

Beyond Any Drought

Root causes of chronic vulnerability in the Sahel
The Sahel Working Group

June 2007

Aknowledgements

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The Sahel Working Group (SWG) is an inter-agency network, focusing on Niger, Mali and Burkina Faso. It was formed to identify and implement solutions to the chronic vulnerability and hunger of communities, as highlighted by the 2005 food crisis. The SWG shares information, commissions research and coordinates programming and advocacy messages. The group is an informal network, and participating agencies that have jointly commissioned the report are: Action Against Hunger, British Red Cross, CARE International UK, Christian Aid, Concern Worldwide, Oxfam GB, Relief International, Save the Children UK, Tearfund and World Vision UK.

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"The origin of the severe crisis experienced by the peoples of Niger should not be looked for in the inadequate rainfall of 2004 or the losses caused by locusts but is fundamentally in... the impoverishment of the majority of rural households."

IRAM, 2006b

There is actually no reason for regional trade to ensure an adequate supply in a country like Niger: if there is tension in the regional market, the poorest country in the region may not be able to compete with coastal countries that have higher purchasing powers."

"We know the drought will come. What is important is that we are ready when that comes so that we don't go out with a bowl in hand begging for food."

16 June 2007

Mousseau, 2006: 20

Foreword

The Sahel has long been vulnerable to drought, impoverishment and food insecurity, as the droughts of the mid-1970s, 1980s and 2005 show. Over the past 20 years, IIED has run a major programme of work in the Sahel that aims not only to demonstrate the fragility of human and environmental systems, but also to show the remarkable energy and innovation that local people can draw on to adapt and survive in an often hostile setting.

As Beyond Any Drought makes clear, people's vulnerability stems from a combination of political, economic and social forces, as well as the impacts of highly variable rainfall. The latest report from the Intergovernmental Panel on Climate Change (IPCC) confirms the likelihood of higher temperatures for the region over the next few decades. Current predictions of changes to rainfall in the Sahel are less certain, with forecasts ranging from a drop of 20% to a 20% rise. In either case, more heat will increase evaporation from soils, rivers and lakes, and reduce the value of whatever rain does fall. For a region already suffering from poverty and drought, such predictions are unwelcome news. Finding ways to help strengthen resilience in human and environmental systems is thus key to helping people adapt to the challenges ahead.

The experience of the Sahel over recent decades shows what "adaptation" to climate change might mean in practice. Since the late 1960s, the Sahel has experienced a 25% fall in rainfall in tandem with several harsh drought years. Livestock have been herded further south, away from the desert margins and into settled, cultivated areas, where a new accommodation between animals and crops must be sought. This has not always been easy. Herders have found their livestock tracks and grazing areas ploughed up, while farmers have had to stop hungry cattle, sheep and goats from straying into fields and gardens in their search for pasture.

Farmers have coped by shifting to shorter-cycle varieties of millet and maize, and abandoning crops like groundnuts that need higher rainfall. Some have dug wells and built small dams to provide enough water to grow saleable crops of onions, tomatoes and mangoes. Many farmers have also moved southward, seeking land in better-watered areas. Since the late 1960s, 5 million people from Burkina Faso and Mali have migrated south to neighbouring Côte d'Ivoire. Much of the civil strife there today stems from the uneasy relations between this large number of incomers and local people, and the growing shortage of land in a region where it had formerly been considered in endless supply.

People in the Sahel have "adapted" to changes in climate, but the process has not been cost free. The harrowing images from Niger of starvation and suffering from 2005 are a reminder of the fragile livelihoods on which so many depend. Governments can help or hinder adaptation to drought and climate change – such as enabling movement across national frontiers, and ensuring migrants can safely send money to their families back home, now a key survival strategy for many.

There is more governments can do. By strengthening local institutions, they can ensure more transparent systems for gaining access to land, and for resolving disputes between different land users. They can encourage technical and financial support for small-scale irrigation activity and simple methods to trap rainwater and conserve soils, and they can build up grain reserves for urgent food needs in case of harvest failure.

Governments and donor agencies need to support local people as they try to build resilience in their families, communities and local institutions. We hope this report will leverage greater support for local people and their organisations and help them construct more productive livelihoods in future.

