crises of 1973 and 1984 had hit hardest. But nor does it mean that this area, where the majority of Niger's population live are immune from malnutrition. In fact the nutrition data suggests that these are often the areas with the highest endemic levels of malnutrition. This report argues that, with this raft of vulnerability, it was a small step to crisis, which the agro-pastoral areas narrowly avoided in 2005 due to a massive and early migration of herds to Nigeria once the impact of poor rains on pasture availability in Niger had been made public by the Direction d'Elevage.

There was a lack of cash to pay the increasingly high prices of cereals in 2005, caused by a mixture of increasing long-term poverty and short term cyclical price rises. The short-duration factors included the region-wide failure of the West African (and particularly Nigerian) market mechanism and pockets of production failure. A FEWS/CILSS assessment mission noted that, while recorded imports of (mainly Nigerian) cereals to Niger for the first 5 months of 2004 (after a good harvest in Niger) were 39,000MT, the same figure for the first 5 months of 2005 was 14,000MT. Where there were pockets of production failure in agricultural areas caused by poor rain, prices were too high for local people to buy food to make up the food deficit and children under three with their greater vulnerability were the first to suffer; the closure of it's neighbours' borders and the poor market-pull of Niger also meant it could not balance its (relatively small) cereal deficit and lower prices. Prices of cereals in July 2005 reached levels at 30,000 FCFA for a 100kg sack never before seen in Niger. The limitations of the labour market in Niger, mean that many thousands of Nigeriens left the country in search of jobs to earn cash causing a glut of migrant workers. For those working in Nigeria in 2005, a job shifting sand, for example was remunerated at 80 Naira a day (332 FCFA), whereas the same worker would now be paid 300N/day (1245 FCFA). It was said that there had been a ten-fold increase in people seeking work, and many children had been in Nigeria from Niger begging. While this was nothing like the displacement seen in 1984, it was evidence of the need to reduce the number of mouths to feed at home and earn cash to buy cereals.

The report recommends a broader understanding of vulnerability with a closer link between actual needs and relief interventions. This requires more detailed monitoring of the different factors that cause vulnerability in different food economy zones, with the realisation from 2005 that very small changes in the economic or social conditions of households can have an extremely damaging effect on their viability. Levels of poverty in Niger mean that there is no buffer when things go wrong. This also means there is no margin for error for the monitoring system. So in the long term, building up household livelihoods such that they are better able to withstand the shocks to which the Sahel is constantly exposed, will be a much more sustainable solution than leaving an imperfect monitoring system in place while the outside world forgets about Niger until the next crisis. It also recognises the adaptive and dynamic way in which farmers and pastoralists can adapt their coping strategies to changing circumstances if they are assisted it a way that reduces their outlays and allows them to diversify their sources of income, rather than just becoming crisis 'victims' or relief beneficiaries.

1.1 INTRODUCTION:

'Was 2005 in Niger a crisis?' or rather 'Was 2005 in Niger a crisis: discuss'. It could almost be seen as an end-of-year exam question for a course in Humanitarian Studies were it not of such practical rather than academic significance. It would also be a good question to test a student's understanding of the way humanitarian assistance really works, and especially its weaknesses. Humanitarian organisations found it difficult to answer this question and this reveals many of the difficulties they face in understanding their work. The current report seeks to make a virtue out of that – in bringing to light the many competing points of view that define what happened in Niger in 2005 –what an anthropology student would call 'conflicting discourses'. Such discourses can be condensed into one major dilemma: if 2005 is defined as a 'crisis', relief agencies can justify parachuting in, giving out free food and setting up unsustainable feeding centres if necessary; if it is not a crisis, then things must be done in a 'developmental' way in order not to upset long-term objectives for short-term fire-fighting.

Most relief agencies called it a crisis, while many development partners and the government hesitated before using the word. Their conflicting positions reflected their institutional orientations: but they also reflected the fact that 2005 could be seen as both – a long term chronic problem related to poverty and a short-term peak caused by a combination of other factors. This makes a mockery of the logic of dividing foreign assistance into two camps. It also explains in part why agencies found it so difficult to decide how to treat the events of 2005. In some ways it was an 'identity crisis' for both sides played out under the spotlight of the world's media; this probably actively contributed to their confusion and inability to deal quickly with a situation quickly adjudged by the media, whether rightly or wrongly, to be 'a crisis'. The following argument is structured in four parts: the first gives a baseline background to the situation of Niger; the second part looks at the chronology of the events of 2005 and the response of aid agencies; the third part is divided into four sections that examine, in depth, the importance of endemic malnutrition and social practices in 2005, the effect of production failure on the events of 2005, the effect of market failure on the events of 2005, and the effect of the political and policy environment; the report ends with part four on internal policy recommendations.

The first few weeks of this study were spent with the idea that what happened in Niger was a severe food crisis superimposed on an endemic problem of childhood malnutrition caused by poverty and feeding practices. As a result, a lot of initial energy was put into understanding the endemic nutrition problems –described below - as these appeared to be the defining context on which the crisis was built. It could have been that attempting to differentiate between acute and chronic cases[1], was just falling into the trap explained above of the humanitarian division of labour. The Prime Minister of Niger, Hama Amadou made a statement in November 2005 that malnutrition in Niger was caused by poverty and not by a lack of food[2], again making it clear on which side of the debate the government stood. However, in my own fieldwork, I started to worry that, my desire to find 'neat explanatory frameworks' would place me on one or other side of this conceptual divide. I was being fed information by educated nutrition centre staff about the fact that children were malnourished because of the long-term problem of mothers who were ignorant of basic hygiene and nutrition matters, when it was more likely that it was caused by multiple factors that denied

[1] In fact medically an individual child cannot be 'chronically' malnourished – it is either malnourished or not (Najman 2006:7).

[2] 'le deficit alimentaire n'est pas la cause, à nos yeux, de la malnutrition endémique des enfants de certains régions du Niger' (PAM/Gouvernement du Niger 30 Nov 2005,Annex IV:11)

certain children access to sufficient food. I started to wonder whether it was just a case of everyone adopting a single explanation that corresponded with their institutional position. Perhaps it was in fact a lot more complex than that, but the environment to appreciate the nuances was currently missing from the cycle of name-calling and the pressure to assume a position. The West was certainly trying to find excuses for its systematic neglect of Niger and lack of early funds to provision the grain reserve of the Government crisis-management body, the DNPGCA[3]. This was being overcompensated by the after-the-fact generosity of the outside world but also a rewriting of the run-up to the events of 2005 that fails to represent the confusion faced by most actors.

Hunger is complex. There is a great temptation to see this complexity as a smokescreen put up by those that would be embarrassed by famine – the aid agencies or the governments, for example. And the mass of different reports either duplicating or contradicting each other adds to the difficulty of seeing clearly. Sometimes governments are trying to hide something, sometimes it's more complex and the governments could be just enacting the recommendations of the Bretton Woods institutions, for example. Sometimes crises can be caused by drought, sometimes a war, sometimes both; sometimes corruption and negligence, sometimes bad luck. The disadvantage in having the media as the whistle-blowers for famine is that the complexity is lost – Africa is presented as a single case, African governments painted with the same single broad brush. There are many different kinds of hunger existing concurrently in Niger – even in normal years – and the key is unpicking which of these saw a peak in 2005 and for what reason.

1.2 METHODOLOGY/ASSUMPTIONS:

If one is to adopt the methodology of investigating many, both short-term and long-term, factors that contributed to events in 2005, how should one decide what emphasis, or weighting to give each factor? In a study for MSF on the causes of malnutrition in Maradi, Najman (2006:4) expresses his dissatisfaction with an explanation of hunger based exclusively on poverty, bad soils or poor harvests – preferring to understand the social and economic origins that allow one both to produce a harvest and still suffer from malnutrition[4]. It is an approach that follows in the tradition of Amartya Sen's entitlement approach, which after 25 years has become the conventional wisdom in approaching famines[5]. Sen argues that famines are not necessarily caused by lack of food, but by the lack of entitlement by a certain population to access the food that is available (Sen 1981). Many of the studies of Niger in the 1970's and 1980's had given an almost apocalyptic reading to the decline in soils, the reduction in rainfall, the 'desertification' and the subsequent famines of 1973 and 1984 (an apocalypse which failed to materialise during the 20 years up to 2005). Najman continues that deducing the nutritional situation from agricultural production is 'tout simplement stupide' (Najman 2006:12). There is a danger that, in rejecting 'stupid' explanations of the obvious or *passé* and replacing them with a new orthodoxy (in Najman's case the exact correlation between cereal prices and admissions to MSF feeding centres) the pendulum risks swinging too far in the opposite direction in an absolute rejection of the impact of agricultural production despite its knock-on effect on markets and market-prices.

[3] DNPGCA – Dispositif National de Prévention et de Géstion des Crises Alimentaires

[4] Najman (2006 :5) goes on to stress that the economy cannot be considered the exclusive key to understanding malnutrition – it is just a 'factor'.

[5] even newspaper articles on Niger were quoting entitlement theory!

I take it as a given that there was a crisis in 2005. One can chose to relativise the scale of the crisis, but, if it does not appear overly tautological, this report is only being written because there was some sort of crisis in 2005. However, when appropriate, I will ask how different 2005 really was from other years. I will also try to examine the validity of different debates – from the 'endemic malnutrition model' to the political/policy-crisis model, and the 'market-crisis' model to the 'production-crisis' model – in an attempt to re-establish a certain amount of equilibrium to the pendulum. It is therefore appropriate that I should base my analysis on the rather unfashionable model of systems theory: in Niger, many variables interact in a complex system of cause and effect; a state of *homoeostasis* is maintained in this system as long as the effect of the negative feed-back loops (e.g. coping mechanisms, appropriate government intervention, relief assistance etc) outweigh the effects of positive feedback (e.g. rainfall failure, market panic, displacement etc) that, by mutually reinforcing each other, are likely to send the system into disequilibrium. A crisis is precipitated by a situation escalating into disequilibrium often fed by the self-reinforcing process of positive feedback. Meanwhile, the level at which the *homoeostasis* (or normality) is being maintained in Niger is at a degree of precarity that would be unacceptable in the West so there is no slack or margin in the system (so it only takes a small shock to send the system into disequilibrium). The advantage of a system model is that it allows for the possibility that a very minor disturbance in market prices, rainfall pattern or production figures that do not appear on the surface to be very serious and can easily be missed by early warning systems set in motion a chain of positive feedback events with outcomes out of all proportion with the initial trigger. It also encompasses possibilities such as production failure reinforcing the effect of the market, or a market crisis that is unrelated to production failure. It includes factors beyond the direct political control of governments as well as effects caused by specific political posturing. If an accurate but politically-neutral reconstruction of events can be established using this model, it is then possible to investigate what informational, perceptual or political obstructions stood in the way of an accurate and timely understanding of the problem, and at that stage a more politicised understanding of the events can be incorporated with human agency and decision-making given its due role and importance.

There is a risk of misrepresenting the positions of certain actors due to the reliance on an incomplete written record of actions and opinions. There is also the danger of being able to see things with the benefit of hindsight and with the knowledge of subsequent events that were not obvious to people at the time. Often that means going through the same data that were available to actors at the time but being able to see where it was all leading. It would be disingenuous to suggest that people should always have been able to understand the implications of the data that can now be used to reconstruct a logical sequence of events. In other words 'incomplete knowledge' is a massively important factor – caused by a mixture of institutional bias, a lazy reliance on 'received' wisdom and the lack of viable information -that are difficult to reconstruct after the event. The reaction against this lack of knowledge can also cause a blitz of information-seeking behaviour that produces such an excess of information that itself paralyses action. I would argue that the situation in Niger in 2005 was complex – in other words it would seem to justify the complex systems of early warning, which exist. On the other hand this complex system probably did little to contribute to a clear message being sent out in an unambiguous way[6]. This study itself is not immune to going down with the same overload of mediocre data that probably characterised reaction to the 2005 crisis. Nor was the study immune from the ongoing climate of suspicion and antipathy that characterised NGO relations with the government, which meant that many lines of

[6] The clear message being that keeping people on the edge while things become clearer can threaten lives

questioning had to remain very discursive and non-confrontational. This was particularly true in Nigeria.

To some extent the reconstructed positions of some of the actors involved could be seen as using a 'straw man' argument on which to base further inferences. Insofar as they represent 'archetypal' institutional responses from which it is possible to learn, there is benefit to be had by slightly caricaturing the positions taken respectively by the press, the government and the NGO's. Sometimes it is the very perception of other people's position and their misrepresentation that is most important. The confrontational atmosphere which this engenders was anathema to a close working relationship between local authorities and foreigners that might have seen this crisis more quickly diagnosed and resolved. But the selectivity of such a reporting process has to be acknowledged.

The majority of the fieldwork for this study was carried out in Zinder and Maradi Regions between 7th February and 22nd March 2006. About two weeks were spent in each of these locations, with the remaining time spent in Niamey and in Katsina, Nigeria. While this analysis discusses the crisis of 2005 at the level of the country as a whole, it concentrates on the key areas of Zinder and Maradi where Save the Children is active – areas that, together with Tahoua, were most effected by the events of 2005. The analysis of the Nigerian situation examined the extent to which Niger's difficulties were experienced/avoided by it's larger neighbour, and the effect of Nigeria in exacerbating or alleviating the problems of Niger. Many people were interviewed in these places, with some preferring to speak off the record. As a result, third party published sources are sometimes quoted in this report rather than the words of the key informants that were interviewed; however, published sources are always examined against the backdrop of the opinions that were expressed by local informants. It simply remains to thank all those who participated in the study and the Save the Children teams who supported it. Their assistance was greatly appreciated. The findings of the report, and any errors contained are however, the sole responsibility of the consultant.

PART 1: BACKGROUND

2.1 SOCIAL ENVIRONMENT

2.1.1 Population and History:

Regions[7]	**Population 30 Apr 2003**	**Projection to 30 Apr 2005**
Agadez	358,190	399,327
Diffa	234,264	261,168
Dosso	1,571,389	1,751,860
Maradi	2,133,929	2,379,005
Tahoua	1,841,273	2,059,924
Tillabéri	1,960,337	2,185,478
Zinder	2,098,948	2,340,008
Niamey	704,338	792,420
TOTAL Niger	**10,902,668**	**12,162,000**

The Peul ethnic group (as they are known in Niger, Mali and Burkina Faso) or Fulani (as they are called in Anglophone West Africa) are distributed throughout the Sahel – speaking a language known as *fulfulde*. The Tuareg people (or Touareg/Twareg as they are sometimes spelled) are widely distributed throughout the Sahara and Sahel, speaking *Tamahaq* language. The Djerma people are the majority in the Niamey, Tillaberi, Say and Dosso areas. In the country as a whole the Hausa ethnic group make up 53% of the population, Djerma make up 15%, Touaregs 11%, Peul 10% and Songhai 8%, as well as other smaller groups such as the Kanouri around Lake Chad, the Beri-Beri around Bilma and Toubous around Seguidine, both North-east of Zinder (Gilliard 2005:14). Eighty percent of the population live in a narrow 200km band in the south of the country. The areas of Zinder and Maradi covered by this study are mostly dominated by Hausa. Raynaut (2001:8) gives the breakdown of Aguié Department as being 80% Hausa, 18% Peul and 2% 'Bouzous'[8].

The Songhai empire installed around Gao in Mali reached its height in 1464 under Sonni Ali Beer, before collapsing around 1590. The Bornu empire, established around the same time around Lake Chad, survived until the colonial era, flourishing through slavery and its conquest of the Kanem Empire.

The Hausa see themselves as originating from *Hausa bakwai* (the seven Hausa) referring to the seven original Hausa trading cities established by the sons of Habou Azid who killed the well-serpent at Daura, now in northern Nigeria[9]. They drove out or assimilated the existing animist *gwarawa* population, but were themselves attacked, although Muslims, by the reforming Peul muslim Usman dan Fodio, who waged a jihad against the city states from 1802-1809 during which the Maradi region was an area of refuge for the Hausa because of the

[7] Source: Ministry of Agriculture, Niger; Charasse & Gouteyron 2005:14
[8] The Hausa name for Tuareg, referring to their origins as the slaves of the Tuareg
[9] Oral history recounts how the first 5 sons of Queen Shawada set up Kano (King Bagouda), Katsina (Komayo), Gobir (N of Maradi) (Douma), Zaria (Gunguma) and Daoura itself (Bagouda). The other two were set up by the illegitimate sons Biramu and Sarki Anna (King of the animists) (respectively Rano and Hissatao near Gobir)

protection afforded by the dense forests in the Goulbin Kaba and Goulbin Maradi[10]. Maradi was closely linked with Katsina, and the deposed head of Katsina state Dan Kasawa, in exile in Zinder, sent a Sarki (King or Chief) to rule over the Maradi area. His grandson, Sarki Mijinyawa, fled to Tessaoua from which he set up a sultanate in 1892[11]. Zinder was the seat of the Sultanate of Damagaram. The Say-Baroua line in 1898 left the area under British control, until 1904 when the boundary was redrawn to its current state.

Before the 19th Century Peul were almost all nomadic, exchanging milk and meat for grain with sedentary groups, although there were often clashes between the groups over trampled crops and access to grazing/water. After Usman dan Fodio's successful jihad against the Hausa city-states, the Peul became split into four groups. Firstly there are the *Toroobe* – now the traditional ruling families of many Hausa towns. They have intermarried with Hausa and no longer speak Fulfulde. Secondly there are *Fulani Siire* or town Peul who have also intermarried with Hausa and settled down. Thirdly there are *Fulani Laade* or *Fulani Na'I* who practice traditional transhumance. Finally there are fully nomadic *Bororo* – distinguished by their striking physical appearance, clothing and make-up (Glen 1987 after Reisman 1977).

Touareg occupy a large area including southern Algeria, southern Libya, Niger and Mali, though they have moved even further a field since the famine of 1973 which forced many into slums or jobs in the Uranium mine at Arlit or as guards in Nigeria[12]. In Niger, the main groups are the Kel Air (north of Agadez), Kel Dennek (around Tahoua/ In Gall) Kel Ataram (north of Tillaberi) and Kel Gress (around Tanout). Each group has a slightly different social structure, but for example the Kel Ahaggar (north of Arlit) are distinguished by a kind of caste-structure that divides the Noble camel herders, Goat herders, mixed arab-descent vassals, blacksmiths, artisans, marabouts, cultivators and slaves (now free).

2.1.2 Social Structures:

The following account describes in detail mainly the social structure of the Hausa community and names and concepts in the Hausa language – but as almost all Peul in the areas covered can speak Hausa and many no longer speak *fulfulde* the terms are relevant to them too.

The most important domestic unit is the compound (or *gida)* in which several households (*iyali)* might live. The head of this unit is known as the *mai gida*. A *gida* can consist of a nuclear family of one man and his wife, or several generations of a family with a man, his wives, their children and potentially grand-children. The size of the domestic unit depends on the degree of schism within the patrilineage (*dengi)* but normally contains roughly 6-8 people[13]. Raynaut (1973) identified a growing tendency towards the domestic unit breaking down into smaller and smaller units – sometimes due to the problem of managing the division of agricultural produce in large families where each household receives according to its size rather than the labour it contributed[14]. When the *mai gida* dies, a family that get on can select another from amongst the children and keep the plot together. If not, it is broken up, or sold and the proceeds divided. Henry (1986:230) observes that the proportion of land under

[10] Outside these areas though there were few villages outside the fortified road-side towns of Aguié, Tchadoua and Gazaoua (Raynaut 2001:9)

[11] The chiefs of Aguié (the *Baraya Zaki)* and Gangara (the *K'aura),* for example, are descendents of the military chiefs put in place by the Katsina State to guard the Tessaoua - Maradi road

[12] Touareg were decisively defeated by the French at the Battle of Tit in 1902.

[13] See Luxereau & Roussel (1997:32)

[14] See Mondher Kimani *et al* (2000:103)

collective use by the extended family unit (or *gandu)* has halved in 25 years – going from 90% of the surface area in 1956 to 47% in 1983. Luxereau and Roussel (1997:34) note that in 1992 around 40% of *gida* share collective land. They note that it is often the younger sons that remain with their fathers while older brothers separate off.

In spirit, at least, people still relate to the idea of the collective identity of children under a common ancestor, and rally around the member (*magaji)* who has taken over the ritual responsibilities of the family at naming ceremonies and weddings[15]. Such ceremonies are seen as an act of family honour such that families are prepared to become heavily indebted in their execution rather than being seen to neglect their obligation. The sacrifices made to pay for ceremonial expenses aim to avoid *kumya* – the humiliating state when a family cannot pay for its own ceremonies.

Mutual aid between a protector (*uban gida* or *uban daki)* and a protégée (*bara*) is becoming less common. It is certainly not publicly talked about, as the status of *bara* is now associated as a clear sign of poverty. There are also, with increasing poverty, fewer people in the population who are prepared to lay claim (publicly at least) to having the wealth necessary to be an *uban gida (*Mondher Kilani *et al* 2000:142). However, mutual aid (*gaya)* still exists in areas such as assisting a chief with work on his fields, or working on the fields of an old man, or one's father-in-law. In addition women have well developed networks (*biki)* mainly around family ceremonies, but also involving *tontines* (revolving mutual support funds) known in Hausa as *adashe* or *asusu.*

The huge amount of money spent on marriages is divided between the preliminary ceremonies (present to the maids of honour, henna ceremony etc), the *lefe (*a trousseau offered to the bride by the groom's maternal/paternal aunts and cousins[16]), the *sadaki* (dowry – the bond of marriage that with the *fatiya* religious recitation form the heart of the marriage)[17], the *kaya (*bed, mattress, pots and pans and other household goods usually given one year after the marriage by the bride's family) and the *gara* feast given by the bride's family for the groom's family (Mondher Kilani *et al* 2000:101). In the village of Gomba Hausa, Zinder, Mondher Kilani and Maman Waziri Mato estimate that for one family, expenses associated with two marriages made up 35% of their annual expenses budget, while they recuperated about 20% of this through the reciprocal *biki* ceremonial gifts they were repaid (*ibid:*135).

They further note that 71% of the 237 households in Gomba Hausa are husbands married to one wife, 22% are married to two wives, 3% to three wives, 2.5% are divorcees awaiting remarriage, 1% widows and the rest single or with more than three wives[18] (*ibid:*101). Henry (1986) observed that in a village nearby 82 out of 125 heads of household had been married several times - one-third because of the death of a spouse and two thirds because of divorce[19]. The high levels of divorce in Hausa society were obvious from my own fieldwork too. It is men who take the decision to divorce, and they keep the children – to whom they must give

[15] Raynaut 2001:11

[16] Consisting of 4 suitcases of clothes, make-up etc – or 200,000CFA

[17] I was told this could be 50,000 to 1 million FCFA depending on the marriage, but I suspect that this figure includes the cost of the *fatiya* and other expenses such as the *bin sakaba* – "I don't know you" – that a husband must pay if he has not sufficiently got to know the bride's family. Mondher Kilani *et al (*2000:134) estimated ten years ago that both the bride and groom's families pay about 130,000 FCFA each.

[18] Unmarried people are poorly viewed – sometimes second marriages are just marriages of convenience where the couple live apart and the husband just visits from time to time (the expression being 'go armed with your bow and arrow' as it's unsure whether or not the husband will find his wife with another man (*ibid*:117)

[19] Both Henry and Modher Kilani note that this is not necessarily a new phenomenon

the right to inherit their land. Women who are divorced when they are older are particularly vulnerable. They have less chance of remarrying and also shoulder heavy responsibilities of childcare and weaning for their daughters' offspring (see Maman Adamou 2004:41). A study by CARE (1997) showed that 13% of household heads were widows, divorcees or with an absent husband.

The *suna* naming ceremony takes place seven days after a child's birth, and involves the feeding of invited guests (two sheep, three *tia* of cola nuts and a 100kg sack of millet would be about average) and the recitation of the *fatiya* (the first verse of the Koran). The *kacia* circumcision ceremony involves a smaller ceremony and at funerals participants offer the *sadaqa* prescribed act of charity laid down in the Koran. In terms of *biki* ceremonial gifts, it is only those who help others who are helped (Mondher Kilani *et al* 2000:139).

2.1.3 Economic Structures:

Land belonged originally to the family recognised by the chief to have first cleared that land when it was bush (*daji*[20]*).* Property under collective use (*gandu)*was owned on a collective basis by an extended family unit and the *gandu* with the greatest number of working family members could bring under cultivation the largest amounts of land (though it would also be split amongst a larger number of people when inherited). Production from the *gandu* was normally reserved for activities affecting the whole group (including taxes, ceremonies and putting aside enough stock to feed the family during the cultivation season). At the same time, the head of the family divided up the harvest amongst his wives in proportion to what he estimated were their needs – leaving them to be essentially autonomous, for the next six months (Raynaut 2001:13). Within the land belonging to the *gandu*, smaller plots (*gayamina)* are given to individuals (usually women) for their own use and this is what women use to make up the difference or to grow cash crops and *gombo* (okra) for sauce. Weekly work was often arranged on the basis of four days work on *gandu* followed by three days on the *gayamina.*

During the last thirty years, though, land has since become scarce, and it is no longer possible in southern parts of Niger to claim land just on the basis of being the first to clear it. Landholding based on the *gandu* is becoming increasingly rare, and no longer exists in some parts of the south of Maradi (Mortimore *et al 2001:40).* Land can be obtained by inheritance (*gado),* by borrowing (*aro),* purchase (*saye),* a grant by the chief (*bayko*), as a bond (*jingina),* as a gift (*kiauta),* or in exchange (*musanya).* Mondher Kilani *et al* (2000:50) found that inheritance was the method used to obtain land in 73% of cases, while 16 % was borrowed 5% bought and the 6% for the rest put together. For irrigated plots the figures were dominated by inheritance (73%) and borrowing (20%). Koranic inheritance law has opened up inheritance of land by women, but in practice families prefer to divide land among the sons because women will soon be part of the household of their husbands so take the land out of the family (see Raynaut 2001:24)[21]. Divorces are also frequent. The role of women is therefore changing as fields become smaller and their labour is required less on the land, and they are having to diversify their activities in order to find food during the dry season (Doka & Monimart 2004).

[20] Although the Code Rurale set out to harmonise the discrepancies between customary law on land tenure and statutory law, it is still customary law which has continued to operate in Maradi (Mortimore *et al:16)*

[21] Luxereau (1996:98) claims there is now a stronger focus on individual property rights under Islamic law than the traditional idea of the collective good.

Land that is borrowed (*aro)* is usually repaid through application of the *zakat* system whereby one tenth of the production is reimbursed to the owner. People can mortgage their land as a bond (*jingina)* in return for a sum of money, though this is usually for a short period of time and the owner usually reclaims it as soon as he can repay the amount. However, it is also one way that land comes to being sold when the owner finds himself getting even more indebted. The majority of people who buy land (*saye)* –need the land for families that are large and expanding[22]. Exchange of land (*musanya)* is sometimes practised when a farmer wants to consolidate various far-flung plots or if he wants to include a different soil type. Land close to the village is usually owned by the oldest families in the village. Such land is much more heavily fertilised than land further away. In a study by Raynaut (1980), only one third of villagers had access to this land. The majority had land further out and in smaller amounts than these few big families. A counter-weight to this tendency is the trend for the breaking up of the large plots of big families into tiny plots at the death of the *mai gida* - as such plots are split amongst many members (see Hill 1972). Strangers (*sangaya)* can request land from the chief (*bayko),* but this method has been impossible in most areas since the 1970's as available land runs out (Mondher Kilani *et al* 2000:53-60).

Both men and women sell part of their produce in village markets. Women often sell food products they have prepared at home (such as *kuli kuli, d'an wake*, *cre* and *panke).* Raynaut (1979:579) estimated that 80% of married women sell cooked food. They are either sold direct from home or in the market to provide women with cash for buying clothes, ornaments and domestic items, and to enable them to contribute to the many ceremonies that take place particularly after the harvest. Sometimes men were said to be worried about the 'reputation' of their wives who take part in market activities, but few can afford to keep their wives segregated. Those that do have usually been to Nigeria or are religious leaders (*marabout).*

2.1.4 Market Structures:

Rural markets usually take place on a weekly basis. Aside from agricultural produce, livestock and women selling prepared food, there are usually trade goods from Nigeria (sandals, plastic buckets, well-buckets, mattresses, spades etc), clothes, hand-crafted mats and ropes, hardware dealers and an assortment of repairers, cigarette/salt/sweet sellers etc. The annual cycle of marketing begins with the arrival of the new crop on the market from September. At this stage the price of cereals falls rapidly, and only starts to pick up again in a normal year around March, reaching it's peak during the period of '*soudure*' (June-August). At this stage farmers are busy on the fields and very little grain is coming to market. With prices at their maximum in the Sahel, it is at this stage when it is most profitable for the coastal countries of Ghana, Benin, Ivory Coast and Nigeria to send their early harvests to sell in the Sahel as local prices have already gone down. The purchasing season in Niger begins straight after the harvest (September/October) and can be very time consuming - lasting up to 9 months in a good year, though quantities will go down as the year progresses. Even in a surplus year traders will often have to source cereals from overseas.

> 'Le point de départ des échanges,c'est la décision de vente prise par le producteur. Elle se fait sur la base d'un besoin financier pour la famille, besoin qui n'est pas linéaire tout au long de l'année mais varie selon les évènements sociaux ou religieux vécus par les familles. [also to get cash for someone leaving en exode or to buy seeds. In general though, farmers will try to get their cash from selling cashcrops such as cowpeas

[22] Raynaut (2001:27) notes that land was selling at 100,000 CFA per hectare

(*niebé)* or groundnuts before selling cereals]Ces besoins financiers se font surtout sentir au moment de la rentrée scolaire, de la fin du ramadan, de la Tabaski ou de Noël, puis au moment de la soudure et du démarrage des travaux champêtres. A cela, il faut ajouter les mariages, les baptêmes et les funérailles qui sont sources de dépenses importantes' (Terpend 2005 :8).

Producers who sell at rural markets (*marchés de collecte)* are usually selling in small qualtities (per *tia)* from grain that they have already put in their grainstore (*numbu)* in order to release cash for immediate needs. Produce is often given to another person from the village to take to market. They sell to traders with whom they often have personal relations. Some large producers in villages buy up the produce of other villagers or from neighbouring villages to sell on to traders or to keep in the area and sell when prices increase (Kouyate 2002:16). While some small traders (*collecteurs)* remain attached to a single market, others move from market to market depending on a network of faithful producers[23]. They will fix a price themselves based on the general state of grain supply in the market and the price indications given to them by their patrons. Producers, who are generally unwilling to return home with the grain they brought to sell, will finally settle on a price. They are also poorly organised with each bringing small amounts fitfully to market, so they are not able to negotiate better terms of trade. If there is no market locally or the roads are impassable for trucks, they are forced to use ox-carts which cost double the price of transport by truck (Kouyaté *et al* 2005:30).

Large traders, who usually purchase by the tonne, have a web of buyers in villages who buy up grain after the harvest in October as well as trucks for transport[24]. The traders send out money and jute/nylon sacks to the buyers – on average about 300 sacs and 1-2 million CFA – and when these are exhausted they send out a truck to collect the goods and more funds as necessary (Kouyaté *et al* 2002:25). Buyers are given a commission proportional to the amount of grain they collect. Traders start with areas close to their base so that transport costs are minimised and then seek further afield (e.g. Nigeria) when these supplies are exhausted. It is then either sent to deficit areas, or exported or stored, usually in the main urban centres, awaiting the period of 'soudure' when the prices go up and the same buyers are used in reverse to market the grain. Individual traders don't keep cereals for more than about three months – preferring to sell it on to small traders, with a margin of 25-40 CFA per tia according to traders interviewed, to release their capital rather than risk price changes[25]. The market is fed by rumours and strongly effected when state on non-state actors intervene to make massive food-aid purchases – a regular event in a food-deficit country (Kouyaté *et al* 2005:73). Medium-sized traders sell stock that has been passed on to them by wholesalers (quantities of 10-15MT), and they in turn supply small traders, sometimes on credit. Most of the transfer to smaller traders is done on credit, meaning that if his customers cannot pay him directly, the effects are felt all the way down the line. He will either have to resort to putting social pressure on his customers to get debts paid or have his prices reflect the economic risk of unpaid debts[26]. It does, however, allow traders to clear stocks rapidly.

[23] Kouyate *et al*(2002:16) note that this fidelity will often be set aside if there are traders from outside the region offering higher prices – in which case local buyers will often delay buying until prices again go down.
[24] Within Niger there are sometimes problems with trucls taking grain from Maradi to Tahoua for example having to return empty, whereas trucks taking niebé to Nigeria are able to return with millet and maize.
[25] Cashcrops such as *niebe, souchet, voandzou*, sesame and groundnuts on the other hand are often kept for 5-8 months though storage conditions for *niebé* are very particular.
[26] Credit is more readily given to well-established retailers to the disadvantage of smaller newcomers. In Balléyera in western Niger, credit is so accepted that there is a day of the week given over to repaying debts.

Meanwhile large traders usually diversify their portfolios to avoid relying in the vagaries of agricultural production[27]. These include such activities as transport, import/export, construction or property – activities that permit an easier money supply from banks than cereal speculation which is seen as depending too much on the vagaries of an unpredictable agricultural environment.

Kouyate (*et al* 2002:17) estimated that there were around 50 large scale buyers in 2002, either based in the producing areas of Maradi or Zinder, or the consumer markets of Niamey, Agadez or Tahoua. Commercial companies specialising in cereals include the Niamey based SOCOPAP-SA[28] (specialising in *niebé (*cowpea) exports to Nigeria as well as cereals and with storage space in Tchadoua of over 500MT) and SNSPV[29] based in Zinder (dealing in cowpeas with Nigeria as well as cereals with WFP and the CCA).

> [Tessaoua] 'est un marché de collecte situé à 128 km à l'Est de Maradi sur la RN1 où l'on rencontre surtout le mil, le sorgho et le niébé, l'arachide et le sésame. En année excédentaire, la collecte du mil s'étale de septembre à mai. En année normale, elle va d'octobre à mai. En revanche en année déficitaire, la collecte du mil commence en octobre pour se terminer en mars… Par jour de foire hebdomadaire les quantités moyennes collectées à Tessaoua sont de 50 tonnes de mil, 20 tonnes de sorgho, 150 tonnes de niébé' (Kouyaté *et al* 2002 :56)
>
> 'Zinder est, avec Maradi, l'un des plus grands marchés de regroupement et de redistribution de céréales du Niger. Ce rôle important qu'il joue dans le commerce des céréales est lié à la proximité du Damergou, région agricole reconnue comme le grenier du Niger[30].'….[à Maradi] 'les quantités moyennes mobilisables en un jour de foire hebdomadaire sont : 100 tonnes de mil, 40 tonnes de sorgho, 400 tonnes de niébé' (*ibid)*

The margins calculated by SIMC (Kouyaté *et al* 2002:47) on millet purchased and transported from Zinder and Maradi at the average 1992-2002 prices in the following places were:

- Zinder – Niamey: 22.62%
- Maradi – Niamey: 26.64%
- Zinder – Agadez: 8.13%
- Zinder - Diffa: 6.88%
- Maradi – Tahoua: 26.91%

Prices in Agadez and Diffa were said to be poor compared to Niamey because of poor local demand, NGO's and mining companies intervening in food markets, and because transport was expensive. In Tahoua, neither of these factors apply so margins are high. In general, Zinder ends up supplying Agadez and Maradi ends up supplying Tahoua. Shorter circuits such as between Tanout and Zinder provided a margin of 6.03%, but other circuits linking the 'collection markets' in the surrounding areas with the Zinder and Maradi markets sometimes operated at a loss. Similarly if traders bought maize in Dawanau, Nigeria with the object of reselling at the market in Maradi, there would be zero economic benefit (in fact a –1.56%loss) while maize from Jibia would be even less economical (-7.21%) (Kouyaté *et al* 2002:47).

[27] *niebé* or *souchet* also give higher margins than cereals
[28] Société de Collecte, de Production et de Commercialisation de Produits Agro-Pastoraux
[29] Société Nigérienne de Production et de Commercialisation de Produits Vivriers et Matériels agricoles
[30] A Zinder on affirme dans le milieu des commerçants que si le Damergou éternue, c'est tout le Niger qui tombe malade.

This lack of profitability could have been a factor in explaining the small amounts of grain moving between Nigeria and Maradi in 2005 as the price differential was not economic. However, there are so many other variables and these are just average prices, that such figures must be seen only as an illustrating the point.

> En effet, la faiblesse relative des marges commerciales habituellement enregistrées aux différents stades de la commercialisation explique, en grande partie, la nécessité d'un stockage plus ou moins prolongé dans le but de générer des gains substantiels et assurer une meilleure rémunération des activités commerciales (Kouyaté *et al* 2005 :61).

2.1.5 Regional trade :

The fact that Niger is so often in deficit, means that regional trade in cereals has come to play a vital role. In fact one could argue that supplies from Nigeria and Benin had started to be taken for granted. Trade with Nigeria had always been strong, and this tradition allowed traders to resume quickly a role after the liberalisation of the Nigerien economy in seeking to make up Niger's deficits from within the region – with maize from Benin during the shortages of 2000 and millet from Burkina Faso in 2002. In 1998 Burkina Faso imported millet from Mali to make up its deficit. Nigeria is the only one of these countries which regularly produces a surplus and when the other countries have excess it is usually redistributed within the country or marketed later. Maize is regularly imported to Niger from Benin, Ghana and Nigeria, and make up larger amounts of the regional cereals trade than millet[31] (Terpend 2005:10). Cowpeas (*niebé)* and tiger-nut (*aya)* are exported to Nigeria from Niger rather than consumed because high prices often mean two sacks of millet can be bought with the sale of 1 sack of *niebé*. The livestock trade is similarly orientated towards the coastal states – with cattle particularly destined to the large urban areas while goats are sold amongst all social groups and sheep are sold particularly at the time of the Haj (Fete de Tabaski). Camels are mainly sent to the Maghreb, while dates and pasta are often brought back on the return journey. Red onions from Galmi are sold throughout West Africa[32] as is the case with peppers from Diffa.

Terpend (2005:9) refers to the Laboratoire de'Analyse Régionale et d'Expertise Sociale (LARES)[33] research, in partnership with French research body IRAM, which divides West Africa into a well functioning Eastern bloc (Niger, Benin, Nigeria, Cameroon and Chad), a Central bloc (Cote d'Ivoire, Eastern Mali, Burkina Faso, Ghana and Togo) – greatly disturbed since 2003 when the problems in Cote d'Ivoire erupted – and a Western bloc (Senegal, Mauritania, the Guinea's, Western Mali and Gambia) – oriented towards cereal imports from abroad. There is clearly also trade between the blocks as Niger's trade with Burkina and Mali, and Mauritania's attempts to buy cereals from the same countries in 2005 illustrate.

The biggest cereal market in West Africa is at Dawanau, Kano and occupies 21km2 with 50,000 stores with 10-300MT capacity. Secondary level markets in Nigeria include Katsina,

[31] Terpend (2005:10) quotes SIMA bulletins in 2001 and 2002 that show between 1999-2001 maize represented 40-55% of cereals imports to Niger while millet was between 30-40%. Quantities of manioc flour, yam and sweet potato while important are one third of the volume of maize.

[32] Sales in Ghana and Cote d'Ivoire have reduced dramatically in the last few years so prices have halved since 2003

[33] The LARES journal 'L'Echo de Frontiers' looks to have provided very useful date on cross-border trade, but the last available edition seems to be for 2003.

Damassak and Jibia. Malanville market in Northern Benin has a similar international importance and many Nigerien traders are resident in the town (Kouyaté *et al* 2002:37). In Burkina Faso there are Ouahigouya and Pouytenga (near Fada N'Gourma), and in Mali, Mopti and Koutiala markets. It is difficult to estimate the quantities that are moved since the liberalisation of exchange of agricultural products there are no quantity controls at customs. However, there is a distinct tendency for Niamey to be provisioned from Benin, Burkina Faso, Ghana (transiting through Burkina) and Mali, while Zinder and Maradi rely on their neighbour in Nigeria with particularly strong cultural links with Hausa's the other side of the border.

Importations de céréales au Niger 2000-2001[34]

Pays	**Mil**	**Sorgho**	**Maïs**
Nigeria	76,57%	80%	22%
Mali	7%		
Bénin	0,43%	8%	20%
Burkina Faso (Ghana, Togo)	16%	12%	58%

2.1.6 Phases in Government Policy:

Before independence, the colonial government in Maradi and Zinder aimed to make a reality of the border between Niger and Nigeria, and transform the North-South Trans-Saharan trade into a more independent model that could resist the economic competition of Nigeria's massive groundnut trade that followed the arrival of the railway in northern Nigeria. European commercial houses[35] were established from 1923, followed from 1937 by the Compagnie National du Niger Français, the Societé Commerciale de l'Ouest Afrique qnd the Compagnie Francais de l'Afrique de l'Ouest (Gregoire 1986:70). By 1962, there were also 5 big Libano-Syrien families operating out of Maradi[36] and 12 *Alhazai* who operated systems of buying up groundnuts from local farmers and selling them manufactured goods in return. Mortimore *et al* (2001:14) identify three stages of government economic policy following Independence in 1960.

At first the Government embarked on a policy of modernisation. The State Groundnut Company SONARA was established in 1962, and immediately, and even more so after 1968, clashed with the *alhazai* as the political classes – often from the west of the country – and the economic classes had little in common. Both the European commercial houses and the operations led by the *alhazai* became intermediaries and storage facilities for SONARA. By the early 1970's the extension of groundnuts in areas previously used for growing food had left the population vulnerable to the drought that started in 1971 and continued until 1975. This caused the collapse of the groundnut industry and most of the *alhazai* who had made their fortunes on the back of groundnuts either faced ruin or moved into the commercialisation of cereals. SONARA was given the monopoly of niebé (cowpea) sales

[34] Source : Kouyaté et al 2002 :90 - SIM et DPV
[35] Starting with Gottanègre and Ambrosini, followed by B.Ruetsch, Dumoulin and Cogeac
[36] Asad, Abed, Elias Issa, Alhaji Ali and Khalil Azard

(which increasingly took over from groundnuts as the cash-crop of choice[37]), but most farmers by-passed them to sell on the black market to Nigeria[38].

The second stage of government policy was based on establishing national food security. The OPVN (Office de Produits Vivriers du Niger) was set up in 1970 to organise the commercialisation of food products. It stocked cereals after the harvest and released them onto the market during the period of 'soudure' to bring prices down and discourage speculation. They failed to manage to do this until about 1982 (Grégoire 1986:113). It had a monopoly in the commercialisation of cereals until 1984.. The *alhazai* who had diversified into cereals continued to do well with the OPVN not able to control more than about 20% of the market (Seyni Hamadou 2000:16). They rapidly expanded trade networks with Nigeria and were regularly importing between 100-200,000MT of millet and sorghum (May-September) and maize (throughout the year) during the 1974-1980 period (Egg *et al* 1993).This body was subsidised by the boom in Uranium exports occurring at from the 1970's, but this boom only lasted until the mid 1980's when uranium prices tumbled. Increased millet production was facilitated throughout the 1980's and into the 1990's by a massive expansion in area cropped (Mortimore *et al* 2001:15). The prices of agricultural inputs and prices were subsidised through a three year plan from 1976-1979, a Five year plan from 1979-1984, followed by an interim Consolidation Plan (1984-5). By the beginning of the 1980's the total fertiliser imports had jumped from 3000MT at the start of the 1970's to 10,000MT (including 1000MT per year by the Projet de Developpement Rurale de Maradi PDRM alone) (Seyni Hamadou 2000:7).

The third phase beginning around 1984 was precipitated by the inability of the Government to sustain the level of external debt once uranium prices collapsed. It was the phase of structural adjustment reforms and liberalisation of cereal markets which saw a massively reduced level of government involvement in rural development. During the 1990's, and with the encouragement of World Bank and IMF, the role of the OPVN in active intervention in cereal markets was reduced leaving only the task of managing the national cereal security stock (Terpend 2005:4).In their place, the traders who had stayed in the shadows during the previous two phases emerged from behind the state institutions. Nigerian operators moved heavily into the market (see below) despite the barriers put in their way in the main towns and succeeded in replacing their Naira with the fully convertible FCFA with which to do business on the international market until the devaluation of the FCFA in 1994 and the removal of its convertibility outside its zones of origin (Seyni Hamadou 2000:17).

2.1.7 Village-level Political Structures:

A village (*gari)* is defined administratively as a locality with a chief (*mai gari* or *sarki),* usually descended from the founder of the village and recognised by the authorities. To this are attached hamlets of secondary importance – where the chief has representatives – and temporary farming settlements (*garin gona).* A person belongs to their village administratively even if they are not present. For example there are many Peul who are subjects (*talaka* or *ard'o*) of the '*chef de groupement Peul' (lamiid'o)* in a place in which they do not physically live. The chief has the responsibility of raising taxes from the heads of household (*mai gida)* for the government. He is considered to be 'the wife of the land' (*mijin*

[37] Tiger-nut (Fr. Souchet; Hausa *aya)* has also become increasingly common in southern Maradi for export to Nigeria.

[38] Cooper (1997) argues that 'the state tends to be irrelevant, and where relevant, the unintended results of policies are more important that the intended ones'.

k'asa) and thus a guarantor of its fertility. He receives part of the *zakat* religious tax to distribute to the needy. In his own right he receives a part of the gifts given at naming and marriage ceremonies, and assistance in the cultivation of his fields. He is expected to feed strangers who visit the village and in a year of famine would be expected to empty his granary to support the people of his village.

Raynaut (2001:25) is of the opinion that Hausa society, unlike other Sudano-Sahelian cultures, recognises and respects the concentration of wealth (*arziki*) in the hands of individuals. Heads of households can rise to the title of *sarkin noma* (Chief of cultivation) if they can amass one thousand sheafs of millet from the labour of themselves and those under their authority. He sees this 'inequality' as one of the principles of social organisation, with individuals that have accumulated wealth expected to create a patron/client (*uban gida/bara)* network of beneficiaries and dependents (amongst the poor –or *talaka*[39]*)* that rely on their protection (*barance)*. In rural Nigeria (in the area near Kano), land shortages led to a growing tendency of concentration of land in few hands, leaving 12% without any land (Hill 1977:83)[40]. In this scenario, having a large family was not necessarily an advantage as plots would be subdivided, so it is possible for them to be ma*talauta (poor)* even though they are rich in people (*arzikin mutane)* and in many other African societies would be considered rich (Gregoire 1986:70). Although Raynaut (2001:28) notes that this is not yet as bad in Aguié, Niger – it is certainly the way things are going. Whether this is the Malthusian scenario that many predicted after the Sahel droughts of the 1970's and 1980's will be discussed in more detail below in the section on land degradation and population increase.

2.1.8 Religious Structures:

Religious leaders (or *marabout*) are found in all villages surrounded by koranic students (or *talibé)*[41]. Friday prayers in the villages are led by an *imam.* There is often a certain amount of competition for power in the villages between the clientilistic structure under the *imam* and under the secular chief (Monder Kilani *et al* 2000:41). Religious leaders are present at all the major ceremonies (funerals, marriage, naming etc) as well as religious events (they are solicited to give the *fatiya* recitation). Influential *marabout* attract many *talibé* from different parts who are accommodated at his house in return for work on his fields. The sacrifice of a *balemi* ram at the *laya* feast on the 11th day of the Haj is a vital event for Niger's livestock economy (see below). Koranic teachers (*malamai)* have largely taken over from traditional healers (*sarakan bori)* in the role of casting out the evil eye and healing sicknesses with a talisman (Mondher Kilani *et al* 2000:47). They also redirect disputes towards the higher religious judges known as *al qadi.*

2.2 PHYSICAL ENVIRONMENT:

2.2.1 Rainfall:

[39] Raynaut (2001:26) notes that *talaka* (poor) and *talauci* (poverty) have pejorative connotations so prefers to use *d'an kad'an* (person with little), *mai k'aramin hali* (person with few means) or *mai shan wahala* (person in difficulty). The concept of vulnerability is translated as *rishin galihu* (Maman Adamou 2004:37). Mortimore *et al* 2001:21 refer to *masu hali*(moderately vulnerable), *kadarin kadahan* (vulnerable) and *mai rashi* (v.vulnerable)

[40] 'intensifying pressure of the population on the land has been the main factor affecting living standards' (Hill 1977:96)…'94% of rich men have more than three acres while nearly all poor have less than three acres' p.116

[41] Koranic education is preferred by many because it imparts *hankali (*the knowledge of good manners and social norms) whereas the formal education system only gives *sanni (*knowledge of a practical skill).

Mortimore (2000:2) refers to the long term 'desiccation' of the Sahel zone over the years 1960-2000 to differentiate from short-term droughts that occur regularly in the region. There was a reduction of almost 30% in the average rainfall of tropical Africa between the period 1931-1960 and the period 1961-1990. The trend over the last 40 years, however, provides 'no discernible model for forward projections'. What can be established, though, is that variability (20-40% on average from the mean annual rainfall) is a normal characteristic of Sahelian rainfall and that fluctuation particularly effects the period June-July, where rainfall is very likely to be uncorrelated with the annual precipitation. This is an important period for cultivation. So it is possible that there can be poor productivity in a year where annual totals are good. During 60 years' study of rainfall at Katsina, Zinder, Nguru and Kano in Nigeria, and Magaria and Maradi in Niger, a moderate drought happened on average every 4.8 years and a severe or extreme drought every 8.1 years, though the frequency of such events was much greater after the early 1970's (Mortimore 2000:11). What is significant, though is that droughts were equally common throughout the 6 meteorological stations, despite their different latitudes or total rainfall[42].

2.2.2 Agricultural Systems:

According to statistics quoted by Charasse and Gouteyron (2005:16), the surface area cultivated in Niger increased from 11.5 million hectares in 1999 to 12.6 million hectares in 2003. The new areas under cultivation have mainly been in the northern agro-pastoral zone, but other less fertile land (compact clay-sand soil known as *geza)* was taken up in the south where all the preferred *jigawa* (sandy, well-drained soils) was already under cultivation. To give a concrete example, this has meant the almost complete disappearance in the areas of southern Maradi and southern Zinder of spare land available to permit shifting cultivation, and the need to apply fertiliser to maintain yields. In the northern parts of Zinder and Maradi the fertility of the soil can still be maintained to a certain extent by allowing land to lie fallow for years before returning to it.