Camilla Toulmin

Director IIED

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Abbreviations

AFD Agence Français de Développement

BM Banque Mondiale

CAP Common Agricultural Policy (EU)

CET Common External Tariff

CILSS Comité Permanent Inter-état pour la Lutte contre la Sécheresse au Sahel

CERAD Centre de coopération internationale en recherche agronomique pour le développement

CMDT Compagnie Malienne de Développement Textile
CSA Commissariat de Sécurité Alimentaire (Mali)

DBS Direct Budget Support

ECOWAS Economic Community of West African States

FAO Food and Agriculture Organization of the United Nations

FCFA Franc Communauté Financière Africaine
FEWS-Net Famine Early Warning System - Network

FMI Fonds Monétaire International

GDP Gross Domestic Product

IMF Interational Monetary Fund

IRAM Institut de Recherche et d'Applications des Méthodes de développement

MDG Millennium Development Goal

OECD Organization for Economic Co-operation and Development

PRSP Poverty Reduction Strategy Paper
SAP Structural Adjustment Programme

SAP Système d'Alerte Précoce

SWAC Sahel and West Africa Club (OECD)

UE Union EuropéenneWFP World Food ProgrammeWTO World Trade Organization

Summary

Summary

This report examines how vulnerability is understood and addressed by development agencies and government departments in Mali, Niger and Burkina Faso. The 2005 food crisis highlighted the extent of vulnerability in the Sahel region, increased international attention paid to the people of the Sahel and led to large sums of money being released to help those people survive the immediate crisis. Most studies written in the aftermath of the crisis have looked at the particular circumstances of the events of 2005. This report was commissioned by the Sahel Working Group, which was concerned that too much attention has been paid to a quite specific scenario and too little to the unacceptable and growing levels of vulnerability that pre-dated the crisis and persist two years later.

The present study took place during April and May 2007 and is based on a series of interviews with development practitioners and donor representatives in London, Washington DC, Bamako, Niamey and Ouagadougou, and on a desk review of academic and grey literature including commissioned reports on development approaches from Mali, Niger and Burkina Faso.

The report is divided into four main sections. The first explores the **meaning of vulnerability** as perceived by theorists and development practitioners in the context of the Sahel and identifies who is most vulnerable. The study finds that the understanding of vulnerability varies between different stakeholders, and that there is a tendency to equate vulnerability with poverty. Most analyses in development agencies and government offices divide causes of vulnerability into temporary and structural, and carry an assumption that structural issues cannot be addressed by development initiatives. Vulnerable households can be found among farmers and pastoralists, and among the growing workforce of landless labourers. Continuous loss of assets, including land and livestock, without time or opportunity to rebuild has left people extremely vulnerable. Among all these groups, children are particularly vulnerable, as reflected in the high levels of acute child malnutrition seen in 2005.

The second part of the report assesses the **root causes of vulnerability** in the Sahel. It considers a wide range of critical and interlocking factors that lead to so many people being vulnerable. Changes in climate and increasing drought frequency, population increase, a dependence on natural resources and lack of economic alternatives, poor access to services, poor governance and inequitable markets are all factors that lead to more people becoming more vulnerable, and many have been at play for many decades.

The third section reviews **aid delivery mechanisms** adopted, and the impact these have had on vulnerability in the Sahel. The report highlights the relatively modest level of overall aid flow to the region despite it being home to three of the world's four poorest countries. The effects and sensitivity of structural adjustment programmes (SAPs) and Poverty Reduction Strategies (PRSs) to vulnerability concerns, as championed by multilateral institutions, are reviewed together with the trend towards donor budget support among bilateral donors. Project-based approaches are then considered, together with the interaction between long-term development and humanitarian responses during the many episodes of heightened crisis in the region.

The final section raises a set of **conclusions** and sets out a number of key **recommendations** that emerge from the overall report, as follows.

The landlocked countries of the Sahel include three of the four poorest countries in the world and yet rank low in the amount of funding they receive. Short-term emergency responses to crises will not affect the ability of people in the Sahel to cope with future shocks. A commitment to significant and sustained increases in funding for long-term development is required. The short timescales of most analyses and most interventions make it difficult to address the root causes of vulnerability.

There is an urgent need for a regional **affirmation of pastoralism as a viable livelihood** in the Sahel. Pastoralism exists in many forms and is adapted to make the most of scattered, variable and unpredictable resources, but the mobility upon which pastoralists depend is under severe threat. Support to pastoralism offers real hope for sustainable production in some parts of the Sahel.

Summary

All development initiatives must include planning for drought as a normal condition and not as an unfortunate event. Drought happens and must be part of development planning. Plans need to include reducing the impact of drought, and increasing both resilience to drought and the ability to recover from it.

New development work must **combine elements of humanitarian and development work.** The situation in the Sahel requires new approaches that combine welfare and development practices. Agencies need to experiment with flexible models including social transfers, and cash and food distribution, integrated in different ways with development work on improving production and diversifying livelihood systems. Agencies will need to overcome the administrative, budgetary, personal and cultural divisions and antagonisms that exist between these two disciplines.

The imposition of external ideas about what constitutes good development and a focus on economic growth as a driver for national development are not addressing the needs and realities of the most vulnerable rural poor. Rural development policies and approaches need to be more locally based and community driven, and should relate to the resource-poor and risk-averse. Development initiatives using different forms of aid delivery (e.g. budget support and project support) should ensure synergy in the initiatives they support. Long-term commitment and flexibility are essential for successful interventions.