The year is divided up into four/five seasons:

- *Kaka* – September-November – the harvest period
- *(Dari* – December-January – the cold season)
- *Rani* – December-March – the dry season (encompassing the cold season)
- *Bazara* – April-May – new leaves on the trees with the approach of the rainy season
- *Damana* – June-September – the season with the main rains (*malka)*

The average number of people working on the fields in Zinder was estimated at 2.5 per household, feeding an average number of eight individuals (Mondher Kilani *et al* 2000:73). Despite that quite high number, 36% of farmers work alone. As previously mentioned, the *gandu* system of collective work is slowly decreasing. Within the *gandu* there is a tendency to give lighter work (such as sowing, harvesting, thinning out) to the older people, while the young take charge of land preparation, ploughing, taking care of large livestock, making granaries and transporting the harvest. Women take part in sowing, thinning and harvesting, though they find it increasingly difficult to access land.

It is common to see a high premium being placed on risk avoidance in agricultural strategy, especially in the most vulnerable households (Raynaut 2001:36). As mentioned earlier,

[42] FEWSNET (2005:28) are of the opinion that rainfall is 'subject to wider fluctuations from year to year' in the agropastoral zone compared to the south.

farmers will often exchange land (*aro)* with other farmers to permit them land of a different soil variety or a slightly different microclimate. Different varieties of millet – both short-season (*aunkutes)* and long season (*zango)* – can be grown. These can be combined with other crops with different cycles. However, the Sahelian meteorological conditions mean that agriculture will always contain an element of risk. As a result, successful farmers quickly diversify out of farming and rarely reinvest large amounts of their money in the farm sector. Instead traders prefer that it is farmers who play the lottery of the weather, while they maximise their profits in a good year and minimise their risks in a bad one.

When production is not going to be sufficient to cover a family's needs, certain members of the family offer their labour to work in the fields of others – a practice known as *kwadogo* or *barema* – for which they are compensated with food (usually a half – one *tia* of millet according to various informants) [see below for how this worked in 2005].

Winter '*contre-saison'* irrigated farming is practised by men in areas in the south of Zinder and Maradi in damp depressions or valleys known as *fadama* or *kwari.* In these areas crops such as tomatoes, onions, salad leaves, sorrel, manioc and sugar cane are grown for market and date, mango, banana and other fruit trees are planted.

2.2.3 Pastoral Systems:

An Oxfam assessment in June 2005 estimates that about 20% of Niger's GDP comes from livestock exports and yet less than 1% of GDP is invested in livestock (Oxfam 2005:11). Pastoralists can be nomadic or sedentary depending on the location and ethnic group. At the start of the rains around June, nomadic pastoralists migrate North, returning South only after the harvest around October. They have traditionally been able to co-exist with agriculturalists due to careful management of 'grazing corridors', water points and grazing areas in predominantly agricultural areas. Nowadays, with fewer and fewer 'commons' areas in the south not under cultivation, and growing encroachment on grazing corridors, co-existence is under pressure. The commons areas (*daji)*, where wild foods and firewood could be harvested, have come under the control of farmers who 'own' all the products growing on their land. In addition, grazing areas are being 'harvested' for forage that is sold in the market rather than being available to pastoralists for free. The old arrangement is decreasing whereby farmers would give food to nomadic pastoralists in return for them 'parking' their animals on a farmer's fields to supply manure (Raynaut 2000:19). In addition, many animals belong now not to nomadic pastoralists or farmers, but to urban investors.

In Tuareg society, women and children stay at home in the North with sheep, goats and some milking cows while the men move with the cattle. Tuareg cattle (known as *Azawag*) are not as well adapted as the Peul *Bororo* cattle to large scale migration, so they tend to remain in the small pockets of the pastoral zone where grazing is available, while camels are taken further a field (Oxfam 2005:13). Peul keep their cattle in the agro-pastoral zone so need to move during the agricultural season. For this reason they keep sheep rather than goats as the sheep follow the cows on the long transhumance, while goats (and camels) are more likely to wonder off. Gregoire and Raynaut (1980) estimated that about two thirds of the cattle in Maradi belonged to Peul and Bouzu pastoralists. In Peul society, women control the commercialisation of milk products and this gives them a larger degree of economic independence within the family.

Small stock are often kept using the practice known in Hausa as *kiwo* – where a goat is lent to the beneficiary, who then shares the offspring and milk (or sale price if sold) with the owner.

About one third of people keeping livestock were estimated to be involved in *kiwo* (Mondher Kilani *et al* 2000:141). Either the beneficiary buys the animal outright, keeps it for a few years and then gets reimbursed by the owner with the produce of the animal (usually cattle) divided equally between them/to the advantage of the beneficiary; or, as normally applies to small-stock, the beneficiary receives an animal that has never given birth, gets the first-born and delivers the next two to the owner; or, also with small-stock, the beneficiary gets an animal that has already given birth where the first two births belong to the owner and the third to the beneficiary. The beneficiary can do with the animal what he/she wishes including selling it, giving it away or killing it. *Kiwo* is even practised within the extended family circle.

Mondher Kilani *et al (*2000:70) observe from a survey done in 1996 that each family in Gomba Hausa, Zinder possessed an average of 9 shoats, 1.5 cattle and 0.35 ass/horse. All households surveyed possessed at least a sheep or a goat, while 76% had 1 head of cattle – usually (like sheep) the property of the man. Around 85% of goats belong to women (CARE 1997; Raynaut 2001:42). It is almost impossible to estimate the carrying capacity of the region in terms of livestock because of the mix of pasture and crop residues which are fed to animals. Banoin (2000:4) estimates that as much as two to five times as much edible matter was generated from crop residues as natural pastures from 1994 to 1997. Regardless of the accuracy of the statistics, it indicates the extent of linkages between the agricultural and pastoral systems.

PART II: THE EVENTS OF 2005 AND THE INTERNATIONAL RESPONSE:

3.1 CHRONOLOGY OF THE 2005 FOOD CRISIS.

3.1.1 The Situation in Niger:

The following chronology describes in detail the evolution of the food crisis of 2005. These events came to be broadly portrayed as beginning with a warning from the government and FAO/WFP as early as the end of 2004, and ending when media pressure forced the donors to start funding the UN flash appeal, and government and aid agencies to acknowledge the scale of the problem from July 2005. The detailed reconstruction shows how the early warning system registered the danger that Niger faced, but was unable to decide whether it was sufficient to trigger the alarm button. It also describes how the debate about giving out free food was influenced by the fact that the national cereal stock stood at only 5000MT at the end of February 2005, despite a request for 78,100MT to refill this stock 3 months before, so there was little practical possibility of implementing free food distribution even if the government had wanted. Thus aid agencies and the government continued to send out hesitant or contradictory signals right up to and beyond the harvest in October 2005, adding to the sense of policy drift.

- 23 November 2004: an official communiqué from the Council of Ministers announces a net cereal deficit in the 2004-5 Agro-Pastoral campaign of 223,500MT[43] (7.5% of annual needs for the country but 26% of the needs of the affected areas) and fodder deficit of 4.6 million MT (36.5% of annual needs)[44]. There were 2988 villages with 3,293,648 inhabitants (32% of Niger's population) at risk of whom 2,541,404 would be extremely vulnerable from December 2004.

- 25 November 2004: Government launches an urgent appeal for 78,100MT of emergency food aid for which only minimal contributions (from France and the EU) had been received 6 months later.

- 15-17 Dec 2004 – Ministry of Foreign affairs held a meeting in which it requested from Niger's development partners 78,100MT and 540 million CFA for measures to ease the crisis.

- 21 Dec 2004 - FAO/PAM assessment of the harvest (conducted between 4-18 Oct 2004) publishes its report estimating the cereal deficit to be 505,090MT, which with 226,740MT of commercial imports left a 278,350MT balance. They note 3334 villages with about 3 million inhabitants as 'deficitaires/vulnérables' (FAO/PAM 21 Dec 2004:18).

- 5th Jan 2005 – Government launches campaign to tax various goods and services, including VAT on goods (eg milk) said to have provoked a price rise – suspended 19 April.

- 22 Feb – FEWSNET warning that 3.2 million people in 3000 villages are facing moderate to high food insecurity.

[43] Production was 2.6 million MT according to these statistics only 11% less than the 5-year average and 35% greater than the 2000 season; the forage deficit was 154% greater in 2004-5 than 2000 (Terpend 2005:13).
[44] In 2003/2004, on the other hand there had been a record cereals surplus of 440,000 MT [427 183 acc GoN Oct 2004]. The deficit in 1997 was 760,000MT (Terpend 2005:13)

- 28 Feb – National grain security stock stands at less than 5000MT (it fluctuated around 70-90,000MT from 1991-1994, around 40,000MT for 1995-6 and around or below 20,000MT from then on) (FEWSNET September 2005)

- Feb – Cereal prices start to rise dramatically from 13,000FCFA/sack to 15,000FCFA/sack in Feb, to 20,000FCFA/sack in April, while livestock, niebe[45] and onion prices start to fall.

- March – Government launches campaign to provide 30,000MT cereals sold at subsidised prices (10,000CFA per 100kg sack – rather than the market price of 20,000CFA). Dadi Dan Bakoye, head of the Statistical service at the Ministry of Agriculture declared (IRIN 19 May 2005) that this had been insufficient to satisfy the needs.

- 30 March – The total sum sought for the Regional Consolidated Appeals Process (CAP), was raised to US $190.3 million from the original request of $152.3 million, which had been circulated to donors five months before due to concerns about the effect of locust infestation.

- 21 April – results of HKI/WFP nutrition survey in Zinder and Maradi conducted in January 2004 [described below]. WFP Niger EMOP for 15 Feb – 15 Aug 2005 (targeting 400,000 people) has shortfall of $2.5 million. Ongoing 'development' projects (school feeding, FFW, cereal banks and nutrition activities) account for another 620,000.

- 5 May: Falmeyé (Dosso)– clashes between Peul pastoralists and farmers cause 11 deaths.

- 19 May: UN flash appeal for $16.2 million to help 3.6 million people in 3815 villages at risk – of which 2.5 million people were considered extremely vulnerable including 800,000 children under 5 (UNOCHA 19 May 2005). At the end of June an official at OCHA said only $2.7 million, or 15 percent, had been received. WFP initially earmarked 14,000MT for 2005 and had distributed 11,000MT by the end of June.

- 24 May: Unicef publish a map showing Maradi and Zinder as being the two most effected regions as revealed by MSF data on admissions to its feeding programmes.

- 25-26 May: a meeting with WFP, AGRIHYMET, FEWS in Tahoua resulting in the re-evaluation by SAP (Système d'Alerte Précoce) of areas of food insecurity increased the number of departments in extreme food insecurity from 8 identified in the last meeting in Jan to 18. These departments were mainly in the pastoralist north – an area which was particularly worrying FEWSNET due to the lack of pasture and the clashes at Falmayé (5th May).

- 27 May: Jan Egeland, the UN's Under-Secretary-General and Emergency Relief Coordinator described the food disaster unfolding in Niger this week as "the number one forgotten and neglected emergency in the world" (IRIN 27 May 2005).

- 28 May : the Prime Minister Hama Amadou made the following appeal in parliament «Je souhaite saisir … l'opportunité … pour lancer, solennellement, du haut de cette tribune, un appel angoissé à la communauté internationale, pour une assistance alimentaire d'urgence».

[45] Niebe – prices in Zinder were 300 CFA/Kg in August, 160CFA in September, and less than 100 after the harvest in December (FEWSNET Dec 2005)

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- 31 May: Michel Falavigne, the UNDP representative declares that massive free food distributions are only justified in those zones where the population has no other means of procuring food. Worrying about the potential effect on coping mechanisms, he continues, « Dans les zones moins touchées, on risquerait de casser les mécanismes en place qui assurent la sécurité alimentaire de façon durable» (IRIN 31 May 2005)

- 2nd June: OCHA issued a statement saying "Two weeks ago, as Niger's lean season neared and indications emerged that the country faced a looming "silent crisis," the UN Office for the Coordination of Humanitarian Affairs (OCHA) launched a four-month Flash Appeal for $16.2 million. To date, not a single dollar has been pledged"

- 2nd June: Following a rally by several thousand people, Government Spokesman Mohamed Ben Omar told AFP "What civil society is asking [demanding food stocks be distributed for free] is poorly conceived and irrational… The cereals we are selling at reasonable prices are being pulled from the national reserves…We cannot take from it without knowing we have something to replace it with, and as yet we are still depending on the whims of our partners" (AFP 3 June 2005).

- On 6th June, at a meeting with donors, UN agencies and NGOs, Prime Minister Hama Amadou requests 18,800MT of cereals from the international community to give out as loans to those in affected areas (Reuters 7th June). At the meeting, donors, aid agencies and the government brushed aside suggestions of distributing food for free for the moment. "The situation is serious this year but not out of control," said Giancarlo Ferri of the World Food Programme (WFP). "We haven't yet reached the stage of a generalised famine calling for massive distributions of free food to keep people alive" (see WFP Aug 2005:7).

- 7th June: Seydou Bacari told IRIN that the government had already provided 42,000 tonnes of cereals at below-market prices and set up more than 1,200 centres where people could work in exchange for food or cash. He said the government was not against free distributions of food [though he worried that they would 'disrupt developmental processes'] but that it had neither the money nor the food supplies to provide such assistance. Even if the money were there, Bacari added, it would be difficult to buy in enough cereals because neighbouring countries had also been affected by the crisis (IRIN 7 June 2005).

- 19th June – revised appeal by the UN for an extra $81million to take the $16million flash appeal launched on May 19 through to the end of December.

- 30th July 2005 – DEC launched appeal on behalf of UK charities.

- August – end: 16,609MT of food had been delivered to NGO's by PAM with 20,710MT expected at the beginning of September (out of a total of 48,058MT planned). They planned to have given one-month ration to 2.7 million by the end of September (the start of harvest). The 30,000 MT ordered by the DNGCA from India had just arrived in country and 11,141MT of food had been delivered to the field[46].

- 22 Sept – the CCA (Cellule Crise Alimentaire) announce the end of Niger's food crisis.

[46] Charasse and Gouteyron 2005:50: estimate a total of 69,500MT should have been distributed free in Aug/Sept and 38,642MT between Nov 04 - June 05 at subsidised prices – totalling 107,900MT or half the deficit identified in Nov 2004. They consider this to sufficient despite the difficulty of targeting those actually in need of the food

3.1.2 The Regional Outlook:

The regional chronology of events shows a tendency to calculate the regional production total for cereals, and assume, if this is in surplus or only slightly in deficit, that regional marketing mechanisms will ensure that the surplus in countries that have produced excess will automatically flow to the countries and the parts of those countries in deficit without necessarily examining in detail the attraction of these markets, transport costs and the fact that the free-trade concept enshrined in regional agreements is not always respected.

- 1st January 2005 – FEWSNET brought out a report claiming generally average grain production figures throughout the Sahel…. 'Current forecasts put total grain production for the Sahel in the 2004/05 crop year at 11,730,500 MT. If this estimate is correct, this year's gross grain production for the Sahel would be 17 percent less than last year's and 2 percent above the average for the last five years.'

- The March FEWSNET report claims that regional food deficits and the fact that Nigeria was exporting large amounts of its cereals to Darfur contributed to limited amounts being brought into Niger.

- On 19th May, it was reported that prices of cereals in Burkina, Mali, Mauritania, Senegal and Chad were leaping (UNOCHA 19 May 2005). In Mali a sack of 100kg had risen from 12,000 CFA to 20,000CFA. In order to keep prices down and avoid their food stocks being sent to Niger, it is said that Burkina Faso and Mali closed their borders.

- On 10th June, a press conference by CILSS played down the production deficit, reporting that 'the Sahel region recorded an overall grain surplus of 85,000 tonnes…Niger and Chad on the other hand registered grain deficits of 223,500 and 216 900 tonnes respectively' - see table below (IRIN 10 June 2005).

Country	**Number declared 'in need'**[47]	**Cereal Surplus/ Deficit 2004-5 Season MT**
Niger	3.6 million	-223,500
Chad		-216,900
Mauritania		-166,000
Senegal		-158,900
Cap Verde		-38,700
Guinea Bissau		-22,100
Burkina Faso	1.6 million	+435,000
Mali	1.1 million	+422,700
Gambia		+56,200
BALANCE		+87,800

- FEWSNET (10 Aug 2005) report that 'last year's [2004] Sahelian harvests were average to good despite reports to the contrary' and that bumper cereal harvest on the way for 2005.

[47] Source Flash Appeal for Niger, UNOCHA 19 May 2005 ; IRIN 24 June 2005

3.2 THE RESPONSE OF INTERNATIONAL ORGANISATIONS:

Reasons for the 2005 Crisis as presented to the French Senate – 29 September 2005[48]
• Endemic childhood malnutrition aggravated by a food crisis – under 5 mortality at 280 per 1000, though down from 354 per 1000 in 1960 – so the humanitarian crisis in fact happens every year during the 'soudure' period. • The national grain reserve was insufficient in November 2004 to face a crisis • The impossibility for the DNPGCA[49] of procuring 30,000MT of cereals in June 2005 • Free food distributions and Subsidised food are complementary and could have been implemented at the same time • Free food distributions should have targeted the most vulnerable - WFP general distributions seemed mutually opposed to the concept of 'targeted' distributions • Free food distributions should finish at harvest time • Failure of Niger to reduce population growth provides a source of future food shortages
Recommendations:
• Reconstitute the DNPGCA stock of 110,000MT[50] • Improve the quality of early-warning information of the DNPGCA/SAP • Reconstitute herds for the most effected pastoralists • Develop cereal banks • Improve the co-ordination of international assistance to Niger and bring new partners into the DNPGCA. • Follow up infant malnutrition and improve access to healthcare.

Reasons identified by WFP's After Action Review[51]:
• Need to include an analysis of the profound causes of malnutrition and to include nutritional needs and the key actors involved • The need to integrate the nutritional dimension into vulnerability analysis tools • Need to avoid political interference in agricultural production statistics • Too few studies and reliable surveys with national coverage of food security • Lack of reliable data on the extent of the crisis • Under-estimation of the extent of the crisis by certain parties • Absence of consensus on the level of crisis • Lack of or too little confidence in the state • Too little data on the situation of prices and cereal stocks available in the sub-region • Results of the Campagne Agricole de Production survey and targeting of vulnerable zones politicised • Overly developmental approach of NGO's present in the country

[48] Charasse & Gouteyron 29 Sept 2005
[49] The Dispositif National de Prévention et de Gestion des Crises Alimentaire
[50] DNPGCA stocks should have been made up of a 50,000MT national security stock and a fund sufficient to purchase 60,000MT but had only 20,000MT of food and financial means for 20,000 MT (Charasse & Gouteyron 2005:38)
[51] PAM (2006) – my translation

- Insufficient quantity cereals for sale at subsidised prices
- Lack of confidence in State structures by certain NGO's
- Recognition of the dysfunction of the DNPGCA but also the key role it needs to play
- Needs were not correctly estimated.

Reasons identified at a meeting at the ODI on 4th October 2005 chaired by ALNAP/HPG [52]:

- Aid agencies were not the cause of what happened in 2005. However, the inability to predict and mount a timely response must be seen as one factor that permitted a crisis to develop, or worse fanned the flames of the crisis.
- By general agreement, the response had not been timely enough. Preparedness was insufficient, and even when there were signs of crisis, there was no agreement among humanitarian actors, nor between them and development actors, over whether there was a problem that required intervention, or what that problem was. This reflects a failure of contextual understanding.
- Was the response originally proposed by the Niger government and the UN, which was based on subsidised food sales and which avoided free food distributions, appropriate? Unlikely ever to be known because there were funding and procurement delays.[53]
- There are problems with artificially separating poverty, impoverishment and famines and using an uncritical conception of a relief-development continuum with normality' and 'crisis' as opposites
- An on/off view of crisis masks the reality that many people live perpetually close to the edge of crisis [especially in very poor countries], and that small deviations from the norm may tip them over the edge.
- Early intervention to stop people's livelihoods collapsing could in principle prevent escalation to a full-blown crisis.
- It was acknowledged that a degree of 'normalisation' allows the system to accept the unacceptable
- They conclude that humanitarian planning must be based on scenarios that recognise the environment of imperfect information. In such a context an uncertain guess at an early stage is often worth more the clarity that comes with waiting until it is too late for pre-emptive action.

3.2.1 Early-warning Systems

It seems the international system can address malnutrition once it arises, but is unable to stop it creeping back away from the spotlight and leaping unannounced from the shadows. But the 'shadows' are only a self-imposed silence from a system that puts a premium on not making false alarms[54] which might embarrass those trying to implement long-term 'development'

[52] ALNAP Oct 2005

[53] Between November 2004 and June 2005, 38,642 MT of cereals were sold at subsidised prices (10,000 CFA for 100kg), while 1,277MT was used for food for work (Charasse & Gouteyron 2005:42). In my own interviews I was told that subsidised food was often bought by or resold to traders who then sold it on the open market.

[54] Even as I write this, I can hardly remove the cynical image from my head that the 2005 crisis might have been a 'false alarm provoked by the media and NGO's and that in fact it was not really that much worse than a normal year and should therefore be analysed as such. Then again the 'taboo about pressing the alarm' should also be analysed if it acts to prevent 2005 being analysed for what it was. Unfortunately evidence for either perspective is very speculative e.g. the number of feeding centres could be an indication there was a problem or could be the source of the admission statistics that for once actually quantified the problem. Also who is to know whether

policies. Such policies seek to make a break with the past by establishing orderly development programmes that address the causes of famine rather than the symptoms. A false alarm at this stage can put paid to years of investing in a new image for a country and replace preventative development programmes with palliative relief programmes; meanwhile not pressing the alarm early enough when a crisis comes along risks events escalating to a point where a crisis turns into a famine and further embarrasses those charged with turning the country away from the ways of the past. It is therefore unsurprising that such systems inspire such political controversy and leave practitioners caught between a rock and a hard place where calling 'famine' is not being encouraged as a normal and responsible part of doing the job, but should there actually be a famine they will be vilified.

Within the government, the Cellule de Coordination du Système d'Alerte Précoce (CC/SAP) is the body with responsibility for collecting, interpreting and disseminating information on food security and identifying appropriate actions (using the SIMA, SIMb, regional committees and the Enquete Prévision et Estimation des Récoltes (EPER)). Aside from this, there is the FAO's Global Information and Warning System, a CILSS weather warning system funded by the EU and the FEWSNET system funded by USAID.

Britain's development secretary, Hilary Benn, claimed in an interview on domestic radio (BBC 2005:17) that the failure of early warning indicators and contradictory signals had been the main causes of the food crisis. He criticised the 'lack of clarity' in the message while implying an understanding of malnutrition in Niger that foreign organisations simply could not claim to have. It was therefore rather unfortunate of FEWSNET to bring out a paper on 26th July 2005 intended to be a 'clarification' of 'frequent mis-information and mis-interpretation of the facts on the ground' which they titled '*An evidence base for understanding the current crisis*' (FEWSNET 26 July 2005). In this paper, they referred to 'a very severe, but localized, food security crisis' and repeated their position that it was localised in the agro-pastoral and pastoral parts of northern Maradi, Tillaberi, Zinder and Tahoua, and that the crisis would result in increases 'in the "normally high" levels of infant mortality'. In other words it was business as usual in terms of the 1973/1984 model of vulnerability. Understandably this is an attempt to show that they were on top of the situation, but it is also their judgement on the aetiology of malnutrition in Niger. It is impossible to predict famine without an accurate model of what causes it. FEWSNET conclude that it was 'a predictable and inevitable result of inadequately addressed chronic poverty in the world's second poorest country'.

If it was *predictable*, then the very network designed to bring it to the attention of the world should have been doing its job predicting, but the FAO failed to mention Niger in its list of 36 countries requiring external food assistance in January 2005. However, if it was *inevitable*, neither that same organisation, nor the government of Niger, nor any of the organisations mentioned (FAO, CILSS, WFP etc) could be held responsible – it was all the fault of the locusts or the drought. The terms used seemed to be all about avoiding blame rather than getting a real understanding of the phenomenon. A 1998 FAO report (Chevassus-Agnès 1998) that could later be seen as a kind of long-term early warning, explained how Zinder and Maradi showed the worst statistics for children breastfed from the first day (10 and 13%),

2005 would have resulted in people dying in the streets like 1984 if the aid reaction hadn't been there. Somehow I doubt it, but again cannot be sure.

highest rates for stunting (45.3 and 49%[55]), and worst infant mortality rates and health indicators in the country (in the case of Maradi) (Chevassus-Agnès 1998:16). As Salif Sow of FEWSNET explains "In any given year, in any village, you will find malnourished children in Niger" (IRIN 5 Aug 2005)[56]. Johanne Sekkenes of MSF took the line that "The fact that it happens every year does not mean this is excusable" (IRIN 5 Aug 2005). The debate is about what an objective level can be that indicates when a problem of malnutrition born in poverty qualifies as a crisis – or as David Loyn writes for the BBC 'How many dying babies make a famine?' (BBC 10 Aug 2005). This endemic problem should have been the basis of models predicting 'vulnerability' to a crisis. It is a question aid agencies should have been able to answer as part of 'crisis-warning strategies' but instead it was the media and the public who answered – leaving the lasting impression that organisations and the government has started to get too thick-skinned about malnutrition.

Nor does it seem that agencies are, even now, any better able to differentiate clearly problems caused by the short-term factors in the current (benign) agricultural season and ongoing endemic malnutrition. WFP's Emergency Report n. 8 (24 February 2006) reports that:

> 'The outlook for 2006 for Niger is of high concern with 3.2 million Nigeriens severely or moderately food insecure and levels of malnutrition of 15.3 percent well over the WHO-defined emergency level of 10 percent Niger has not recovered from the 2005 crisis. In many areas of the country, food stocks are already exhausted and the lean season has begun.'

At the same stage in 2005, the number of people being identified as being food insecure was also 3.2 million. It seems as if WFP are either waking up from a long slumber or trying to cover their bases in case 2006 turns out badly, and yet the conditions for 2006 are completely different. It is difficult to see on what basis predictions of need are being based. It appears more to be a strategy of hedging bets based on a desire not to be caught out like in 2005. As will be seen later in Section 7, this strategy of covering the institutional back of organisations rather than engaging with a real understanding of the constantly changing context of malnutrition, caused huge political friction with the government. It also failed to engage with a dialogue about whether Niger should be seen in an 'emergency' or developmental context, or whether this humanitarian division of labour was in any way appropriate to this context.

The test of a model's efficacy is its ability to predict things; however, with at least 3 different early warning systems in place and a difficult political environment into which the results are coming out, the weighting of the variables can be done differently by each system in such a way that a whole range of different outcomes can result – and only one will be accurate (although the inaccurate one might correspond better with political expediency). Weighing up the relative importance of the variables is an imprecise art: many of the feedback mechanisms within individual variables and between variables are almost impossible to predict.

[55] Diffa, with a tiny sample size is actually ranked between the two for moderate (<-2SD) stunting , while Maradi and Zinder are ranked worst for severe (<-3SD) (25.5% and 24.9% respectively) – figures quoted are from WHO/EDS 1992

[56] However, it is impossible to conclude, as the FEWSNET (26 July 2005:2) report does, that because the food crisis is particularly serious in Zinder and Maradi that feeding practices in these areas are 'the possible cause of rising malnutrition rates in these areas'. It could just be coincidence. However, FEWSNET blame the 'chronic issues that are at the heart of the current localised crises' and show they have made their diagnosis, which is one which worryingly leaves the early warning systems somewhat absolved in their part in advocating developmental approaches and not wanting to be alarmist and call famine'.

It is the weighting of the variables which is all-important, and that weighting varies from year to year[57]: in a year of catastrophic rain failure for example the variable that will have more importance than any other is the rainfall – and in this case the message can be kept simple, clear and loud (see Holt 2005); but in a year of relatively poor rains, the consequences will be determined by the mobilisation of other factors. In this case there are many elements of doubt, so the message cannot be made unambiguous, loud and clear for fear of being seen to cry wolf. This was the case with 2005 – the warning of production failure and a 223,500 MT cereal deficit were made in November 2004 when the appeal for pre-emptive action came out, but without the kind of conviction that would persuade the donors to react. Instead a 'wait-and-see' attitude prevailed as observers realised that early-warning systems were no match for running the variables through the machine to see what came out, by which time it was too late for pre-emptive action. In the scenario where the early-warning indicators are showing ambiguous trends, it would be better to have the ability to trigger 'crisis warning' indicators that can put into action a rapid response before it gets left to the media and the public to give their uninformed but sometimes correct judgement.

3.2.2 Estimating the Scale of the Problem: A Famine or 'very severe but localised food security crisis'[58]:

Arguing over the scale of the problem is a perennial problem when there is a lack of accurate data. Most parties appear to be plucking figures out of the air – Le Figaro on 23 August talked of hundreds of thousands of children dying, while MSF estimated the figures to be only 10-15 per week in its CRENI's. Bernard Kouchner, former French health minister was quoted by AFP as telling an international conference of food producers in Budapest on 22 June that "30,000 children were dying each day in Niger of hunger or curable diseases" (IRIN 27 June). Understandably, the reaction from the Health Minister, Ibrahim Ari, on State radio was to say that Kouchner was "simply making up numbers". He went on to use his own statistics to show that only 6470 malnourished children had been taken in for treatment during 2005 so far, of which 310 had died (the figures for the whole of 2004 had been 573 deaths from 9632 children taken in). He ended by complaining about "false information, whose only aim is to tarnish the image of Niger".

To some extent, I would agree with the ODI that for those dying from acute malnutrition, 'how the situation is labelled is academic' (ODI Aug 2005:2). Of interest here, though are the issues of power and control which go with being the one to 'define' the issue – and how that battle was waged between the government, aid agencies and the media to be seen as the party most concerned about the plight of the starving (or most concerned with avoiding the blame). I personally feel there is a dangerous tendency to relativise on the part of professional crisis-watchers. However, as this study is an examination of the detailed background behind the events of 2005, rather than an expression of opinion that will alienate otherwise engaged actors, I refer to 'la crise alimentaire' or food security crisis – though many would rather it were called a nutrition crisis, a livelihoods crisis or an economic crisis depending on their institutional point of view. In fact, it could be more correctly seen as a crisis of 'admissions into feeding centres', where the nagging question remains whether a crisis would have existed/been recognised if centres, and particularly MSF, had not been there to document it.

[57] In other words you cannot just use the fact that 2006 was a crisis to predict that 2006 will be one too even though the long term effects will be felt the year after. There have been good rains and reasonable market conditions so one would expect the numbers of vulnerable to be less unless the model used is unrelated to these things.

[58] FEWSNET 26 July 2005:1

3.2.3 Which areas of the country were most effected?

In order to answer this question, it is first necessary to have an opinion on what it was that effected the different areas. As explained in the introduction, it is, to some extent, necessary to 'reconstruct' the opinions of the various actors based not only on the analysis they made at the time, but also on the actions that they put in place and the areas that they targeted. At a DfID funded meeting at the ODI on 4th October 2005 chaired by ALNAP and HPG, it was argued that early warning systems had been focused on the areas that were usually the most marginal, and had ignored the impact of rising food prices in the less marginal southern areas (ALNAP 25 Oct)[59]. The causal factors are examined in more detail later in the report, but the presentation below describes how, to a certain extent, the wrong parts of the country were initially targeted because the wrong causal factors were identified[60].

The Ministry of Agriculture 'provisional pre-evaluation' of the 2004 agricultural season in October 2004, noted that there had been significant periods of drought (varying from 25-45 days) during the sowing time in Maradi (Mayahi, Dakoro, Aguié Departments), Zinder (Tanout, Gouré), Diffa (Mainé Soroa, Diffa, N'guigmi) and Tahoua (Tahoua, Illéla). The rain had also stopped suddenly at the end of the season, and some regions had no rain after 15 September. They noted that the locust infestation had been less than in the 2003-4 season, but that prices in the markets were higher than in 2003-4 (Govt of Niger Octobre 2004). As a result there was a cereal deficit of 248, 549MT which would be covered by an estimated 226,740MT of imports leaving a 21,809MT balance. There were 2742 villages identified as 'deficitaires' with 3,197,139 inhabitants (almost one third of Niger's population. Of these villages, the greatest number were in Zinder (902 villages), followed by Tahoua (708), Maradi (538), Tillaberi (451), Diffa (391), Agadez (225) and Dosso (119).

It is at this stage, things appear to lose clarity[61]. The joint FAO/PAM assessment of the harvest (conducted between 4-18 Oct 2004) puts a great emphasis on the losses caused by locusts (7% of the national production). They identify 3334 villages with about 3 million inhabitants as 'deficitaires/vulnérables' (FAO/PAM 21 Dec 2004:18 relying on the figures of the Ministère du Developpement Agricole (GoN Oct 2004)). They see Tahoua (409 villages) and Tillaberi (497 villages) as the areas most at risk, though they also note food deficits and deteriorating terms of trade in North Zinder (Tanout – 222 villages) and North Maradi (Dakoro – 179 villages).

Following a meeting at Tahoua in January 2005, the official figures showed the greatest number of vulnerable villages was to be found in Tillabéri (841 villages), followed by Tahoua (648), Zinder[62] (632), Maradi[63] (470), Agadez (213), Diffa (88) and Dosso (86) (Gouv du Niger/CILSS/FEWSNET Mars 2005:4).

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[59] Assessing the areas likely to suffer most requires an accurate diagnosis of the main threat. This diagnosis was lacking in 2005, so the it was impossible to anticipate accurately the right areas to target. There was a perception that agro-pastoral areas were likely to suffer disproportionately because of the 150% reduction in availability of forage. These were also the areas to have suffered most in the famines of the 1970's and the 1980's. There was also the perception that the locust invasion did more damage than turned out to be the case.

[60] This analysis also confuses cereal deficit and vulnerability to food insecurity.

[61] It is not possible to be fully representative of all the reports, maps etc that purport to describe the situation in the different parts of Niger; the examples chosen are acknowledged to be 'selective' to illustrate a point

[62] The Zinder figure breaks down roughly toMirriah (254 villages), Tanout (175), Gouré (130), Magaria (58) and Matameye (53). In Magaria, Bandé and Dungas were seen as vulnerable zones and in Matmeye, Kantché

There is nothing unusual about different institutional actors producing different sets of statistics and for those statistics to change over time. But they did contribute to the sense that there was not a clear, unambiguous message being portrayed[64]. What they show are the rise of Tillabéri to the top of both lists. It is difficult not to make the conclusion that based on the above production deficit, Tillabéri was being singled out as vulnerable based on gross production alone, without taking into consideration, even if the production statistics are correct, the fact that household food security is not exclusively dependent on 'own production' - especially in the agro-pastoral zone where most of the departments in deficit are located. The Annex of WFP's own CFSVA (PAM Juillet 2005:29) notes that only 7% of millet consumed in the agro-pastoral belt comes from own production while 80% is purchased. The figures for the 'rain fed areas' are 62% grown and 32% purchased. Elsewhere they note that 'only 22% of food insecure households depend primarily on their own production for food' (WFP Aug 2005:11). This does mean that both zones will suffer when poor production causes price rises, but at the stage Tillabéri was raised to the top of the list of vulnerability, price rises had not yet begun their really steep rise.

And yet the CFSVA goes on to conclude (WFP Aug 2005:11) that the most critical region in Niger was around N.Tillabéri with 47% of households food insecure or vulnerable, followed by Central Tillabéri and Northern Dosso (with 39% food insecure/vulnerable), followed by N. Tahoua, the extreme north of Maradi and parts of Zinder and Diffa (with 37% food insecure/vulnerable), followed by the south of Maradi and south of Zinder (with 30% food insecure/vulnerable)[65].

Gouv du Niger/CILSS/FEWSNET (Mars 2005:6) give vulnerability scores from extremely critical to showing signs of alert for 7 regions (see Appendix 2). If, on the basis of these figures, one gives a weighting of 5 for Extrement Critique, 4 for Critique etc: one ends up with Tillaberi on 33 points, Diffa on 22, Tahoua on 21, Zinder on 19, Maradi on 18 and Agadez on 16. One could ask why Diffa is so high or, from the table, why Illela and Mirriah have been left out and the vulnerability of Aguié is fixed so low.

FEWSNET Monthly report for May (FEWSNET May 2005) identifies the zones with food insecurity as being the totality of the pastoral and agropastoral livelihoods zones especially the extreme north of the Zinder, Maradi, Tahoua and Tillabery regions and contrasts that with the relative availability of food and stability of prices in the south and extreme south[66].

It seems that much of the analysis was based on an uncritical assumption that the south would be food secure. However in a report by Kouyaté *et al* (2005 :29), they note that Niger as a whole is a food-deficit country and that Zinder is far from being a grainstore :

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[63] The Maradi figure breaks down at Dakoro (148 villages), Mayahi (98), Madaroumfa (80), Guidan Roumji (69), Tessaoua (47) and Aguié (35). In Tessaoua, Ourofan, Korgom and Tessaoua cantons were vulnerable, and in Aguié, Gangara and Aguié cantons were vulnerable.

[64] When the relative clarity of this picture is then translated into the cereal needs per department it takes the form of the table in Appendix 2 *Cereal Needs 2004-5* (Govt of Niger Octobre 2004:18):

[65] They note that 73% of people in southern Maradi and Zinder depend on their own food production (WFP May 2005:11)

[66] FEWNET refer to 'des paradoxes importants inexpliquées' in the relationship between the early warning and the result (Salif Sow 2005:12)

> La situation générale de l'agriculture nigérienne fait que le pays est globalement déficitaire de façon structurelle ; la zone de Zinder par exemple, réputée être le grenier du pays, connaît 3 saisons déficitaires sur 5.

Parts of the Damagaram that are seen as the 'breadbasket' of the country were the ones to suffer greatly in 1998 – but the specifics of that year need to be looked at in isolation from 'reputation'[67]. In an interview in Maradi, the areas of Tanout and northern Tessaoua were said never to have to depend on grain from the south, while the south of Maradi was sometimes supplied from these northern areas when they had had one of their jackpot bumper harvest – but that kind of reputation cannot predict how things are going to pan out in any specific year[68]. It seems, though that the links between the two areas, the common climatic and market conditions to which they were both subject, caused them both to suffer, and to cause the other to suffer because they could not rely on the greater resilience of the neighbouring livelihood area as a crutch to get them through as would happen in many years.

All the above analyses base their assessment on a direct correlation between food production and vulnerability, and conclude that the populations that were most effected could be identified on production map of the country, even if we have established that even this map was not necessarily accurate. In the part III of this report, we investigate the possibility that malnutrition is not simply caused by production. Charasse & Gouteyron (2005 :20) quote statistics showing the worst weight for height situation for under fives at 20% is in Maradi, followed by Zinder, Diffa, Agadez and Tahoua in that order. They comment that Dosso, Tillaberi and Niamey are 'traditionally' less affected.

There is no way of objectively verifying whether Maradi, Zinder and Tahoua suffered more malnutrition in 2005 than any other areas, as the high figures of admissions to feeding programmes could just have been because the programmes were concentrated in these areas. If though, as is commonly perceived, these areas suffered most in 2005, it might ironically be because they are the very areas (especially Zinder and Maradi) which don't suffer from the chronic food security crises seen in other areas. The systems in place to plug the production deficit expected the deficit to come from the usual suspects and put in place the well-worn process of sending trucks to Agadez and Tillaberi, which takes place every year whether it be for relief or commerce. The fact that Zinder and Maradi don't usually suffer such peaks of crisis despite high endemic malnutrition meant also that they did not have the same range of coping strategies as would be the case further north.

In conclusion, it is difficult to see the logic of some of the targeting, and easy to agree with the conclusions of the PAM/GoN *Revue après Action* on the incorrect estimation of needs and analysis of vulnerability. It is also likely that the targeting of the vulnerable zones became politicised. Again, that wasn't of itself enough to explain the inability of the relief system to prevent a crisis, but it certainly contributed to the lack of clarity in the messages being sent out and the ability to diagnose the reasons for that crisis.

3.2.4 Confusion caused by the locust invasion

The first appeal for funding to fight the locust invasion was made by the FAO in July 2004 with the first locust swarms arriving in Niger a month later. They most affected northern

[67] Arguably that reputation as the breadbasket was lost after the famine of 1984 that badly effected this area
[68] Genné (1991) quotes statistics from FAO/WFP to show how in Maradi in 1988, Guidan Roumji and Dakoro were the only communes in surplus, while in Zinder, Tanout registered the only surplus (double its needs)

Tahoua, Agadez and Arlit. By November it was clear that less damage was done than was at first feared and IRIN reported that most of West Africa escaped relatively lightly from the locust invasion, but that there were isolated pockets of heavy localised damage (IRIN 23 December 2004). The worst affected place was Mauritania, where up to one third of the population were effected. Michel Anglade, Oxfam's humanitarian coordinator for West Africa was quoted as saying, "The big grain producing regions have been relatively spared, but this should not hide the fact that many farming and ranching communities which were already marginalized have been hard hit". However, FAO/PAM's post-harvest assessment (2004:12), came up with the figure of one third of production losses in 2004 as being due to locust infestation and this was the figure that stuck. They estimate that 7% of national cereal production was lost due to locusts – though it was more than a quarter of the harvest in effected areas (*ibid*:1).

3.2.5 Comparison with other years :

Gouv du Niger/CILSS/FEWSNET Mars 2005:7 give the following scores for vulnerability for the years 1992-2004 according to vulnerability score assigned to each department and commune in Niger according to ten criteria (rainfall, cereal situation, cash-crop situation, pastoral situation, sources of secondary income, state of markets, health/nutrition state, presence of alert warnings, capacity to adapt and the score of the previous year).

Year	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
>75	0	2	0	0	0	1	0	0	0	0	0	0	0
50-75	7	20	3	5	9	12	3	3	5	0	0	0	8
40-50	16	32	14	18	19	23	9	15	20	2	7	1	22

The last big famine in 1984 is known as El Bahari, after the leader at the time when it took place. In 1984, the failure of another successive rains caused massive displacement to the cities, as there was no prospect of getting a harvest nor famine relief by NGO's in situ. People died on the roads as many sought refuge in towns. Tanout was especially badly effected. Many young men went to Nigeria in search of jobs. In interviews informants explained how 1987 was a bad year in the SouthEast of Maradi but not in northern agro-pastoral areas 1990-1991 was also a bad year for Maradi. Another difficult year for Zinder and Maradi – though not a famine – was the 1997-8 agricultural year – named El Baré after the leader at the time General Ibrahim Baré Mainassara. In 2005, many people went *en exode* to Nigeria, but the two factors of early rains, and the prospect of NGO assistance that was being talked about on the radio, encouraged them to come back and plant what was ultimately a successful crop. It seems as though the scores above were generous during the early 1990's. It should be noted that being 'vulnerable to a crisis' does not always have a direct correlation with 'suffering a crisis'. What the table does show clearly, though, is that 2004-5 had a kind of stealth that took most people by surprise. People did not appear to be much more vulnerable than usual.

PART III: THE CAUSES OF THE MAJOR SHOCKS TO THE SYSTEM IN 2005

4. ENDEMIC MALNUTRITION AND SOCIAL PRACTICES:

The truth about malnutrition in Niger is that we probably do not really understand why it is happening or whether it is, or was in 2005, significantly worse than it has been in the past. It is important to signal this lack of knowledge rather than just coming up with another single-factor causation theory and set of related solutions. The analysis below is therefore structured along the lines Unicef Conceptual Framework – looking at the underlying causes in the three areas of the social care environment, the public health situation and household food security, – that lead to the inadequate food intake and/or disease that manifests itself as malnutrition.

4.1 NUTRITION SURVEYS:

In 1998 the EDSN survey (Enquête Démographique et Sanitaire du Niger 1998:153) reported 20.7% global acute malnutrition for children under three years (weight for height of <2 SD's from mean), 3.7% severe (<3 SD's) and 41.1 chronic malnutrition (stunting – height for age <2 SD's) at a national level for Niger. These figures rise to 31.1%, 6.4% and 55.7% respectively for children aged 12-23 months. A Unicef MICS study in 2000 reports 14.1% global and 3.2% severe for children under 5 years (rising to 35% and 8.6% respectively for the 12-23 month cohort.

On a regional basis, the joint WFP/Helen Keller International nutrition survey in rural areas of Maradi and Zinder (for children aged 6-59 months) in January 2005, reported 13.4% global, 2.2% severe and 60.4% chronic for Maradi, and 13.4% global, 2.7 % severe and 61% chronic for Zinder (PAM/HKI 2005:5). They comment that stunting amongst the 2-5 year agegroup is three times worse than for the 6 months to 1 year group and associate this with the state of hygiene and sanitation, especially amongst un-schooled mothers (an interpretation common to most 'schooled' investigators). Epicentre did a nutrition survey in Zinder in July/August 2005 on behalf of MSF for children from 6-59 months, and reported 18.6 % global and 3% severe. For children under thirty months these figures were 32.6% and 5.6% respectively.

In a survey by Médecins Sans Frontières (MSF) in April-May 2005 in certain regions of Tahoua and Maradi, levels of global acute malnutrition stood at 19,5 % and 3 % respectively and severe acute malnutrition at 2,9 % and 4 %.

A nutritional survey by the Government of Niger, CDC (Atlanta) and UNICEF at the end of September 2005, showed figures for global acute malnutrition for 6-59 month children averaged at 15.3% for the whole of Niger, but broken down to 9% for Niamey, 16% for Diffa, Maradi and Zinder, and 18% for Tahoua.

ACF's survey in October 2005 in the agropastoral zones of Maradi (Dakoro) and Tahoua (Bouza et Madaoua) for children between 6 months and 24 months produced results of 7.4% global acute malnutrition and 2.8% severe for the pastoral zone, 20% global and 7.4% severe for the agro-pastoral zone, and 14.3% global and 2% severe for the agricultural zone (though I am not clear to which zone this refers in these departments). They conclude that the areas of Bouza and Madoua have the greatest needs.

4.2 SOCIAL CARE ENVIRONMENT :

The following table presents the results of over 50 interviews with mothers of malnourished children that aimed to understand the social and environmental background to malnutrition. Mothers in general said that they had been breastfeeding from the first day, but in later interviews a few women admitted that this was not the case. In the light of the health-education messages being given out at health centres, they felt they should not admit that they had expressed the colostrum and thrown it away. But according to local belief, especially in the case of mothers giving birth for the first time, it was considered that this is 'stale' milk that had been waiting around for a long time and should be replaced by fresh milk. Weaning of the first child invariably happens at the maternal grandmother's house, and, as this often the stage at which children became malnourished, quite a few of the women interviewed were grandmothers. Weaning tends to happen when the next child is due or at any stage after about 18 months when mothers feel it is 'the right time'. When it is a case of the mother being pregnant and suffering from morning sickness, the child is sometimes taken immediately to the grandmother and the weaning is sudden and 'brutale'. Almost all malnourished children (*kwa mosso)* were seen to have arrived in that state through being ill with fever or diarrhoea. These were also the symptoms associated with weaning, teething and learning to sit. It is likely that there is also over-reporting of symptoms due to the free health services provided to malnourished children.

Place	**Appearance of homestead**	**Social Situ**	**Weaning/ Colostrum**	**Health**	**Economic Situ**
Kuk al Sam – 9km ex Doungo	-reasonable size compound in centre small village	-no co-wife -1 married son still in gandu -3 older girls -youngest boy severe maln. -Mo been to school	-still breast-feeding -gave breast milk from birth		-married son went to Kano in 2005 -1 plot (*gona)* for husband -1 plot for her -last year OK harvest -this year fairly poor -husband is mason
Kuk al Sam	-cow outside gida	-no co-wife -5 children -oldest son married 14 yr old girl – living at home	-still breastfeeding -gave milk from birth		-doesn't have enough land -husband organises village food distributns
Nr Kuk al Sam – 12 km from Doungou	-isolated straw gida in hamlet	-she is 2nd wife -husband divorced 1st wife -husband's mo & fa live there -grown up sons in Nigeria	-her milk went dry at 4 months -started with cow's milk and millet		-bought more seeds in mkt in 2005 after 1st planting failed -small parcelled big fam -husband sells milk in Doungou from 1 cow which he keeps for Tuareg
Daratchama Village	-Mo has been to school	-3 children -youngest 1 year severe maln	-still feeding -gave milk from birth		-doesn't have enough money to engage in trade -has a small parcelled
Doungou Village	-big	-no co-wife		-child had	-she has own gayamina

	ramshackle compound -16 people live there	-1 child –severe malnutrition -rest of family in *garingona*		diarrhoea and fever (treated at CSI for 1000CFA)	-she has 2 sheep -doesn't do other work -didn't take credit in 05
Doungou Village	-small dirty compound -foster mother well-dressed but her own child also looked thin	-mother of maln child gone to Mecca -child cared for by aunt -husband hasn't contributed anything for child, so family will dispute his rights	-sudden weaning when mother left	-child already in CRENAM 5 months before but got sick again	-wealthy uncle sent money for mother to go to Mecca -family has big parcelled on the edge of town (being slowly encroached)
Outside Matameye – 10km	-straw house in hamlet	-has older co-wife	-breastfed since birth	-child sick since birth	-husband is marabout -has 2 sheep -has enough land
Outside Matameye – 10km	-straw house in hamlet	-co-wife in Nigeria with husband	-weaning at 18 months -only breastfed after 24 hours	-child sick since weaning with fever and diarrhoea	-reasonable size parcelled
Outside Matameye – 12km	-straw house in hamlet	-child's mother died – now looked after by aunt -aunt has co-wife	-immediate following mother's death – won't eat solids		-quite big plot -she has a few sheep
Outside Matameye – 12km	-straw house in hamlet -small compound with 2 huts	-co-wife lives in compound with 5 kids -she has 3 kids	-breastfed after 24 hrs		-1 sheep -husband has own small plot -husband en exode
Daratchama	-good compound -plenty of pots and pans and animals	-mother divorced father of child when a few months old -remarried as 3rd wife but he subseq divorced 1st wife		-child often sick	-husband had to sell some animals in 2005
Outside Daratchama – 3km	-straw house in hamlet -visibly simple and other kids looked maln. – had been in CRENAM	-child had come to g'mother as mother pregnant again	-sudden weaning when mother pregnant	Child had been sick	-had no animals
Outside Daratchama – 2km		-G'mother caring for child because mother pregnant -g'mother also caring for son's			-mid sized parcelled -some cattle -7 work on gandu while 27 consume

		child			
Dawan Marké village	-average looking compound in medium-sized village	-child now 24 months – was maln in 2005 -mother didn't have enough to eat to breastfeed	-sudden when next child on the way		-husband working on Azapi food for work project[69]
Dawan Marké village	-neighbour to previous case	-child in CRENI & CRENAM in 05 but discharged now in CRENAS -two kids died of sickness – 3 left	-stopped at 8 months	-had fever and diarrhoea	-3-4 goats -ox-cart belonging to mai gida[70] -husband working on Azapi CFW -she looks after 3 sheep and 3 goats for richer people -often lack of food at home -sold sheep in 05 due to lack of grazing
Dawan Marké village	-large average looking compound 6-7 huts	-has co-wife -child youngest of 5 -has been 5 months in CRENAS/M -all her kids suffered at weaning	-pregnant again so has weaned child	Diarrhoea, fever	-1 cow, 6 goats -husband's gandu has small parcelled with 3 workers -she has no gayamina -keeps bull 4 neighbour -has a sheep herself -husband sometimes seeks migrant work – not this year as CFW.
Barawa	Straw house in hamlet -8 ha plot		Not yet weaned	Child had fever and diarrhoea	-can normally produce 20 sacks – only 7 *dairmi* in 05 (one and a half sacks) -2 brothers and 2 sisters in gandu but only men cultivate – sisters married outside -no livestock -husband in Nigeria -she doesn't help farm
Barawa	Straw house in hamlet	-no co-wife -3 other kids			-husband his own plot – about 6 ha -he is in Nigeria -he looks after goat for his elder brother -she helps with harvest
Doungou		-child 2 years weaned three months before -older children had same thing	Problems since weaning		-husband in Abuja Nigeria sends things when he can
Doungou		-child 1yr7mo -he was first child	Weaned because	Refused to eat/drink	-husband is marabout

[69] Azapi were paying workers 500 FCFA per three holes dug in an erosion reduction strategy. In 2005 a similar project at Daratchama meant that men returned back from the *tabaranda* (migration) in Nigeria and worked from March-August covering 40ha. Without this, the chief said, they would not have been able to pay the price of millet which had risen to 1100 FCFA per *tia (*440 CFA/Kg)

[70] Possession of a ox-drawn cart is a clear sign of wealth (they were on sale for 40-55,000 CFA at Kundoumawa market –not actually that expensive!).

		– newborn is healthy	mother pregnant	after weaning got fever diarrhoea 2 days later	
Doungou		-no co-wife -husband's father blind so he cannot go to Nigeria		Child sick for 3 weeks with fever/diarrh – given trad herbs and quinamax inject but no effect	-no livestock
Doungou		-child 1yr8mo been 4 weeks in CRENAS -mother living with parents	Not weaned before but weaned while in prog	Sick with diarrhoea and fever and enlarged torso	-husband in Nigeria -big gandu normally produces enough -she has 5 goats
Doungou		-grandmother looking after 7mo kid -mother died 5mo ago -older child is fine			-father (handicapped) bought his own field others come to help him cultivate or give money -g'mother used to do small trade but too busy now
Dago village – 11km from Kantche	-many coughing children	-child one year old -husband at home	-still breastfeeding		-mid-sized parcelled
Dago village – 11km from Kantche		-husband at market	-bad sevrage		-2 goats owned, 1 kiwo-borrowed (used to be theirs but sold in 05) -kiwo cow also. -husband worked in other people's fields in 2004
Badawan village – 14 km from Kantche		-child 9mo -husband to old to go to Nigeria -other kids had no weaning probs.	-not weaned	-had fever & diarrhoea	-husband has own plot -she has own plot
Badawan village – 14 km from Kantche	-neighbour to above	-child 2 yrs	-weaned – three months before as mother had younger child on way		
- Badawan village – 14 km from Kantche	-poor looking straw house	-child 2yrs9mo -younger baby of 2mo healthy -husband at mkt	-bad weaning when mother pregnant		-husband sometimes goes to Nigeria eg 05 -husband grazes other peoples cattle -husband part of gandu
Badawan village – 14 km from Kantche	-banco walls -middle income	-child 2yr4mo -older bro not sick like this	-weaned 2mo ago – in CRENAS since	-healthy until weaned -cold and fever	-wife has three cows -husband has 1cow and 1 heifer -she has gayamina -older sons in Nigeria
Killourey – 7km from Ourafan		-g'mother looking after daughter's 1st child		-sick with diarrhoea	-husband away visiting -husband has parcelled -1 son in Nigeria at Koranic school -she sells gallettes at 5-

					25 FCFA each
Agare – 8km from Ourafan	-Peul nomadic camp attached to Peul hamlet	-household is g'mother and her two daughters -child in CRENAS 5mo -other children in good health		-child has been sick for 5 months	-son-in-law in Kaduna from which other children just returned -animals near Tanout -no land
Dogon Dawa – 10 km from Ourafan		-she is 2nd wife -twins- both maln.			-mother sometimes has problems finding food -owns 1 goat -looks after 3 goats 4 sheep for her co-wife -no-one in Nigeria
Hamaye – 10-15km from Ourafan		-twins aged 1 year, been in CRENAS 4mo -no problem with 2 older kids	-had insufficient milk	-twins had fever & diarrhoea	-no animals
Hamaye – 10-15km from Ourafan		-husband in gandu of his father -aged 11mo – in CRENAS 1mo	-mixes breast and *fura*	-fever	-she has 2 sheep -chef de gandu has 1bull
Hamaye – 10-15km from Ourafan	Mudbrick house	-child 1 year – in CRENAS 4mo -no problem with older child	-had insufficient milk		-6 sheep in compound
Outside Aguié		-child had been in CRENAS three times and CRENI twice	-no problem producing breastmilk	-child often sick and refuses to feed	
Outside Aguié		-twins	-insufficient milk		
Gamji village		-child 2yrs -looked after b g'mother since weaning -had been in CRENAS before weaning when mother had no breastmilk	-weaned at 1yr9mo because mother 2mo pregnant	-after weaning ate well but got fever and diarrhoea	-mother has 2 small gayamina -husband works in gandu -g'mother has large gandu with 3 large fields and 16 eating -mai gida is marabout in Nigeria
Gamji Village		-child 25mo – in CRENAS 4mo -first child of *mai gida*'s 2nd wife -*gida* has 2 married men plus three wives; their mother (widow); 1 single brother -co-wife has 27mo twins – healthy	-children of wife and co-wife all weaned because reached right age – 2 have diarrhoea, 1 healthy.	-Gets sick just before being released from programme -no appetite	-women don't work in *gandu* except at harvest -women have *gayamina* -mother had trouble getting enough food so didn't produce milk -goat belongs to co-wife (co-wife had 2 but sold one when she gave birth) so cannot use milk -she sold her own goats during 05 crisis.
Maizurka el Hazai – 27km outside Garare	-husband has ox-cart on which he carried wife the 27km to the	-she has 4 children and adopted one -gida made up of husband, his three brothers, their 4			-she has gayamina in which grows millet and niebe -each brother has own field

	CRENAS	wives, his blind father -child 4yrs but brain damaged			-husband works for other people at 1 tia/day -had sheep and goats but sold @1000 each in 05
Maizurka el Hazai – 27km outside Garare	Small poor hamlet	-child aged 14mo -three other children	-not yet weaned	-diarrhoea when started teething	
Maizurka el Hazai – 27km outside Garare	Small poor hamlet	-child age24mo -husband present – son of mai gida's older wife -has 5yr old –no problems	-weaned at home – firstborn weaned by g'mother	Lost appetite and fever after weaning	-husband alone working on gandu as father in Nigeria -husband works on fields of other people -took credit (bashi) to buy millet at 900/tia but couldn't repay -had to sell sheep and goats in 05 but *mai gida* still has 1 goat.
Dodori Village – 23km from Korgom	Banco building in village centre	-child's father died when Mo 3months preg -child 7 weeks in Aguié CRENI & 12 weeks in CRENAS	-mother in shock at husband's death so no milk when child 3mo		-gandu has 9 *mai gida* with 6 wives -each brother has own plot -women have *gayamina* -5 brothers in Nigeria -graze goats for others
Dan Dodo Village c26km from Korgom		-child 20mo -in CRENAS 5mo	-not weaned because sick -didn't breastfeed until day 3	-child ill for 3 months before getting onto programme	
Dan Dodo Village c26km from Korgom		-child 17mo -cared for by aunt because mother died 4mo ago	-sudden weaning at 13mo		-aunt has *gayamina* (produced 2 sheafs)
Guidan Bawa – 12km from Dan Bouzou	Quite well-off – ox-cart visible	-child 18mo -11 weeks in CRENAS -4 other children – no problem with them	-not yet weaned because sick but started adult food from 7mo -sometimes no milk in breast	-diarrhoea and fever (due to teething)	
Guidan Bawa – 12km from Dan Bouzou	-gandu head well dressed and brother rich enough to keep wife in seclusion	-child 24mo – in CRENAS 6weeks -3 older kids no problem	-weaned because of age -had eaten some adult food since 7mo	-fever – had injection at CSI	
Gangara		-child 12mo	-mother breastfeeding and had milk	-child sick	
Guidan Makad'a Village – 15km from Gangara	-cow in compound	-child 2yr in CRENAS 4wks (released) -older child had no weaning prob	-weaning by g'mother		-still has some millet in her *numbu* (granary) -12 in gandu – 3 men, 3 wives, 6 children -husband's plot 0.6ha -wives have *gayamina* – 0.23 ha.
Guidan Makad'a		-child 16mo in	-already	-child keeps	-15 eat from gandu –

Village – 15km from Gangara		CRENAS 9 weeks	weaned – diarrhoea since	getting sick	still cultivation season reserve in gandu *numbu* -she has *gayamina* (niebé, millet sorghum but all now eaten)
Guidan Makad'a Village – 15km from Gangara	Big compound trays of drying *daudawa*	-child 3yr in CRENAS 3wks -3 other children no weaning probs	-weaning by mother –no prob	-sick with vomitting	-large gandu -husband to Nigeria 05 but not 06 because insecurity there

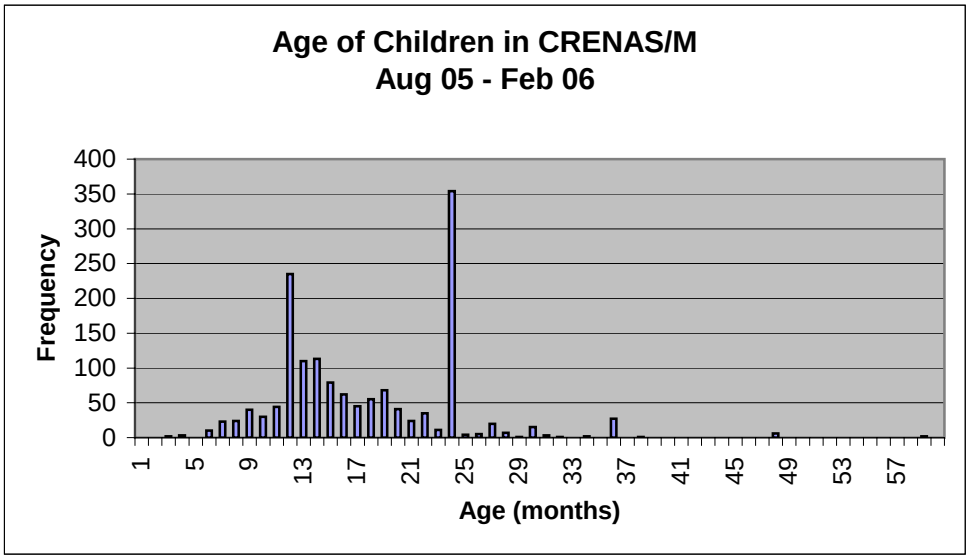
The results show the lack of a strong single explanatory social or environmental factor in the incidence of malnutrition. While the economic situation of the families is important, healthcare issues, weaning and child-spacing were relevant as well. In many cases, different factors interact to produce a compound effect, while in other cases, it can be a single factor such as ill-health that causes a normal child in a well-off family surrounded by healthy siblings to be malnourished.

The economic situation of families was not enough in itself enough to explain the incidence of malnutrition. None of the mothers interviewed showed signs of great wealth, though given that they were mostly in small villages rather than urban areas where the more wealthy tend to be concentrated, is only to be expected. None of the mothers had – or admitted to having - a large animal herd. Only a few had an ox-cart. Many lived in straw rather than mud-brick houses. Most had family members working in Nigeria. But there were other mothers who were married to village marabout, some who said they had plenty of land and another case where a wealthy uncle had pad for the mother to leave on the *Haj*. For the malnourished children in these cases, there was sometimes a family tragedy such as divorce or the death of the mother to factor in. As far as healthcare is concerned, there were quite a few cases where neighbours had children enrolled in feeding programmes, but other families using the same water source had healthy children. Within the same family, it was very rarely the case that the other children in the family were said by the mothers also to be malnourished. Quite a few mothers said that all their children had been sick at this age, but a greater number said that this was the first child that had suffered from malnutrition.

The majority of mothers interviewed came from some distance away, as they were the ones with most to gain from the lift home I provided in return for being shown their homes. Although this produces a bias in the results, it was clear that the majority of mothers came from villages and hamlets around rather than from the main commercial village/town where the CRENAS was – in Doungou only 4 out of 52 cases came from Doungou village itself. Some women came from distances as great as 25km on a weekly basis to attend the CRENAS. Husbands were almost all absent from the compounds when visited – often at the market or doing business somewhere. There was also a bias in the fact that most of these cases were mothers of malnourished children in 2006 rather than during the crisis. However, the stories are quite comparable with the 5 cases from 2005 that I revisited.

One can conclude that each of the social and environmental factors – poverty, poor weaning practices, ill-health, family problems – make a child more vulnerable to being malnourished, and are responsible on an individual basis for many of the cases seen. However, they need to be treated on a case-by-case basis. The chart below, for 1502 cases seen in the Save the Children feeding centres, shows how the mean age of children in the centres was 17.7 months. They pass through an extremely vulnerable phase between leaving the mother's breast and the age of about 30 months. If this period coincides with a bad harvest, a bout of ill-health or a

family tragedy, an individual child can become malnourished even if all the other children in the family had no problems, and no other members of the family are malnourished at the time.



4.3 PUBLIC HEALTH

In most villages from where children in the CRENAS originated, water was collected from deep open wells by teams of oxen or donkeys ('Agadez-style'). These are usually privately owned and water costs 5 CFA for 30-40l. In Daratchama, the well had collapsed at the bottom and was producing muddy water. It could not be established whether the diarrhoea mothers talked about was caused by water-borne diseases or poor hygiene – though given the fact that it is perceived as being linked to babies starting to crawl it might be the latter. Diarrhoea is also popularly associated with 'teething' .

4.3.1 Breastfeeding

It was estimated in a study done for Save the Children that 80% of children are put on the breast only after the colostrum has been removed (SC/Al Umma 2005). It was explained by several informants that the colostrum (*dakashi* or *ruwa nonou* – literally breast water*)* is considered to be old milk that must be purged from the woman (especially if this is her first child) in order to allow the fresh milk to flow. In some cases it used to be thrown over the roof of a hut so that there would be no risk of it being consumed by livestock. Women use local herbs including the plants *shabara* roots *(Guiera Senegalensis) hausa gada or rounfan* to encourage lactation for a couple of days during which the child is fed with goat's milk. After this the mother's milk can be considered unhealthy if it is too 'hot' (*nonou mai zaki)* as this encourages diarrhoea – similarly if a nursing mother takes her *fura* with too much sugar. Cold breastmilk is considered best. Many women complained about being unable to provide enough milk for their babies – especially during 2005 when many mothers went hungry. In other cases mothers were unable to produce sufficient milk for twins.

4.3.2 Weaning:

Children for Hausa, Peul and Tuareg are usually weaned around 22-24 months unless the mother is pregnant earlier. The first and usually the second child are taken to the maternal grandmother for weaning. Other foods aside from breastmilk are added from when the child is

aged between 4-6 months especially if the mother has problems lactating. One informant said that children were sometimes weaned if they lost appetite or showed signs of ill-health. Weaning (*iyaye)* was said to be with 'adult food' such as *fura* (millet porridge), and occasionally milk. At weaning the bark of the *gamji (Ficus Platypylla), hanou (boswellia sp)* and *kade (Butyspermum parki)* trees are sometimes used

4.3.3 Medical charges

In MSF's report on 28th June 2005, entitled *Pay or Die,* they identified the inability to pay for the costs of medical care as presenting a major danger as Niger entered the hungry season which was also the season of malaria and diarrhoea. People were paying 500 FCFA for healthcard, and 300-600 per consultation, and the average cost of drugs prescribed to malnourished children in Tahoua hospital in April totalled 13,000 FCFA (MSF 2005:3). Such costs are prohibitive to many families. Women interviewed in the course of this research said they preferred to get treatment at CRENAS feeding centres because it was free, even if this meant waiting up to 7 days with a sick child for the next opportunity to be treated at the CRENAS.

4.4 HOUSEHOLD FOOD SECURITY:

The quantity of food that people had available to eat in 2005 was said by one informant to be one tenth of what they are eating now. The ripening crop was eaten green from the fields as soon as the harvest of 2005 was ready. Niebé was the first crop to ripen and it was eaten rather than being sold.

4.4.1 Diet:

There is a perception that the diet in the villages is unhealthy because they lack the variety of foods on sale in the towns. The towns with their many educated 'fonctionnaires' have understood the importance of a varied diet, while the villagers just send their vegetables to market in town without considering eating them themselves. It could simply be that rural people cannot afford to eat these cashcrops as they require the income they will bring to tide over their deficit, while people in town receive a reliable salary so can cover their deficit with that.

The variety of the rural diet depends on the time of year – with greater variety being available after the harvest, when there is also more cash to buy in other kinds of food – including meat or vegetables (see Raynaut 1977:574). When money is short though the whole household relies on a monotonous diet of *fura* (millet porridge). After millet has been milled, it is washed to take away the bran husk – which is then given to goats. The porridge is prepared by pounding the millet and adding hot water to form a thick porridge known as *kunu* or by cooking it in further boiling water, sometimes with the addition of milk, to produce *fura*. Once cooked the *fura* can be consumed over a period of days, and can be watered down to form a kind of cloudy coloured drink (*hawro hawro)* given to guests. Young children in particular find it difficult to digest the porridge when it becomes fermented with keeping. Millet is also eaten in the form of a solid cake (*tuwo)* with a sauce (*mia)* often made with sorrel (*yakwa)* or tamarind (*kalwa),* found on sale in all markets as black blocks (*daudawa)* or baobab leaves (*kuka).*

There are various taboos concerning the consumption of food by children. Many people believe that giving a child eggs, meat and *tuwo* (millet cake) will make the child a glutton (*makwa aitchi)*, stupid or a thief (*barao)*. One woman said she does not give goat milk direct to the child – only mixed with *fura* – as she doesn't want him to behave like a goat. In many cases, though, no milk (in the form of *kindurmu* – sour milk – usually sold by Peul women) is added to the *fura* – because of its expense (150-200 FCFA) – so the nutritional benefit of *fura* is reduced. Peul and Tuareg on the other hand often give milk direct, without boiling, to their children, though rarely *kindurmu*. In 2005 many people in towns consumed rice because the price of rice did not rise as fast as the price of millet, even though previously its consumption was restricted to the Tabaski feast.

4.4.2 Farming/Herding

During the cultivation season, the food stock that the head of the household has put aside is supposed to cover the food needs of the family. The productivity of a person's own plot might be compromised by having to spend time working for other people. One man interviewed spent 4 days working for other people for every one day working for himself. He received 600 FCFA per day.

4.4.3 Non-farm activities

Fishing – this activity is open to all, though one fishermen said that as the lake dries up it becomes restricted to the professional fishermen with traps who go to Kano on a weekly basis to sell the dried fish.

Wood Collecting/ Tiawa straw collecting/ sorghum bran collecting – a small boy collecting wood said he would sell it at Takieta market for 15 CFA and buy sweet potato. At a wood-selling kiosk, the owner explained how the *kiriya* tree (*Prosopis Africana*) that is shaped into pestles for sale in the market, was also in demand from blacksmiths, as well as having supernatural properties. On the other hand, women preferred *adua* (*Balynites Egyptica*) because of its sweet smell and because it gave off less smoke. Depending on the amount ordered it was sold at 70-100 CFA per bundle. Another man carrying firewood to sell said he would get 150 FCFA with which to buy *gari rogo* (manioc flour). This is an activity associated with the poor in a normal year but many people resort to collecting from the commons in a bad year.

Pounding etc - it costs 25CFA to mill one tia with a commercial machine, so women who pound for others by hand must work for less than this. Women also get involved in cooking prepared food for sale in the market and making oil from groundnuts. Other jobs for men include brick-making or portering, while others get involved in 'petit-commerce' including selling cigarettes or sweets, or changing money.

Selling milk (*kindurmu):* the prices dropped in 2005 because people in town were eating rice rather than *fura/*milk. Normally a calabash of *kindurmu* sells at 500 FCFA, although people tend to buy per spoonful (5-10 FCFA).

Selling possessions: items that had value before became worthess in 2005. One chief described how his horse that was now worth 200,000 FCFA had only been worth 40,000CFA.

Medicinal plants – the Peul have a reputation for their knowledge of plants with pharmaceutical properties. One group that I interviewed were on a dry-season round trip from North Dakoro to Kano to sell medicines. Although they took no supplies with them, they obtain food from the villages they pass through in exchange for medicines or by being accommodated by the village chiefs.

In bad years *tafasa* (*cassia toro), anza (boscia senegalensis)* and *kauci (tapinanthus sp.*) are consumed. Manioc flour (*gari rogo)* is also considered to be a food consumed mainly by the poor[71].

Credit: Credit is a very old institution in Hausa culture related to the agricultural calendar where a farmer would borrow during the cultivation period and pay back at the harvest (see Nicholas 1974). It is related to the custom of giving presents – a relationship that even exists between commercial parties. Credit is usually taken from family acquaintances. In one village, an informant said that there was no-one in the village capable of giving credit - one had to go to merchants in the bigger villages or town. Credit is often given in the form of millet at the current price: therefore if one *tia* was given when the prices peaked at 900 FCFA per *tia* with the promise to repay at the harvest, when prices are down to 300 FCFA, the borrowed millet will have to be replaced with three *tia.*

4.5 CONCLUSION:

There seems little reason to see why long-term malnutrition caused by social factors would have peaked in 2005 and been the major cause of high admissions to feeding programmes. There is a distinct seasonality to malnutrition statistics (see MSF 28 June 2005:4) which could indicate either that malaria in the rainy season is causing many children to be vulnerable to malnutrition (or vice-versa) or that the effect of the 'soudure' period on food availability makes a big difference to the incidence of malnutrition. The rest of the factors – including weaning practices, bad hygiene, disease etc provide the raft of vulnerability that allows a single factor to tip children over the edge, but probably do not in themselves offer an explanation. The following section looks at the productive capacity of the agropastoral system. Should there be failure in that system and inadequate functioning of the market system, those made vulnerable to malnutrition by the above factors will be tipped over the edge.

[71] The Nigerian manioc is said to induce ulcers, while that from Benin is better

5. AGRICULTURAL/PASTORAL PRODUCTION

5.1 A FOOD PRODUCTION CRISIS IN 2005?

The chief of Daratchama village in Zinder said that the production in 2004-5 had been half that of 2003-4 or 2005-6. Another (apparently rather well-off) chief in Hawan Dawaki said that his fields which usually produced 1000 sheafs had only produced 100 in 2004-5. Two other interviewees independently confirmed that their production in 2004-5 had been half that in 2005-6[72]. In Dodori a woman said she'd produced 4 sheafs in 2004-5 and 7 in 2005-6 (though it would have been more if she'd had enough labour). These are not definitive statistics, they are anecdotal reports, but at some stage they have the potential to coalesce into a critical mass. While there was a certain amount of discussion amongst informants in Zinder and Maradi about whether 2005 was *yungwa* (famine) like 1984, there was agreement in many places that it had been a year of poor production. It might be an academic debate similar to the 'famine debate', whether there was genuinely a widespread production failure in 2005, as we cannot be sure of either the anecdotal stories coming out of the villages or the national statistics[73]. Should one assume that the statistics showing only7.5% below the 5-year average might have been an under-estimation? Or should one assume that the statistics are correct and ask why a food security crisis happened in a year of reasonable national production? Perhaps, as with most national statistics in Niger for 2005, they probably average out many conflicting tendencies that were happening in Niger. They probably hid what came to be termed 'pockets' of production failure that required a fully-functional marketing system to correct them.

Charasse and Gouteyron (2005:22) argue, for 2005 to be such a dramatic year required an agricultural deficit *and* the 'poorly functional sub-regional food markets that produced rarely seen prices'. Large food deficits were recorded in Niger for 1984, 1987, 1989, 1990, 1993, 1997 and 2000 (*ibid* 2005:17). The country was in deficit for every year in the 1990's except 1998 and 1999. The food deficit in 2000 was 666,500MT more than double that of 2005 according to the statistics, but 60% of that deficit was made up by commercial imports (Kouyate *et al* 2002:102). In interviews, traders argued that there simply wasn't enough locally-available grain for them to honour the contracts that they had signed. Others argue that the traders preferred to lose their deposits and hang on to their stock as prices were still going up. Others said that the traders were selling Nigerian grain on the market as villagers did not supply them with grain at the harvest in 2004 in sufficient quantities. We are unlikely to know the definitive answer as to whether traders hoarded grain or whether it was a significant factor. Traders this year say they are receiving a lot more grain from their buyers in the villages. In general, though, whether or not food production lies at the heart of malnutrition (I would argue food availability is crucial and the link between food production and food availability is very often made by local people), improving the availability of food will give people a distinctly improved ability to address malnutrition.

5.2 LIVELIHOODS PROFILES :

The *Niger Livelihood Profiles* published by FEWSNET (Jan 2005), has summarised the 8 broad food economy zones (FEZ), in the absence of a full food economy baseline study, that characterise Niger:

[72] One informant said that the *gandu* had produced 10 *dairmi (*sheafs) in 2004-5 and 32 in 2005-6, while the other said their *gandu* had produced 15 and 30 respectively.

[73] For example, Seyni Hamadou (2000:20) refers to the Direction de Protection des Végetaux (DPV) estimate a 55% underestimation of niebe exports due to the porosity of the frontier (60% according to the SIM)

- Desert
- Air Mountains cultivation
- Pastoral
- Agro-pastoral
- Rainfed agriculture
- Southern irrigated cash-cropping
- Lake Chad irrigated/flood retreat cultivation
- Niger river irrigated rice

The Air Mountains, Lake Chad and Niger river irrigated rice zones do not really concern us here, nor the Bilma Oasis subzone within the desert FEZ. This leaves, the desert, pastoral, agro-pastoral, rainfed and southern irrigated zones stretching in East-West bands across Niger as if they were isohyets on a rainfall map. This corresponds with the commonly-held perceptual map of Niger – representing greater potential the further south one goes, and greater vulnerability the further north one moves. This is oversimplifying the case, as the detailed analysis in the FEWSNET report shows an understanding that the gross number of people vulnerable in the rainfed zone are high; but that does not take away from the fact that FEWSNET's analysis finds that 'the agro-pastoral zone has a particularly worrying food security outlook' (*ibid:27).* While not wanting to argue that the agro-pastoral zone in any way escaped the crisis of 2005, such a focus prevented the analysis from understanding that other areas could be vulnerable too.

The importance of this broad perception of Niger is that it masks the real patterns of vulnerability – relating to the location of population, their interaction with their environment and markets, their margin of error and their vulnerability to different kinds of system failure. In many cases, such as 1984 for example, the agro-pastoral areas were the most vulnerable. On the other hand, vulnerability to rainfall failure can be low for a family in the agro-pastoral zone who might have planted short-season millet and sent its herds to graze in Nigeria. However a family in the rainfed agriculture zone that have invested a large amount of their household income in fertilisers that will be wasted if it doesn't rain, are highly vulnerable to a late start to the rainy season. Vulnerability is complex and one cannot just rely on a model that agro-pastoral areas are always more vulnerable because that is where the last great famine occurred. Fifty percent of households are categorised as 'poor' in the pastoral and agro-pastoral zones, while this figure is forty percent in the rainfed agriculture zone; but the poor in the pastoral/agro-pastoral zones have up to 10-15 shoats (the balance against agricultural risks that would render them middle wealth group in the rainfed zone) (FEWSNET Jan 2005: 24-34). It also hides the fact that a greater actual number of people are vulnerable if the crop fails in the rainfed zone compared to the agropastoral zone.

Perhaps more important than this, though, is the way that these east-west bands imply that a certain kind of failure will affect the whole livelihood zone, whereas the way rainfall, for example, tends to fail in a typical year is in pockets rather than broad bands that correspond with the isohyet. In 2005, most early-warning and crisis warning indicators identified the whole of the agro-pastoral zone as highly effected, while it was the Tahoua area of this zone that was most effected, and the rainfed agricultural band was deemed to be safe, where it was only Dosso in the West that had had good production while the central part of this band in Zinder and Maradi was suffering.

The pastoral, agro-pastoral and rainfed agricultural zones blend into each other in both economic and physical terms which make it scarcely possible to differentiate areas on either side of the 'line'. It is easier to see immediately the difference between the irrigated and non-irrigated areas, but in this case the line requires better definition rather than the rather crude line that cut across the extreme south of the country. Irrigated *fadama* (humid areas) occupy very small and distinct places, and though they play an important role economically, exist in most parts of the 'Southern Irrigated Cash-Cropping Zone' alongside much more extensive rainfed plots. They should be distinguished from the much more extensive gravity-fed irrigation that covers the area between the dam at Galmi, the onion capital of Dogueraoua and Birnin Konni, or the Goulbin Kaba and Goulbin Maradi river valleys where one can genuinely talk of a 'zone'.

The charts showing sources of food and sources of cash for all 8 FEZ in the *Niger Livelihoods Profile* have provided an important insight into the degree to which the poor in almost all zones are dependent on purchase rather than their own production, and that money often comes from working for others (FEWSNET Jan 2005:12). In the pastoral zone, 50-60% of the poor and middle families source their food from purchase, while this figure is 40-60% for the Agro-pastoral zone and 20-50% in the rainfed agricultural zone[74].

FEWSNET (Jan 2005:10) stress how 'the livelihoods of rural households even in remote areas are increasingly based on the cash economy'. They point to the fact that pastoralists and agro-pastoralists purchase most of their grain from sale of animals and animal products but that 'does not automatically make them the most food insecure in the country'. They add that 'a regular grain 'deficit' in an area is not synonymous with hunger' (*ibid*:10). In fact they are probably better-used to being in a state of deficit so have more effective coping strategies and wider networks from which to realise cash when required. They are certainly not perceived of as being a vulnerable group as a whole by local people – in fact people with livestock are considered to be better off than those without livestock – maybe due to their usefulness in increasing a household's economic repertoire *vis-à-vis* differing ecological conditions. The *Niger Livelihoods Profile* (*ibid:*32)notes that a growing proportion of the increasing population in the rainfed zone are faced with a level of impoverishment in the bad years which is not made up in the good years, meaning that they are more vulnerable to periodic hazards than their parents or grandparents. But it is the poor of the pastoral and agro-pastoral zones that they classify as being the most food insecure in the country (*ibid:*14).

Agro-pastoral areas sell large amounts of cereals as a cash-crop in good years rather than storing it for the poor years, a factor which is underestimated in the FEWS charts[75]. In all areas it would be useful to understand the extent to which farmers are buying back their own production at a later stage during the year having sold at the harvest to release cash. I would guess that cereal production is less genuinely monetised in the rainfed agricultural zone, where farmers rely on niebé and other cash crops for their non-food needs, so they are more dependent on their own production for their food consumption. In a year of poor harvest, when the niebé was eaten by families rather than sold, there was great difficulty in accessing the cash to pay the high price of millet.

[74] Interestingly, this does not accord with the food consumption patterns described by WFP's Emergency Food Security Assessment in October 2005 . The authors claim, without disaggregating the data according to livelihood zones, that the very poor in Niger get almost 60% of their food from 'own production', while the same figure is less than 30% for the poor category (WFP Oct 2005:11).

[75] Apart from a brief mention on p.35 they could also have put more stress on the importance of soil infertility

A study by CARE in 1997 (CARE 1997; Raynaut 2001:38), notes that the cereal production for 1996 was double the needs of the population in the extreme north of Maradi, but this was mainly sold for cash and by May 1997 half of households had no grain in their reserve. Figures for the South and Centre of Maradi where cereals are grown with other cash-crops in a more diversified agriculture, showed that grain stocks in almost three quarters of households were empty by May. For the rest of the year, in both places, households had to depend on the market for their basic cereals. Raynaut (2001:44), though he feels that such an economic stratification cannot represent the real diversity of social circumstances, classifies 15% of households in Aguié as able to survive on their own resources, 40% as 'niveau moyen' (though vulnerable to a change in circumstances), and 45% as having insufficient means to feed the household and extremely vulnerable to a change in circumstances (e.g. price variability, ceremonial expenditures – death, naming ceremonies – ill health etc).

In conclusion, FEWSNET (2005:36), include the following 7 indicators for detecting an imminent crisis in the rainfed agriculture zone, that if used to diagnose the conditions prevalent at the time would have allowed for a clear and unambiguous alarm to have been sounded in that area as early as January 2005. Because the last indicator was never present, many denied that it was actually a crisis:

- Late start of rains
- Hesitant early rains leading to substantial re-seeding
- Poor rains leading to widespread crop failure
- Early and marked work migration
- Little dip in cereal prices post-harvest; and an early and steep rise in prices thereafter
- Acute decline in livestock prices (an early crisis indicator – not an early warning indicator)
- Movement of whole families to administrative centers or better-favoured area (a mid crisis indicator not an early warning indicator)

5.3 RAINFALL:

In Doungou village in Zinder, one woman said that the rain in 2004 has started early but then dried up. Her seedlings had withered away, but when she replanted it did not rain for a long time. Another man in Gangara, Maradi said there had been 45 days without rain after they had planted. The Chef de Canton of Hawan Dawaki, Maradi repeated that the rainfall in 2004-5 had been poor. The statistics from the local rain gauge recorded an annual total of 455mm against a total of 745mm for 2005-6. The total for 2005-6 shows that it was clearly a good year, but the total for 2004-5 was not disastrous. For Niger as a whole 62% of rainfall stations in 2004 registered an annual deficit compared to the 1971-2000 average, while only Dosso and the urban commune of Niamey had sufficient rain according to Gouv du Niger/CILSS/FEWSNET Mars 2005:7.

However, as it is the exact distribution of the rainfall during the growing season which most effects production, it is useful to compare the rainfall month by month during the rainy season:

	April	May	June	July	August	Sept	Annual Total
Hawan-Dawaki 2004	0	75.2	85.5	66.1	176.5	52	455.3
Hawan-Dawaki 2005	20	0	123.5	310	178.5	92	745
Matameye 2003	38.3	4.8	79.5	153.7	208.2	45.2	533.1
Matameye 2004	0	81.2	53.8	143.8	282.1	36.5	597.4
Matameye 2005	3.5	17.7	83.4	114.6	213.0	75.9	509.4
Matameye 10y Av	4.2	26.6	66.4	166.6	198.9	79.3	552.2
Ourofan 2003	0	6.6	63.0	127.2	196.7	101.2	515.3
Ourofan 2004	0	0	?	76.1	190.0	48.5	314.6[76]
Ourofan 2005	0	3.9	72.7	186.2	94.1	54.1	411.0
Ourofan 5yr Av	0	2.4	35.4*	142.4	149.2	53.8	412*
Tanout 2003	4.9	2.4	10.1	102.3	114.6	71.3	318.4
Tanout 2004	0	21.0	12.9	129.9	41.4	16.0	221.2
Tanout 2005	0	44.7	21.0	76.2	76.8	24.3	244.4
Tanout 10y Av	0.8	9.9	12.4	70.1	79.3	41.8	216.4
Mayahi 2003	7.0	6.8	100.3	130.0	168.0	101.2	515.3
Mayahi 2004	0	28.7	80.8	131.2	166.7	29.0	440.5
Mayahi 2005	0	18.0	70.6	122.6	101.6	43.2	366.0
Mayahi 5yr Av	1.2	9.0	55.5	147.4	150.5	54.1	431.9
Gomba Hausa 1993	0	23.8	32.8	222.3	69.9	61.5	410.3
Gomba Hausa 1994	0	3.2	121.7	138.2	155.2	112	530.3
Gomba Hausa 1995	0	1.6	60.1	72.6	246.6	49.8	430.7

Source: Direction de la Météorologie, Niamey; Monder Kilani et al 200:16

This extremely selective set of rainfall statistics shows just how difficult it is to understand the rainfall of the Sahel – even with the benefit of hindsight. For other locations in Maradi from where the monthly breakdowns were not available at the Durection de la Météorologie, annual totals consistently show that 2004-5 was a worse year than the years that preceded and succeeded it (and in most cases the 5 previous years), so the fact that Matameye and Mayahi above don't observe this trend should be noted. But these annual totals mask the distribution per month which is often as important if not more so than the annual total – especially the amount of rain in July and August.

There is enormous variation at a local level too. For example in 2004, Tanout had bad rain in August while Ourofan nearby had bad rain in July – both half their respective monthly averages – but they were both are seen as being representative of the same drought. Similarly, Matameye and Hawan Dawake, close together and with almost identical average rainfalls , had completely different experiences in 2004-5, with Hawan Dawake experiencing a drought in July while Matameye had above average rainfall. Luxereau and Roussel (1997:23) describe two rain gauges eight kilometres apart showing contrasting figures of 15mm and 243mm for one particular month. An informant from Malan Dawi near Gangara village in Aguié described how the rainfall in 2000 had been very good on the western side of the village, but poor on the eastern side. In 1998, the rainfall in the three nextdoor villages of Guidan Tanko, Dan Gatamou and Aguié had been good, though they had failed in Malan Dawi, so farmers had to go to these villages to find work. In 2005, rainfall had been very poor in 7 villages north of Malan Dawi, but had been less bad in Malan Dawi.

[76] *Total/Av without figure for June

At an even more micro level, the usefulness of the rain to growing crops depends on whether the rain fell in one large storm or gently, but again the effect of a heavy storm at the end of August will have a completely different effect from one during June when the growing millet shoots are less resistant. In other words beyond the very obvious events, such as the total failure of the rains in 1984, the exact implications of the precipitation are often lost in the detail. A genuine picture at this level of detail is almost impossible to get with the current distribution of rain gauges.

One must also beware of reading too much into precipitation figures which might be highly inaccurate. The general message is that it is a confusing picture, the implications of which will be all too easily lost, unless the statistics are unambiguously shouting the same message. But if a severe drought gives rise to a severe famine such as in 1973 and 1984, it would be a brave person who discounts the effect of 'pockets of drought' can have on producing pockets of famine. In some areas there was clearly a long period during the early growth phase of the millet when it didn't rain. Another informant summed it up by saying 'it was not a drought – we just ran short of food'. Rainfall-induced production failure caused by poor monthly distribution of rainfall probably took place in many locations in 2005, and adjacent areas could have been effected even if they did not themselves suffer the drought. At a local level it could have been the strongest influence in a production failure that contributed to the subsequent crisis, but it was by no means the exclusive cause of the crisis.

5.4 THE THREAT TO PASTORALISTS IN 2005

The vulnerability of the pastoral system to rain failure is reduced by the fact that herds can move to where rain has fallen. Also fodder can be brought in from outside the area if there has been a failure in fodder production. A Peul informant described the network of information about where rain has fallen amongst Peul as being very efficient.

The area where livestock were most under threat in 2005 was in the concentration around Dakoro, Tahoua, Tchirozerine and Abalak. A joint PAM/FEWSNET/CC-SAP (20 Juin 2005:5) evaluation in June noted that it was a situation of great risk as the pastoralists were around the sown crops and would have to start moving north soon. However they wrote that the situation would improve as long as rain followed within a few weeks – though some weakened animals would not be able to survive the first rains. Oxfam's assessment from 16-27 May 2005 indicated that cattle were already dying and that they were too exhausted (Oxfam 200:18). The Système d'Information du Marché de Betail (SIMb) showed that the value of livestock compared to grain fell 42-55% in the worst-effected areas of Dakoro, Fillingué and Oullam (SIMb Oct 2005).

Livestock were lost in 2005 – but not in the numbers that were seen in 1973 or 1984. Charasse & Gouteyron (2005 :20) note:

> 'En moyenne, la situation du cheptel ne s'est pas trop dégradée au Niger en 2005 [sauf à Dakoro], même s'il a souffert de la pénurie de fourrage, ce qui l'a amené à transhumer au-delà des zones de pâturage habituelles, et à faire, dans certaines cas, un retour précoce dans les zones agricoles (p.32).

There is a danger of relying on the idea that certain areas are 'traditionally' vulnerable without accurately identifying the scenario to which they are vulnerable. Terpend (2005 :13) notes

that pastoralists were notified early of the forage situation by the Direction d'Elevage and the media and were thus, to a great extent, able to begin their migration very early in the season (September) and thus get to pasture reserves in neighbouring countres with most of their herds intact (see also Salif Sow *et al* 2005:7*).*

The numbers of animals being sold after the Fete de Tabaski (Haj)on the 21st January 2005 were higher (by 48-54%) than in any of the previous years even though the market would normally be quiet at this time. This reached a peak in April for cattle, though sales of goats and sheep continued to increase during the period of 'soudure' in July when prices were at their lowest. At the same time the price of forage was at its highest (500 CFA per a bundle in May 05 – Oxfam 2005:4) There was also an unusual peak of livestock exports unrelated to Tabaski during the July-September period when frontier markets are usually quiet due to the pressure of agricultural work during the cultivation season indicating that 2005 was unusually severe (SIMb Octobre 2005:42). However, the prices eventually started to improve in anticipation of rising demand, particularly from Nigeria for Tabaski on the 10th January 2006. In terms of sedentary agro-pastoralists, many poor families in the south sold their only remaining smallstock to buy food. Assisting such people to restock should be seen as a priority.

5.5 INCREASING LAND DENSITY AND DECLINING FERTILITY:

The planting of short-season millet in extensive areas of newly-cleared land in northern parts of Maradi and Zinder reduces risk because of the greater fertility of the soil and the possibility that on occasions the harvest will be extremely large. Mortimore (2000:12) argues that the risk of drought in these lower-rainfall areas is no greater than in southern areas despite the 'common illusion that drought becomes more frequent as rainfall diminishes'. As long as risk is managed (and population pressure kept down) these areas are not always as vulnerable as they may appear. Average millet output per household in the north of Maradi in 1996 (2650kg) was shown to be more than double the figure for the south (1250kg) according to CARE figures (1997). This is partly to be explained by the fact that more cash-crops are grown in the south, while in the north millet is sold as a cash-crop more often. The mix of agricultural and pastoral production systems in the north allow a further method of spreading risk.

If it can be established, therefore, that the agricultural areas were more vulnerable than usual to the events of 2005, one should ask whether this was just an exceptional set of circumstances or part of a structural change. The team of Mortimore *et al* set out, in association with the ODI, to study neo-Malthusian interpretations of natural resources management – i.e. that the famines of the 1970's and 1980's indicated that the delicate environment of the Sahel had reached it's maximum carrying-capacity[77]. They wanted to find out if these interpretations provided a good basis for policy, or whether there were grounds to believe the theory of Esther Boserup (1965), whereby increasing population provided the motor to encourage technical solutions to increase productivity. They begin by noting (Mortimore *et al* 2001:5) that increases in population density since 1977 are only the last stage of a historical process of settlement in Maradi Department which has been continuing since the early 19th century. In some parts of the Department, such as the Tessaoua area, well-established villages and market towns were already observed by the explorer Barth in 1851:

[77] See Genné 1991 for example – with its Malthusian prologue by René Dumont – fragile soils, drought, overgrazing – reminiscent of Herskovits 1926 *Tragedy of the Commons*

> ‘Permanent fields were near the settlement, fallowed fields further out, and uncultivated bush was left in the interstices between village *terroirs.* This land was used for pasturing livestock herds belonging to [Peul and Bouzou]. Between 1900 and 1929, most of these interstices were occupied by new Hausa and Bouzou villages[78], and between 1929 and 1975 the frontier of settlement extended northwards into drier areas around Dakoro.’ (Mortimore *et al* 2001:5)

According to Mortimore[79], the argument being suggested by Raynaut and his colleagues at Bordeaux (Raynaut *et al 1988;* Raynaut 1980) was that declining rainfall, increasing land shortages, growing shortages of animal manure, increasing individualisation of incomes, the undermining of the extended family and a deepening level of market participation meant that production system and the natural environment were in disequilibrium (Raynaut *et al* 1988:33).

Mortimore’s team observed that production has managed to increase in line with population by putting new land under cultivation, but they question the ability of the poor to buy what is produced (Mortimore *et al* 2001:22). They also note the increased frequency of droughts (*ibid*:4). Maradi’s population density increased from 24/km2 to 35/km2 between 1977[80] and 1988[81], while in terms of land use, they observe that land saturation point was reached in some areas of Maradi as early as 1975, but it had reached almost all areas by 1999. This means it is not possible to ensure fertility of the land through fallowing meaning that systems of farming must be changed or risk a radical collapse (see Raynaut *et al* 1988:33). In the centre of Maradi region where population densities were highest, there was a ‘crisis triangle’ where degradation risked becoming irreversible (Luxereau & Roussel 1997:131-3). Before 1975, long-term fallowing was widespread across Maradi, while manual fertilisation using household manure was rare. Now fallowing has more or less disappeared except in the extreme north.

This reduction of fallowing was not, however, matched by an increasing use of fertiliser, even though the Projet de Développement Rurale de Maradi (PDRM), which operated from 1978-1986, subsidised the use of inorganic fertilisers (Mortimore *et al* 2001: 8).Another member of the team, Hamadou (2000:10) points out that yields of millet and sorhum, while varying greatly on an annual basis, appear to be declining from 1979-1990. Between 1960 and 2000, both Niger as a whole and Maradi Department in particular maintained or increased total cereal production by bringing new land under cultivation but land was now saturated (Mortimore 2000:13).

After studying the long-term changes to the environment over 40 years, Mortimore *et al* (2001:44) conclude that ‘an increase in rural population density *can* facilitate agricultural intensification’[82]. They note a slow improvement in yields in the south of Maradi where techniques of fertilisation are well-known and used when affordable, while yields in the north are stagnant (*ibid:*34). The population density for the climatically similar northern Jigawa state in Nigeria was 118/km2 in 1991, and yields have been maintained due to greater

[78] In one interview, a Hausa village chief noted how Bouzou can obtain double the yields of their Hausa neighbours due to the integration of livestock into their cultivation system and greater manuring. Typical yields reported by Hausa informants were about 32 *dami* for around 1ha (476kg)

[79] Mortimore *et al* (2001 :2)

[80] Accorsing to the 1977 census that put Maradi’s total population at 944,288 (Gregoire 1986 :23)

[81] That figure is 49 people per square kilometre in Guidan Roumji and Aguie, while it is 23 for Dakoro, Mayayi and Tessaoua.

[82] My italics

intensification of agriculture. Niger is adapting in an environment with a larger component of risk than Nigeria. I would therefore argue that the agricultural areas are not therefore *structurally* more vulnerable on an annual basis than the agro-pastoral areas, but they do now have to be seen as having their own place now on the list of places with the potential to face disequilibrium in the future and should not be ignored. Mortimore *et al* conclude that the system is not a failing one that needs rescuing, so much as an adaptive one that needs to increase its productivity, the main supply constraint affecting crop production being that of fertilisation (*ibid*: 45).

5.5.1 Fertiliser:

Organic fertiliser has taken over from inorganic since the 1980's but is unable to supply the needs of the population (Mortimore *et al* 2001:44; Mortimore 2000:14*).* Fertiliser (whether organic or inorganic) has become a commercial quantity like anything else that is bought and sold by farmers. In the south of Zinder, Modher Kilani *et al* (2000:66) describe how 82% of people interviewed used fertiliser to some extent on their land. This was mainly from Nigeria with less than 15% coming from Niger's agricultural extension services. However, with the devaluation of the CFA against the Naira in 1994, and attempts by the Nigerian government to restrict the smuggling of subsidised fertiliser over the border, there was an escalation of price from 2500 FCFA per sack in 1990 to 12,000 FCFA per sack in 1997(Raynaut 2001:32). The current price has remained at this level. Fifty percent of farmers used pesticides from Nigeria, obtained through the extension service. There is a distinct 'aureole' effect around settlements, where land close to villages gets a larger proportion of fertiliser, due to the constraint of transport and the limited amounts of fertiliser available. There is a high risk amongst poorer families of using credit to obtain fertiliser and then being faced by a drought so the higher yields anticipated do not materialize.

6. ECONOMIC MARKET CONDITIONS IN NIGER

6.1 LABOUR MARKET

Raynaut (2001:29) sees the availability of workers and jobs working on the farms of other people as an indication of the push factors and pull factors caused by land shortages. He estimates that between 30-40% of households sell their labour on the farms of other people instead of working on their private plots or contributing labour to the *gandu.* While this has become a necessary survival strategy for the poor, it is rarely obligatory for the rich to hire labour, so the terms of trade are asymmetrical in favour of the employer, especially in a bad year[83]. The tendency to abandon ones own land to work on the farms of others was certainly noticeable amongst the most vulnerable from my own interviews.

6.1.1 Seasonal Migration:

The limitations of the labour market in Niger, mean that many thousands of Nigeriens leave the country, either temporarily or permanently, in search of jobs. One informant in Daratchama claimed that it was up to 50% of the male population who left – though this depends on the year. In a bad year many more people leave, but, with a glut of people searching for work, the price of labour goes down. Seasonal migrants (*yan cin rani* – the eaters of the dry season) have long been part of the regional labour market, many young men simply continuing a tradition that starts when young boys are sent as *talibé* to study in Koranic schools. In both cases, the aim was to reduce the number of mouths that needed feeding in the household. Migrants find work in manual jobs such as water carriers, construction workers, street vendors or guards (the *miguardi* being a particular speciality of the Tuareg).

In 2005, a job shifting sand was remunerated at 80 Naira a day (332 FCFA), whereas the same worker would now be paid 300N/day (1245 FCFA). It was said that there was a ten-fold increase in people seeking work, and many children were in Nigeria from Niger begging – though now it is just the koranic students (*talibé)* who remain. A water carrier who has his own trolley and jerrycans can make 700N per day (2905 FCFA), including the 200N (830 FCFA) he has to pay for the water. Demand is greater when the weather is hot, with anything between 4 and 9 trolleys of water delivered per day. One such water-carrier in Katsina had been coming down to Nigeria every year for 5 years having started at Koranic school. In 2005, there were so many people looking for work that sometimes three people were pushing one trolley. There is a tendency for the non-Hausa people to look for work in the big cities of the South – Lagos, Port Harcourt, Abuja – whereas the Hausa-speaking people have more cultural links in northern Nigeria. However, migrants also go deeper into Nigeria the longer they have been doing the *tabaranda,* and many have settled down and set up businesses instead of returning every year to plant. Nigerians themselves have traditionally gone south for seasonal labour. Another informant living very close to the border in Niger spends 25 days of the month doing business in Nigeria then returns to his family for the rest of the month, as well as during the cultivation season. Remittances are sent by road whenever anyone from the village is returning home.

[83] hence the fact that wages had been very stable between 1977-2001 moving only from 500 to 750 per day (Raynaut 2001:29)

6.2 HOUSEHOLD INCOME/EXPENDITURE BUDGET:

Mondher Kilani *et al (2000:139)* and WFP (October 2005:14) estimate household food budget as follows:

Food Income %(*Mondher et al)*		Expenditure % (*Mondher et al)*		Expenditure (*WFP)*	
Agriculture	67%	Taxes	2%	Food	64%
Mat-weaving	2%	Agricultural inputs	5%	Social oblig/ clothes	9%
Borrowed	10%	Food	48%	Health	5%
Gifts received	21%	Clothes	3%	Domest/Agr Assests	2%
		Health	1%	Debts	7%
		Ceremonies	41%	Animal feed/care	9%
				Education expenses	1%
				Other	3%

6.3 THE MARKET IN NIGER:

Many blamed ultra-liberalism and structural adjustment for the crisis of 2005, while others defended the market, by saying that it was the very fear of impending famine caused by the NGO and media statements that caused market speculation and price inflation, and fanned the flames of an existing problem that would have died down if normal mechanisms already in place and managed by the government had been allowed to operate fully. Perhaps NGO's were waking up to the fact that the 'normal functioning of the system' was leaving an unacceptable number of children malnourished, and that those who were asking to use existing systems were trying to keep the lid ever more firmly on the pot. It should be noted that Raynaut observed in 1977 that the process of monetisation was starting to apply in every area of economic life[84], so it is not a new phenomenon or unique to the events of 2005 (Raynaut 1977:584). In any case, the 'facts' could be used to foment either side of the argument.

6.3.1 High Prices in 2005:

Prices for a 100kg sack of millet between October 2004 and January 2005 were static at 13,000 FCFA/sack (Terpend 2005:13[85]). In February this rose to 15,000 per sack, followed by a rise in April to 20,000. These prices were reasonable compared to other bad years such as 2000-2001. But it was in July when the radical increase occurred – up to 25-30,000 depending on the market – to levels never before seen in Niger. By September they went down to 25,000 before resuming the normal level after a good harvest at 15,000 FCFA/sack in November.

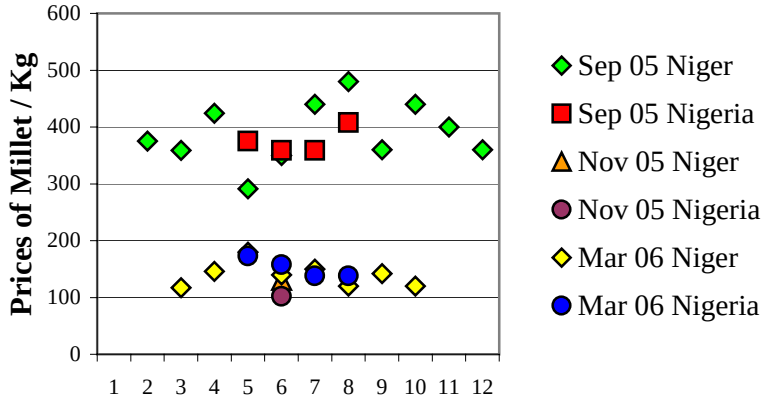
This change in July was seen by Beekhuis (2005:64) as being caused by the fact that by June 'stocks in the major supply centres, which are Maradi, Zinder and Niamey, were exhausted'. Many of the traders who came from Tahoua to Maradi returned with less millet than they had hoped for. Prices rose spectacularly with a 30% escalation in two weeks at the end of June. He

[84] With this comes the increasing breakdown in the solidarity of the extended family and the increasing role of informal mechanisms utilised by personal choice such as groups of friends (*abokan cintuwo)* who eat together. These mechanisms also have their own fragility as they grow into what Raynaut sees as the 'vacuum' left by family solidarity.

[85] She puts this rise in price down to insufficient supply to the market compared to demand as well as a 5% increase in the (retail?] price index between March and July in response to rising petrol prices. In August 2005, Nigeria raised fuel prices by a further 10% (Salif Sow *et al* 2005:12)

puts this down firstly to the beginning of the period of *soudure* when supplies largely depend on imports, secondly due to purchases in-country by some NGO's and thirdly to the demand of local contractors and the government. There were two 'call-to-tender' offers at the end of April and mid May to supply 30,000MT to DNPGCA. This was to be purchased out of country by merchants, but, as the ceiling set was 20,000 F/100kg sack (which was the exact price of millet at Jibia in Nigeria in May with no margin), merchants had no choice but to source it in June in Niger, driving up prices (Beekhuis 2005:64)[86].

The average price of millet at Ouahigouya market in Burkina Faso rose to 210 F/Kg in July 2005, compared to the average for that month of 135 F/Kg. In Tillaberi in the same month prices were at 280 F/kg, compared to an average of 190 F/Kg. In Jibia, just inside Nigeria the price for July was 305 F/Kg, compared to an average of 150F/Kg. For May, June and July the prices at Jibia with the exchange rate taken into account (195, 235, 305 F/Kg respectively) were higher than the prices at Maradi (190, 205, 245 F/Kg) so there was no incentive to sell Nigerian millet to Niger (FEWSNET 19 Sept 2005) Prices from November 2004 to March 2005 showed that prices at Jibia were almost identical to prices in Zinder (FEWSNET March 2005)[87]. Prices in Nigeria were higher than Niger for a few months from March and then rose even higher due to rising demand, so Niger followed. Such price rises cannot be explained by poor production alone: the locust infestation caused more panic than real damage to crops, though they meant that annual production could not be easily estimated and was thus subject to market panic; according to one informant, by July 2005 all the millet available in Niger was already in the hands of merchants, so they could set whatever price they wished.



In an attempt to get away from the bias of price surveys, the table above shows the randomn prices that were given to me in the course of interviews[88]. If anything they exaggerate the effect of the price rise compared to official figures but show the same basic tripling of prices in Sept 05.

Other surveys that confirm this trend include Aquadev (July 2005) who show that prices in Zinder were high at 270FCFA/kg in July 2005, but that prices outside Zinder were even higher (at 330 FCFA/Kg in Tanout for example) because they were being supplied by urban

[86] Brahima Sidibe from Niger's farming research centre Agrhymet is quoted as saying "Access to food is difficult in some places due to a drop in output, but especially because of high prices… it's not a famine, it's that people are poorer and cannot afford to buy food" (IRIN 10 June 2005).
[87] Prices for Maradi just over the border from Jibia were not quoted.
[88] Calculated at 2.5kg per tia, and with FCFA/Naira exchange rates at 4.32 for March 06, 4.24 in Nov 05 and 4.08 in Sept 05.

traders. In Diffa (Issari) the price of a 100kg sack of grain (30,000CFA) was equivalent to 6 medium sheep (Charasse & Gouteyron 2005:29)

6.4 REGIONAL TRADE AND THE ROLE OF NIGERIA IN 2005:

Burkina Faso and Mali compete with Niger to make up their deficits from coastal states, and one needs to ask whether Niger has the financial and technical means to compete adequately on a regional basis (Kouyaté *et al* 91). With Nigeria, there are especially close commercial ties caused by the Hausa cultural connection which do not necessarily exist with other countries in the region. With the prospect of a difficult year, the governments of Nigeria, Burkina Faso and Mali closed their borders expressly against the accords signed in the CEDEAO agreement. The most dramatic closures were the borders with Nigeria and Burkina Faso (and with it Ghana which sent goods through Burkina in transit). In 2000-2001, millet imports were 100,000MT (of which 75,000MT came from Nigeria) while sorghum imports were 90,000MT (of which 17,000 MT was from Nigeria and 90,000MT was from Burkina Faso and Ghana)[89] (Terpend 2005 :14). In 2004-5, the official figures of the Departement des Produits Vivriers registered a little over 5000MT of cereals from Nigeria and 25,000 MT of imports from all source (Niger : Profil des marchés céréaliers – Geert Beekhuis – PAM – Août 2005).

6.4.1 Nigeria

Nigeria is Niger's most important supplier of cereals, though there are few statistics because the majority of the trade is 'informal' so is not noted (Kouyaté *et al* 2002:78).

> Les chiffres des importations de céréales à partir des pays africains enregistrés officiellement par les statistiques souffrent de beaucoup d'incertitudes en particulier leur manque de fiabilité réside essentiellement dans la sous estimation qui caractérise les relevés des services de Douanes et même des services de la Protection des Végétaux qui n'arrivent pas à couvrir tous les postes frontaliers (Kouyaté *et al* 2002 :89).

In 1984, with Niger suffering from a deficit of 150,000MT of cereals and not having the capacity to transport this from Nigerian markets, there was a massive penetration of Nigerian traders and vehicles to the areas of Dosso, Niamey, Tahoua and Diffa. After the crisis, the direct approvisionment of these areas from Nigeria rather than from Maradi or Zinder became common – provoking Niger to impose a 50,000 FCFA tax per Nigerian vehicle in 1994 – after which Nigeria was forced to work through Nigerien intermediaries. Seyni Hamadou (1997) refers to a 1994 study by IRAM that identified 47% of the cereals in the market in Niamey as coming from Nigeria, versus 30% from Maradi and 12% from Zinder

Nigeria's 'green revolution' funded by oil revenue largely contributed to the self-sufficiency of the country in food with subsidies to agricultural inputs (including fertilisers) and price subsidies. This policy collapsed during the 1980's the amid the fall in oil prices and economic restructuring, meaning that from 1995-2000 the agricultural sector suffered a profound crisis with falling yields, that were only reversed with greater agricultural investment from 2002

[89] One informant said the fact that the Niger government didn't allow food out of the country without weighing was a burden on free movement of goods. As for livestock, the Niger government were said to require a 1200N (4980 FCFA) tax per bovine and 500N (2075 FCFA) per sheep.

(Salif Sow *et al* 2005:4*)*. During this period Niger turned to Mali for millet and Ghana, Ivory Coast and Burkina for maize imports (Seyni Hamadou 2000:24). Restructuring and liberalisation of the cereals market included the removal of almost all commercial monopolies, removal of price fixing for agricultural products and elimination of the majority of import/export controls including customs duties and the need for licences. However, liberalisation has not always been applied, and since 2002 the government has applied measures to prevent the export of certain products including millet, maize, sorghum and root vegetables to supply growing domestic needs[90] – aware of the incendiary political impact food shortages would have.

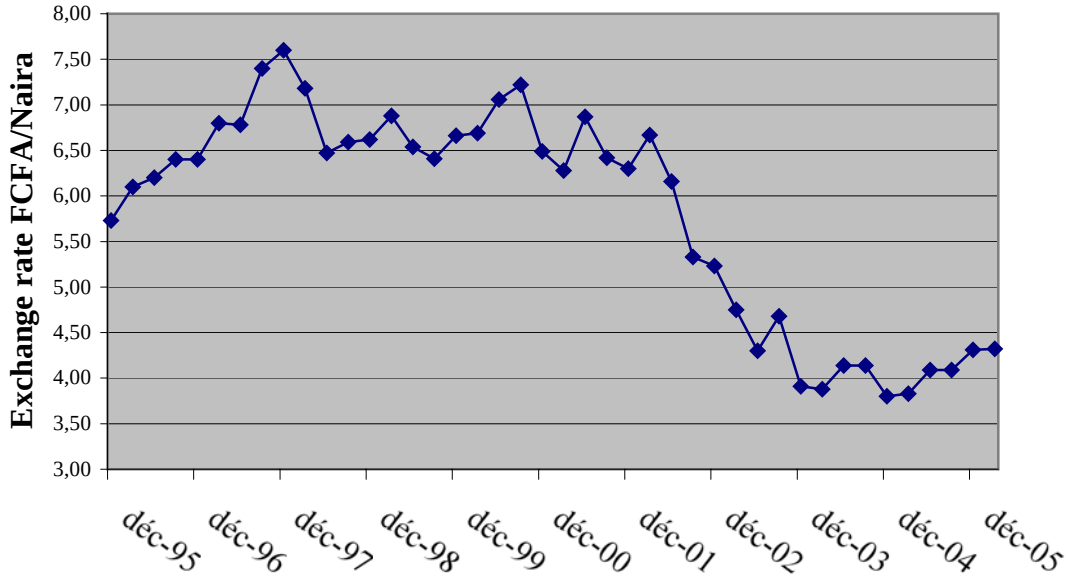
Exchange across the Niger/ Nigeria border was effected by both formal and informal barriers to trade across the border. The formal barriers and taxes, while frequently by-passed[91], served to reduce the volume of trade conducted and caused prices to be increased to make up for the extra expenses incurred[92] (Kouyaté *et al* 2002 :80). Kouyaté *et al* (2002:80) also note that when northern Nigeria suffers a food deficit, prices in the whole region start to rise as buyers seek to buy cereals in neighbouring countries. Normally, though, this is the exception and traffic usually flows the other way in terms of cereals. The main advantage that Nigeria has is the ability to source food from different climatic zones, from the humid south to the Sudano-Sahelian north, through an efficient road network and relatively cheap transport. Two thirds of the country benefits from two seasons. In the years 1999-2003, it produced on average 16 million MT of cereals compared to 11.5 million MT for the whole Sahel region (Salif Sow *et al* 2005:2*)*.

In Nigeria, 2004 was a bad year – estimated to be 10% less than forecasts by the Sokoto, Kano and Jigawa Technical Supervision Service – although likely to have been worse. Up until May 2005, price rises in Nigeria were within normal range for the time of year, but from July average prices rose above the equivalent of 300 CFA/Kg. Traders at Katsina market said it had never before risen so high. Many households working as labourers on big farms because they had no land, suffered doubly from the fall in production and the rise in prices. The situation was to some extent alleviated in August by the arrival of maize and yams/sweet potatoes onto the market from the harvest in the south.

[90] This includes the huge number of checkpoints which, while ensuring the 'security' of local people and goods , serves as a huge commercial drag as trucks need to pay at each checkpoint before being allowed to proceed (Salif Sow *et al* 2005:9).

[91] One informant mentioned that for every legal truck there were 10 illegal trucks – rice in particular is favoured as the government has banned direct imports from Benin, so they pass through Niger and then down again.

[92] Dans certains cas, les commerçants utilisent de petits véhicules de faibles capacités (une à deux dizaines de sacs) pour transporter les produits sur des voies qui ne sont pas surveillées par les forces de contrôle.



data source: www.oanda.com

The period from 1989 to 1995 saw a rapid depreciation in the value of the Naira from N27 for $1 to N80 to $1. The CFA was devalued on the 12th January 1994. The above figures show how the official rates have fluctuated since then, but traders involved in cross-border trade tend to use the parallel exchange market – which show a 39% appreciation between 2000 and June 2005 (Beekhuis 2005:27). In the WFP (SENAC) study prepared by Beekhuis, he concludes, taking cumulative inflation and exchange rates into account, that 'exchange rate fluctuations from 2000-2004 make it less attractive by 24% for a Nigerian exporter to sell as sack of millet in Niger and to change his revenues into naira on the parallel market' (Beekhuis 2005:27). The above rate reached its lowest figure of 3.67 at the end of December 04, but it was down as low as 3.98 on the 1st Aug 2005. before going up to the current level of 4.37.

Traders interviewed in Katsina in 2006 mentioned that the government had bought the majority of their stock in 2005, and ensuring that they continued to have good relations with their main client made them wary about talking to a stranger. Such purchases were meant for the Strategic Grain Reserve, and were intended to be resold at subsidised rates after July 2005 (Salif Sow *et al* 2005:9). They write that official figures for how much was purchased were not available despite their meetings with Federal Minister of Agriculture and the Federal Bureau of Agricultural statistics, but it gives an indication how important a role the government still play in cereal markets that the Federal Government set the objective of purchasing 5% of national production to make up its strategic reserve. Informal trade with Niger did continue, but there is no doubt that quantities were much reduced. To illustrate this point the FEWS/CILSS assessment mission note that, while recorded imports of (mainly Nigerian) cereals to Niger for the first 5 months of 2004 (after a good harvest in Niger) were 39,000MT, the same figure for the first 5 months of 2005 was 14,000MT (Salif Sow *et al* 2005:9)[93]. Many claimed that in 2005, cereal from Niger was sold in Nigeria (for example see

[93] The general absence of cross-border statistics mean that such an important factor is in general hard to measure quantitatively and across different years. Poor production statistics were also cited by Beekhuis (2005:28) in that the FAO production levels for 2003 and 2004 are identical.

Seydou Bakari of the SAP – BBC 8 Nov 2005:11), though the validity of this claim was not established.

From March until July 2005, the price of millet in Nigeria was higher than prices in a country – Niger – heading into full scale food crisis. There is no doubt that the government acted forcefully to ensure that the scale of the crisis is Nigeria did not become public knowledge. MSF admitted 13,000 children into its Katsina feeding programme in the six months that it was allowed to operate[94]. The areas of Daura, Dakama, Gika, Abdulawa and Gishirawa were effected, according to one informant. Daura, near the cross-border market at Mai Aduwa, was said to have the same ecological conditions as Niger, and would have suffered like Niger if it had not been part of Nigeria. The locals were not completely dependent on agriculture so were able to get by. Transport in Nigeria is also cheaper than Niger, so as soon as crops were ready in the south they could be placed on the market at reasonable prices. This connectivity with a hinterland from a different ecological belt was considered vital – as well as the strength of 'contre-saison' irrigated agriculture in Nigeria. Had it not been for these things, given the population densities in Nigeria, things would have been 'explosive' according to one informant.

6.5 CONCLUSIONS ON THE ROLE OF THE MARKET:

Cereals imports from Nigeria were estimated in Ministry of Agriculture figures to be down to 16% of average levels from an average of 40,000MT to just over 5000MT (they were 37% of the average for Benin and 39% of the average for Mali and Burkina Faso) (Beekhuis 2005:26). They were even further down compared with the last big deficit year of 2000. It is clear that imports were unable to fill the gap caused by the fall in production in 2005. The ODI meeting on the causes of the 2005 crisis (ALNAP 2005) concluded that 'the general failure of the development community in Niger to signal the crisis was possibly based on a reluctance to suffer the likely market disruptions of food distributions' though it was the massive late reaction which caused more disruption of markets than a smaller earlier intervention.

[94] Aside from this, one NGO said there were no other nutritional feeding centres in Katsina State.

7. POLITICAL AND POLICY ENVIRONMENT IN NIGER IN 2005:

7.1 GOVERNMENT FOOD SECURITY STRUCTURES

The Dispositif National de Prévention et de Géstion des Crises Alimentaires (DNPGCA) was set up in 1998 to replace the previous body managed by the OPVN (Office des Produits Vivriers du Niger) (Kouyate *et al* 2002:6). The OPVN was restructured, and the Système d'information sur les marchés (SIMC), initially attached to the OPVN became independent. The DNPGCA follows the charter on food aid approved by CILSS and Club du Sahel in 1990 - not to give out food aid but to put food onto the market in a way that doesn't prejudice market prices (Charasse & Gouteyron 2005:38). However, Kouyaté *et al (ibid)* note that, unlike during the 1980's, the DNPGCA have very little control over prices, and in fact often operate in a context of ignorance of the real motivations and activities of the private commercial sector.

DNPGCA stocks should have been made up of a 50,000MT national security stock and a fund sufficient to purchase 60,000MT but from about 1996 it had only 20,000MT of food and financial means for 20,000 MT (Charasse & Gouteyron 2005:38) and by February 2005 the stock stood at 5000MT. It is not altogether certain that the DNPGCA were aware that the shortfall in their stock was matched by low levels of provisionment in the commercial sector, and that they would be unable to call up large reserves of commercial cereals if the international community did not respond to the request for 78,100MT in November 2004. After 1998, a new policy had been put into place to manage the national security stock by a committee (CMC – Comité Mixte de Concertation) composed of representatives of the Government and the donors presided over by the Office of the Prime Minister. [95] In 2005, the donors were represented by WFP. It seems in general that there was little co-ordinated thinking within this committee structure, and the fact that no actual donor was present must have contributed to the complete lack of interest (aside from some French and EU contributions) by donors in provisioning the national security stock that could, in part have made up for the market failure described in the previous section.

7.2 POVERTY

Is Niger the poorest country in the world? The UNDP Human Development Index is commonly quoted in reports about Niger, placing the country 176th out of 177 countries, or, in the case of the 2005 report 177th. This unenviable position is disputed by the government[96] who say that the 2001 figures are being used which place Niger at a disadvantage (Charasse & Gouteyron 2005:13). From interviews, it is clear that Niger is a *poor* country, and the role that poverty played in the events leading up to the 2005 crisis should not be ignored. It is also a poor country whose massive population growth risks outstripping the economic capacity of the risky Sahelian environment to provide for that population. In a book entitled *L'extreme Pauvreté au Niger*, Gilliard remarks that poverty is not about isolated cases, but a 'collective phenomenon' (Gilliard 2005 :11).

[95] In 2005 it was WFP who was the donor representative on the CMC. It was surprised therefore when WFP decided to organise its own free distributions independently of the CMC and the CCA from June 2005 (Charasse & Gouteyron 2005)

[96] Prime Minister Hama Amadou says, also in his address to the opening of the PAM/GoN *Revue Après Action* on 30 Nov 2005, that he is not prepared to sell cheaply the dignity of the Nigerien people ….'vendre la dignité du Peuple Nigérien à bon marché… cela, nous ne sommes pas prêt à l'accepter' (PAM/Gouvernement du Niger 30 Nov 2005,Annexe IV:26)

The Prime Minister, Hama Amadou, in his address to the opening of the PAM *Revue Après Action* on 30 Nov 2005[97], stated that 'the endemic malnutrition of children in certain parts of Niger' was not caused by a food deficit but was the result of income precariousness. It was poverty that prevented the poor accessing the food that was on the market, and Niger was in need of 'massive international support to eradicate poverty' rather than therapeutic feeding centres which don't 'fundamentally address the causes'. It was mentioned in many of my interviews that 2005 had been different from the famine of 1984 because people had felt poorer in 2005. There is obviously selective memory loss to a certain extent, as 1984 was the more serious crisis, but it appears what they, and the Prime Minister, are saying was that in 2005 prices were so high that no-one could buy food even when it was available. In 1973 and 1984 they were perceived to have things to sell (for example the food in people's stores which was commercialised on the market for the first time) but in 2005 there was nothing to sell. In 1984 the government had forced open the stores of grain merchants and prices had never risen much above 500 CFA/tia, while they were sometimes double that in 2005.

Even in the government's own analysis of the current situation, they admit there is an ongoing problem with deficit areas even in 2006. An initial assessment of the 2005/6 season showed a cereal surplus of 21,000 MT, and yet over 1000 villages and 1.8 million people were at risk of food crises, according to the Nigerien minister of animal resources, Abdoulaye Jina (IRIN 24 Nov 2005). The roundup of the 2003/4 agricultural campaign showed a massive surplus of 427,183 MT, and yet there were 1841 villages containing 1.6 million people where there was calculated to be a deficit of more than 50% (GoN Oct 2004). There is clearly some sort of link between deficit and what the Prime Minister refers to as poverty, though the words used are different. Sachs refers to the 'poverty trap' which even democratic countries, when they are burdened with poverty, as well as physical isolation, lack of infrastructure, illiteracy, epidemics, etc will find it very difficult to escape without massive and sustained outside help (quoted in Bernard 2005:3). If they are being honest, most aid workers realise, as the Prime Minister would probably acknowledge, that the 'good-governance debate' is sometimes just a way of not having to confront the lack of sustained engagement in the problem of poverty in Niger by the outside world further than removing the symptoms of its presence from the television screens rather than addressing the cause.

Professor Boureima Alpha Gado of the University of Niamey, a specialist in the area of food insecurity and rural strategies was quoted by IRIN saying

> « le Niger est dans un contexte de crise alimentaire structurelle, et lorsqu'un phénomène comme la sècheresse ou les invasions de criquets pèlerins se produit, il aboutit à une situation de crise pour la population déjà très pauvre ».
>
> « Les paysans ont peu de moyens et de stratégies d'adaptation. Depuis 10 ans, ils sont si pauvres et si vulnérables qu'en cas de catastrophe naturelle telle que l'invasion de criquets pèlerins, ils ont très peu de moyens pour faire face à la situation. Actuellement, la conjoncture est aggravée par la pauvreté du paysan, qui n'a pas les moyens de se procurer des vivres sur le marché » (IRIN 23 June 2005).

[97] My translation

7.3 GOVERNMENT, AID AGENCIES AND JOURNALISTS

It seems curious that if malnutrition is not caused by a food deficit but by poverty, the whole government system of early warning should be based on establishing the national cereal deficit[98]. But putting the Prime Minister's words in context, the government had not taken too kindly to WFP announcing the results of its food security survey on the 23rd November showing 3.2 million needed food and non-food assistance, two weeks before the start of the Jeux de la Francophonie 7-17 December 2005. With the prospect of an ever-lasting cycle of food aid now beginning[99], it is not surprising that the Prime Minister should announce an end to 'holding out a hand to the international community to be fed'.

In the same vein, it is not surprising that the government should withdraw permission from a BBC team that were reporting on the food situation in Niger in April 2006 (BBC 3rd Apr 2006). When the CCA declared the food crisis finished on the 22nd September 2005, there was a desire to turn the page on a chapter in their history. While not wanting to have their nose rubbed in it, most Nigeriens are aware that their country is very poor – and that the end of the 'crisis' leaves them with the usual high levels of endemic malnutrition. But given that the BBC had already produced a report showing 'evidence of hunger' in 2006, the risk that Niger was being assigned to rolling famine coverage for the foreseeable future was too much for the government to bear[100]. The BBC could also have chosen to move the agenda on and to stop beating the drum for more funds to be given to relief agencies – hardly a sustainable solution. They could have been more sensitive to the fact that we all – aid agencies, government and the international community – are complicit in turning a blind eye to poverty most of the time - it is not necessarily the unique product of a government cover up. Many accused the government of not reacting quickly enough to the events of 2005 and of not having enough grain reserves in its stock to make up the deficit. The government could argue that it requested the donors to make up the 78,100MT shortfall in the strategic reserve on the 25 Nov 2004.

7.4 DEVELOPMENT AND RELIEF:

One of the main criticisms of the international aid effort in 2005 by the government was that NGO's treated the symptom – malnutrition - without seeking to address the fundamentals of poverty which lay behind it[101]. NGO's were accused of providing short-term solutions and that such interventions leave populations dependent[102] (see Harvey & Lind 2005 on the dependency debate). On the other hand the organisations that were already in country had a 'developmental' agenda that had difficulty absorbing the urgency of the crisis in 2005. It was just difficult for the government, after noting the 'erroneous' declaration of a famine to then

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[98] ODI/HPG's meeting on the Niger crisis (ALNAP 25 Oct) concluded that too much stress was put on the 'relatively healthy levels of aggregate food availability' and not enough on the significance of rising prices or increasing admissions to therapeutic feeding centres. Participants argued that the role of government in data collection was crucial, where capacity had been eroded despite initial investment in these systems.

[99] "On veut toujours présenter le Niger comme étant en état de crise, mais pour nous, la crise alimentaire c'est du passé", according to Aboubacar Foguié, secrétaire général du ministère de la Communication (AFP 4th Apr 06)

[100] Experienced aid workers would probably comment that evidence of people eating wild foods in the hungry season is not revolutionary – in fact some foods could be quite nutritious - but the BBC would probably argue that they have become too blasé.

[101] '…[les] Centres Médicaux de récupération d'enfants décharnés … ne résolvent pas fondamentalement les causes qui sont à la fois dans la pauvreté et dans les pratiques sociales démodées… le Niger a besoin d'un soutien international massif pour éradiquer la pauvreté' PM Hama Amadou (*ibid)*

[102] '…dans un cadre d'assistance sans fin qui, à terme, ne peut que nuire à leur sens de responsabilités de Citoyens' PM Hama Amadou (*ibid)*

turn around and critique the lack of speed, efficacy and long-term thinking of the majority of interventions. This meant that the development organisations got a relatively easy ride while the relief organisations and the media decided the government was to blame.

There is a potentially damaging division of labour between development and relief agencies. Maybe for too long, Niger has been the domain of development agencies that have become inured to long-term malnutrition. Maybe it would be a good thing if the interest of the media focuses on the fact that it is considered 'normal' for the under 5 mortality rate per 1000 live births should be 262 (UNDP 2003) and for many of those deaths to be due to endemic malnutrition. These figures have never been a secret – they are published every year – but they should be considered as an indictment to all concerned with development in the country. The division of labour of the aid system between development and relief, has sometimes left the Niger government caught between its long-term, and much more lucrative development commitments, and the shorter-term but politically explosive relief agencies who had the means to solve the short-term crisis. Declaring the Sahel in a state of 'famine' was a threat to longer term government funding from the Bretton Woods organisations and debt relief – no wonder the Prime Minister had little time for nutrition centres that don't resolve the fundamental issues.

But maybe the nutrition centres are required because the development agencies have not themselves been able to resolve the issue. In the end it is probably a question of perspective, but it appears unhelpful to filter all understanding of the Niger situation through the artificial lens of the division of labour of aid agencies whereby development agencies are expected to get cosy with the government while relief agencies get confrontational. In this way it would be possible to get more balance between the nutritional analyses over the Niger situation and the more structural economic analyses, both of which play a part in explaining why mothers still turn up at feeding centres with malnourished children.

7.5 THE POLITICS OF MARKET FORCES

The emphasis by the government (and the UN initially) on subsidised food sales rather than free food distribution that could be seen to have the potential to disturb the market, became a bitter battle of polemic in the public domain that probably had more to say about outsiders views of 'neo-liberalism' than uniquely addressing the situation in Niger. The French press in particular were particularly angry about what they saw as 'la logique néolibérale' (Le Monde 31 July 2005) or 'les perversions du marché (Libération 9 aout 2005). Again the attractions of a single causative factor are difficult to avoid. Raynaut (2001:26) describes contemporary poverty as a *lacuna* related to the market, whereas before it related to the social positioning of rich and poor. It involved a social relation and there were mutual obligations between them. He sees the contemporary marginalisation of the poor from the social sphere as being fed by the commodification of land, caused in itself by short supply and by the increasing market in paid agricultural labour. It is difficult to avoid being seen on one side of this argument as an apologist for the market and on the other as a sentimentalist for a more communitarian era, and yet it is important to avoid trying to squeeze in between the two for the sake of comfort but without reference to the objective facts.

7.5.1 Can markets be trusted with the food security of the country :

> 'Les opérateurs n'ont pas souvent les compétences techniques requises pour assurer la couverture optimale des besoins alimentaires du pays…En effet, si les commerçants

> sont actifs dans les importations de céréales d'Asie et des pays voisins, ils n'intègrent pas souvent dans leurs programmes d'approvisionnement un choix conséquent de la période d'importation. Le plus souvent ils attendent que la pénurie s'installe avant de lancer les commandes et les conséquences sont la hausse des prix et la forte pression de la demande sur les stocks. Si cette situation profite aux commerçants, elle n'est pas une bonne chose pour les politiques de sécurité alimentaire' Kouyaté *et al* 2002 :93

Kouyaté *et al* from the Government system for market information (the SIMC) observe that market operators often lack the technical competence to ensure coverage of the food needs of a country [after all their objective is to concentrate on where they can get maximum profit rather than where there is need but with no means to purchase]. Often traders don't have sufficient funds to import amounts needed. Often traders wait until destitution is evident before launching their orders, by which time prices will be high and there will be great demand for their goods. This situation contributes to the profits of the traders but not to the food security of the country. They therefore argue, as many informants did in my own interviews, for the necessity for there to be a government safety-net that has adequate provisionment for when things go wrong.

FEWSNET (Dec 2005), assessing retrospectively the causes of the 2005 crisis, reports that 'in contrast to previous years in which grain flows were largely determined by availability and the exchange rate for the naira and CFA franc, trends on border markets are increasingly conditioned by new economic requirements imposed by deregulation in the wake of recent structural adjustments in Nigeria and partisan national interests oftentimes taking the form of protectionist measures, to the detriment of regional agreements on the free movement of goods'. FEWSNET recommend 'conducting intergovernmental consultations including representatives of the private sector with a view to forging a consensus with respect to the need to comply with regional trade agreements focusing on regional integration.'

7.5.2 Structural Adjustment Programmes:

The Independent newspaper published an article on 1st August entitled 'IMF and EU blamed for starvation in Niger' – a charge denied by the Director of the External Relations Department Thomas Dawson who wrote in a letter to the editor that 'the IMF has never supported or encouraged the abolition of the government grain reserves'. The Observer newspaper published an article on 7th August claiming that the IMF and EC had stood in the way of the government distributing free food, a charge that was refuted by the IMF's Africa Director Abdoulayé Bio-Tchané.

Niger arrived at completion point under the HIPC (Highly Indebted Poor Country) Initiative in April 2004, allowing it to receive debt relief from the Paris Club in May 2004, signalling the start of a new three year programme with the World Bank/IMF focusing on the Poverty Reduction Strategy (PRS). In general the gradual withdrawal of the government from the commercial sector is an intricate part of the PRS. A government forum held in Niamey in June 2003 reaffirmed the consensus that the PRS was 'the sole reference framework for partners in their support to Niger's economic, financial and social policies'. Amongst other things, the PRS aims to promote good governance and sound economic management, invest in infrastructure and irrigation, and improving access to health and education for the poor. One of the objectives identified in the progress report of the PRS (GoN 2004:50) was for the authorities to 'pay special attention to the mobilization of domestic revenue by… the imposition of taxes on virtually all goods and services consumed'. Authorities would also

seek to implement ‘actions aimed at preventing the accumulation of further domestic arrears through strict observance of the rules of fiscal orthodoxy’ (Ibid 2004:51). In other words ‘prudent spending policy’ and private sector development is key to PRS implementation. Such prudent spending, while probably not directly responsible for the fact that the national food security stock was almost empty, was part of a general withdrawal of the government from involvement in rural livelihoods. The cutting-back on programmes that invested in agricultural imputs meant that the burden and risks of investing in agriculture were shifted directly onto the shoulders of farmers, while much of the profit from their labours were reaped by merchants who ran none of the risks with the Sahelian climate faced by farmers. It is therefore unsurprising that that in 2005, it was their year to suffer.

PART IV : PROGRAMMING RECOMMENDATIONS:

8.1 IMPROVING ECONOMIC RESILIENCE IN MARADI/ZINDER:

The above description shows how a combination of short-term cyclical factors and long-term trends conspired to make 2005 an exceptional year. This most effected the agro-pastoral and agricultural communities of Tahoua, Zinder and Maradi but it could have been anywhere. There is evidence that land shortages and fertility problems – though not new to the rainfed agriculture zone – have made these areas as vulnerable as other areas and that makes a large number of people vulnerable. However, this is not the Malthusian scenario expected in the 1970's. With investment, these areas have the potential to continue being the motor for Niger. They have been neglected in the last ten years as investment in agricultural inputs has plummeted. For this reason, SC should continue to invest in these areas where it is already operational.

Keeping people on the borderline between poverty and destitution is a very imprecise art and requires a degree of surveillance of peoples' lives that international organisations simply do not have. In this context, it would be better to implement programmes that attempt to move people further away from this brink so that whatever happens in the complexities of their economic existence, they will have more *margin* to play with.

Zinder and Maradi have particularly been neglected in the last 10 years. In 1976, the Projet de Développement Rural de Maradi (PDRM) – a massive production-based approach that contributed greatly to the national debt – was set up funded by the World Bank (Raynaut 2001:5). As a result of SAP's (Structural Adjustment Programmes), after 1985 there was privatisation and liberalisation of commerce, massively reduced availability of credit for farming, a reduction in the role of the state in development, a reduction in the role of co-operatives and a move towards bottom-up rather than top-down interventions. The PDRM wound down in 1986, partly replaced by the much smaller Programme de Développement Rural de l'Arrondissement d'Aguie (PDRAA) funded by IFAD, that began in 1992. This was again based on increasing production (with an 'excessive' role given to credit mechanisms according to Raynaut (2001:6), but also with an eye to environmental impact and helping the most vulnerable. There were also smaller scale projects run by NGO's such as CARE with village level micro-finance initiatives for example. It was noted that, while the population had been deaf to the advice about technical innovations in the first stage of development programmes, with increasing competition over land they became increasingly interested in adopting new methods to intensify production and maintain fertility (Raynaut 2001:55; Mortimore *et al* 2001). It was at this stage that investment programmes reduce their activities.

There are many possible approaches to building up livelihoods in SC's zone of operation. Raynaut (2001:49) recommend reinforcing economic diversification, reducing the risk of unforeseen expenditure on, for example, healthcare, improving the ability of the poorest to earn money during the dry season, livestock banks for women and improved technical training in the education of children[103]. Mondher Kilani *et al (*2000:166) recommend encouraging the massive adoption of modern methods of fertilisation to prevent yields from decreasing progressively. Mortimore *et al* (2001:47) advocate the use of integrated fertiliser management (IFM) that combines inorganic fertilisers in a package with organic fertilisers.

[103] Daratchama women made a submission to Azapi to make groundnut oil but the project was refused.

Clay (2005:4) writes about 'safety-net' interventions that build up livelihoods. These include microfinance and cereal banks.

There are already existing NGO's operating in these areas, and it is beyond the scope of this study to advocate in detail the most appropriate programmes to recommend. Afrique Verte have extensive experience in establishing cereal banks with 'Organisations Producteurs' that could organise the purchase and sale of cereals – improving reliability of supply to buyers and allowing collective bargaining to obtain better prices. This could be done in particularly deficit-prone areas to improve their purchasing power or in surplus areas to improve their selling position. Their margin must be sufficient to cover years when no-one pays anything in. ILO has done some work on co-operative cereal banks. Members of the bank paid 500 FCFA to join. Initial stock is supplied to the project to enable the village to stock 50 sacks of millet. A committee consisting of President, Secretary, Treasurer and five members manage the stock. It is renewed every year after the harvest either locally or in the nearest big town if there is a local deficit, and is sold during the period of *soudure* to try to keep prices down. With the profits made, the cereal bank can increase its stock every year. PAO/PAS (Projet d'Appui aux Opérateurs associatifs du secteur rural) registered 600 cereal banks in the Tillaberi area alone, and the Direction de l'Action cooperative registered 15,180 in the country with a capacity of 164,155MT (Lambert 1999). Most have a very short life because of lack of funds to buy cereals. This must be taken into account, as many of the cereal banks I observed were empty because of the failure to build-in long-term plans for the replenishing of stock. Following on from the recommendations of Julius Holt (2005), the restocking a goats to poor women who lost them during the crisis of 2005, should be a priority, especially if this is seen as part of an integrated programme to improve manuring of land.

8.2 NATIONAL TECHNICAL SUPPORT:

At the same time, SC should work to improve the way vulnerability in all its facets is conceived in the food security models used in Niger. It is important to invest in better ways to analyse risk and vulnerability at a national level, and improve the coherence between needs and the way short-term assistance is targeted. The systems are in place to produce data, but there is a problem of assessing needs and co-ordinating a response, and the different developmental/relief approaches of actors responsible for each – such as the WFP, DNPGCA, CILSS, FAO, FEWSNET. There is sometimes a lack of critical analysis of the large amount of data – both academic and operational. SC with its developmental approach to provision of relief, and its expertise in HFE (Household Food Economy) looks ideally placed to play a greater role at a national level with a Food Economy Analysis unit similar to that in use in East Africa. Given the important role of the market – and particularly the regional cereals market – in the food security of the country, it is important that a unit of this kind exists to provide technical advice for a surveillance system on markets and particularly on understanding the factors that operate in the relationship between surveillance and action.

Appendix 1

Entre le 1er janvier 2005 et le 11 septembre 2005, Médecins Sans Frontières (MSF) a admis dans ses centres plus de 32.900 enfants sévèrement malnutris. Le nombre d'admissions prises en charge par MSF devrait atteindre 40.000 sur 2005. En 2004, 10.000 enfants avaient été admis dans le centre de récupération nutritionnelle de Maradi. En 2005, MSF est présente dans cinq régions d'intervention : Maradi, Tahoua, Zinder, Diffa et Tillaberi grâce à dix centres de récupération nutritionnelle intensive (CRENI), 41 centres nutritionnels ambulatoires (CRENA) et deux unités de soins pédiatriques. [ACF had 30 centres] Le budget prévisionnel de l'intervention de MSF au Niger pour l'ensemble de l'année 2005 s'élevait, fin août 2005, à 15,6 millions d'euros, financés par le surplus des dons constatés à l'occasion du Tsunami en Asie (Charasse et Gouteyron 2005 :51).

Appendix 2 :

Region	Département	Extrement Critique	Critique	Tres Difficile	Difficile	Signes D'Alerte
Diffa	Diffa	Issari			-Bosso -Gueskérou	
	Nguigmi	Kabléwa			Nguigmi	
	Mainé Soroa		Goudoumaria		Mainé Nord/Ouest	
Tahoua	Keita	Keita				
	Madoua		Ourno		Tambaaye	
	Tchintabaraden		Télemcès			Kao
	Bouza				-Karofane -Bouza	Tabotaki
Zinder	Matameye	Kantché				
	Gouré		-Guidiguir -Kriguim		Birni Kazoe	
	Tanout					-Gangara -Zinder C
Dosso	Dogondoutchi	Dogon-Kiria				Soukou-koutane
	Dosso		Farey		Moko	
	Loga					Loga
Agadez	Bilma	Dirkou	Bilma			
	Tchirozerine	Tabelot				
	Agadez Comm					-Azamalan -Toudou
Tillaberi	Téra	Dargol	-Kokorou -Gorouol		Bankilaré	
	Ouallam		Tondikiwindi			
	Tillabéri		Anzouru			-Ayourou -Kourtey
	Kollo				Karma	
	Fillingué				Fillingué E	-Abala -Tagazar
	Tillbéri Comm				Tillabéri C	
Maradi	Mayahi	Mayahi	Kanembakacé			
	Tessaoua			Tessaoua		
	Dakoro			Birni Lalé		
	Aguié					Gangara
	Madaroumfa					-Madarou.. -Sarkin Y

Source: CC/SAP Bulletin d'Information no 102 (10 juillet)

Rég./Dépt.	total	Productions (Tonnes)		Besoins totaux (T)	Balance(T)
		Prod. brute	Prod. dispon.		
AGADEZ	**399 563**	**2 120**	**1 802**	**86 861**	**-85 059**
Arlit	133 061	105	89	28 719	-28 630
Bilma	16 417	0	0	3 855	-3 855
Tchirozérine	153 304	1 274	1 083	34 931	-33 848
Agadez Com.	96 781	741	630	19 356	-18 726
DIFFA	**261 323**	**13 939**	**11 848**	**61 314**	**-49 466**
Diffa Arr.	87 979	4 962	4 218	21 641	-17 423
Maïné Soroa	115 167	7 709	6 553	27 742	-21 189
N'Guigmi	39 444	1 080	918	8 185	-7 267
Diffa Com.	18 733	188	160	3 747	-3 587
DOSSO	**1 752 896**	**562 042**	**477 736**	**430 570**	**47 166**
Dosso Arr.	379 377	124 804	106 083	94 453	11 631
Boboye	354 243	114 035	96 930	87 716	9 214
Doutchi	541 033	176 113	149 696	132 986	16 710
Gaya	283 030	106 550	90 568	69 307	21 261
Loga	150 648	38 409	32 648	37 195	-4 548
Dosso Com.	44 566	2 131	1 811	8 913	-7 102
MARADI	**2 380 412**	**683 719**	**581 161**	**578 425**	**2 736**
Madarounfa	333 593	124 309	105 663	82 663	22 999
Aguié	297 067	81 540	69 309	73 694	-4 385
Dakoro	441 531	110 421	93 858	107 664	-13 806
G/Roumdji	361 479	134 823	114 600	89 552	25 047
Mayahi	390 691	122 215	103 883	97 082	6 801
Tessaoua	366 355	110 411	93 849	89 831	4 019
Maradi Com.	189 696	0	0	37 939	-37 939
TAHOUA	**2 053 953**	**541 460**	**460 241**	**499 950**	**-39 709**
Tahoua Arr.	297 493	72 623	61 730	74 009	-12 279
Konni	398 727	143 849	122 272	97 165	25 107
Bouza	284 309	65 525	55 696	70 476	-14 780
Illéla	275 055	61 600	52 360	67 572	-15 212
Keita	250 813	58 696	49 892	61 999	-12 108
Madaoua	336 196	130 023	110 520	82 956	27 563
Tchintabarade	53 070	4 066	3 456	12 015	-8 558
Abalak	79 601	2 633	2 238	18 021	-15 783
Tahoua C.	78 689	2 445	2 078	15 738	-13 660
TILLABERI	**2 186 771**	**571 400**	**485 690**	**537 895**	**-52 205**
Kollo	382 557	118 689	100 886	94 928	5 958
Filingué	472 628	117 849	100 172	116 222	-16 051
Ouallam	314 312	65 486	55 663	77 573	-21 910
Say	269 383	92 843	78 917	66 580	12 337
Téra	487 733	125 731	106 871	119 048	-12 177
Tillabéri Arrt	246 219	49 632	42 187	60 756	-18 569
Tillabéri C.	13 939	1 170	995	2 788	-1 793
ZINDER	**2 341 392**	**673 552**	**572 519**	**566 462**	**6 057**
Mirriah	691 068	206 677	175 675	171 422	4 254
Gouré	268 769	63 330	53 831	64 582	-10 751
Magaria	589 613	208 183	176 956	145 555	31 401
Matamèye	272 942	109 781	93 314	67 230	26 084
Tanout	319 023	74 514	63 337	77 679	-14 342
Zinder Com.	199 976	11 067	9 407	39 995	-30 588
CUN	**785 694**	**13 602**	**11 562**	**157 139**	**-145 577**
NIGER	**12 162 004**	**3 061 834**	**2 602 559**	**2 918 616**	**-316 057**

The numbers of beneficiaries for WFP distributions in August 2006 was as follows/

Number of Beneficiaries	Region	Department
153,000 – 287,000	Tillaberi Tahoua	Oullam, Téra, Fillingué Tahoua, Keita
76,000 – 153,000	Tahoua Maradi Zinder Agadez	Illéla, Bouza Dakoro, Mayahi Mirriah Tchirizerine
27,000 – 76,000	Tillabéri Tahoua Maradi Zinder Diffa	Tillabéri Madoua , Tchin Tabaradene Aguié, Tessaoua Gouré, Tanout Mainé Soroa, Diffa
1 – 27,000	Tillabéri Dosso Maradi Zinder	Kollo parts Guidan Roumji, Madaroumfa Matamey
zero	Zinder Tahoua Dosso Tillabéri	Magaria Konni Parts Say

Appendix 3. Glossary of terms

Al Qadi (Ar)	-	Religious judge in Sunni Islam
Adashe	-	revolving mutual support funds (tontine in Fr/Eng)
Anza	-	*boscia senegalensis*
Aro	-	borrowed
Arziki	-	wealth
Aunkutes	-	short-season millet
Aya	-	tiger-nut (Fr souchet)
Bashi	-	credit
Bayko	-	grant of land by the chief
Biki	-	ceremonial gifts
Boka (pl Bokayé)	-	specialist in traditional religion (non-islamic)
Bouzu (pl Bougajé)	-	Hausa name for Tuareg
Dairmi	-	sheaf of millet (Fr botte) (can produce c.18kg grain)
Daji	-	bush
Dakashi	-	colostrum (literally teats too heavy with milk)
Daudawa	-	black blocks of sorrel(oseille Fr)/tamarind? for sauce
Dengi	-	lineage
Di'goojiah	-	name sometimes used for plumpy nut (goojiah- peanut)
Fadama	-	damp areas used for irrigated agriculture
Fatiya	-	ceremonial reading of the first verse of the Koran
Fura	-	millet porridge
Gado	-	inheritance
Gandu (pl Gandaye)	-	land under collective use of the extended family
Gayamina	-	individual plots given out to family members
Gara	-	feast given by bride's family for groom's family
Gari	-	village
Garin gona	-	temporary agricultural settlement
Gari rogo	-	manioc flour
Gero	-	millet
Geza	-	compact, clay-rich soils
Gida (pl gidaje)	-	enclosure of several houses (*iyali)*, household, lineage segment of husband, wife/wives and children
Gidan	-	house of…
Gombo (Fr)	-	okra
Hatsi	-	millet
Hawro hawro	-	thin porridge drink
Hunturu	-	harmattan
Iyaye	-	weaning
Jigawa	-	sandy easily-worked soils
Jingina	-	loan on security of property
Kade	-	*butyrospermum paradoxum*
Kacia	-	circumcision ceremony (also *wanzami* – FGM)
Kalwa	-	tamarind
Kaya	-	furniture etc given to a couple by bride's family
Kauci	-	*tapinanthus sp.*
Kauta	-	gift
Kindurmu	-	sour milk
Kewayé	-	individual lots making up a family *gida*

Kiwo	-	pasturing contract between herder and owner
Kuka	-	baobab leaves
Kumya	-	being too poor to pay for ceremonies
Kupyiwa	-	okra (Fr gombo)
Kwo mosso	-	someone who is thin (with large head)
Kwari	-	basin or depression in landscape often used for *contre-saison* agriculture
Lamiid'o	-	'chef de groupement' of Peul
Lefe	-	trousseau offered to the bride by grooms relatives
Madara	-	milk
Magaji	-	family officiary for ceremonies
Mai gari	-	village chief
Mai gida	-	head of the family
Mai arziki (pl masu arziki)		rich man
Malam (pl malamai)	-	koranic teacher (from Arabic *mu'allam)*
Malohiya	-	*corchorus tridens*
Marabout	-	religious leader (seen as a derogatory term by some – like witch doctor would be in English
Masasaka	-	place for threshing millet
Matalauci (pl matalauta)		poor person [pejorative]
Mia	-	sauce
Musanya	-	exchange
Niebe	-	cowpeas
Nonou	-	breast, breastmilk
Numbu	-	granary
Raban kaka	-	dividing up of the harvest
Sadaki	-	dowry
Sadaqa (Ar)	-	alms
Sarkin	-	chief
Sangaya	-	strangers
Sarki	-	Hausa chief
Saye	-	purchase
Soudure (Fr)	-	hungry season
Souchet (Fr)	-	tiger nut
Suna	-	naming ceremony
Tabaranda	-	migration (Fr exode)- usually religious
Taffasa	-	*cassia toro*
Talibé	-	students of koranic school (from Arabic *taleb* – student)
Talaka (pl talakawa)	-	subject of a chief/ poor [pejorative]
Talauci	-	poverty [pejorative]
Tia	-	measure equivalent to c.2.5kg but varies within Niger
Tuwo	-	millet cake
Vouandzou		
Wahala	-	suffering
Yakwa	-	sorrel
Yungwa	-	famine
Zakat (Ar)	-	religious tax of one tenth of possessions for the poor
Zango	-	long-season millet

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