Donors should be prepared to support recipient governments in international trade negotiations. They should acknowledge inequities in terms of subsidized support to farmers in developed countries when considering conditionalities on development aid.

Decentralization, underway in all three countries, **offers considerable potential to improve accountability and representation of local interests in decision-making**, but requires a long-term substantial financial and moral commitment from donors and government. Tiered approaches to service provision (e.g. health, veterinary) can improve access to services among more remote or mobile populations. Support to civil society and to mechanisms to improve communications between elected officials and their constituents is necessary to improve accountability and representation, as well as training and support to the officials themselves.

There are some **exciting positive developments in the region.** These derive almost exclusively from long-term project work based on good learning from the communities concerned.

Introduction

1.1 - Background to this study

A key stimulus for this study was the food crisis in Niger in 2004/05 that exposed the extent of vulnerability among households across the landlocked countries of the Sahel. It also exposed the readiness of donors to make available large sums of money for the people of the Sahel when faced with an emergency, in stark comparison to their reticence to fund longer-term development. Why, after all the efforts made since the catastrophic droughts of 1974, were the people of the Sahel found to be so vulnerable in 2004/05?

This study assesses how ideas of vulnerability are understood and used in development agencies and government departments in a sample of Sahelian countries. It is not an academic study but an assessment of how vulnerability is analysed and addressed in the design and implementation of development work, and the intended audience is development practitioners. The study concludes with recommendations for changes that key partners can realistically implement.

There is a danger that too much attention is paid to the circumstances of the 2004/05 crisis in Niger and that the particular situation overshadows the main lessons that apply to all countries in the region. There are already a number of good studies examining the situation from a range of viewpoints; IRAM (2006b) may be the most comprehensive in its coverage. It would be a mistake to conclude that another crisis cannot happen in the absence of the peculiarities of the situation in Niger in 2004/05. There will be more crises. The root causes are still operating although the precise triggers will be slightly different next time.

This study took place in April and May 2007 and is based on a series of interviews with development practitioners and donor representatives in London, Washington DC, Ouagadougou, Niamey and Bamako. The study also draws on a desk review of academic and development literature and strategic documents, plus commissioned reports on development approaches from Niger, Mali and Burkina Faso.

1.2 - Structure of this report

There are four key sections to this report.

- 1 an exploration of the **meaning of vulnerability** as perceived by theorists and development practitioners in the context of the Sahel, and a description of who is vulnerable
- 2 an assessment of the **root causes of vulnerability** in the Sahel
- 3 an analysis of how **development and aid** has responded to and in cases increased vulnerability in the Sahel
- 4 a set of **conclusions**, and **recommendations** that follow from the conclusions.

1.3 - What is chronic vulnerability?

Vulnerability has been defined in a multiplicity of ways by academics and aid agencies. For the purpose of this report, vulnerability is defined as the inability of some communities or households to cope with contingencies and stresses to which they are exposed. Vulnerability has three components:

- 1 exposure to hazards, such as drought, flood or earthquake
- 2 susceptibility to the hazard, e.g. where environmental, physical, social, political and/or economic factors increase the likelihood that the community will be affected by a hazard
- 3 the capacity to resist or recover from the hazard, often referred to as coping strategies (Villagran de Leon, 2006, Devereux et al., 2006).

g.

Box 1 - Example of three elements of vulnerability

- A family living in an area prone to earthquakes has a high **exposure** to the hazard.
- The family may live in a poorly constructed building so it has high **susceptibility** to the hazard.
- However, if the family has savings in the bank and another house to move to they would have a high capacity to recover.

At the livelihood level, vulnerability is related to assets and how people manage them (Cannon et al, undated). In this context, assets such as land, livestock, and social and human capital are vital in allowing people to cope with shocks and stresses. Vulnerability is **chronic** when it is persistent and long-lasting.

Two important aspects of vulnerability are that:

- 1 vulnerability can be generated by society
- 2 vulnerability becomes evident only when disasters or shocks occur.

There are substantial differences between the definitions of vulnerability in the development literature and as used by most of the development professionals interviewed. Some development agencies and government offices have their own specific definition of vulnerability; many have none. Some of the differences in definitions of vulnerability lie in the scale at which they are applied. Individual households will be more or less vulnerable to shocks specific to the particular household (disease, crop failure, divorce). At the community level, shocks due to harvest failure, disease, pests, drought, flood, lack of fodder or market perturbations are felt by many people at the same time, although some households will be more vulnerable than others. Overall it is clear that poverty rather than vulnerability is the most commonly used focus among Sahel-based agencies¹. Some agencies say that they do not see the need for a definition of vulnerability, perhaps reflecting the lack of differentiation between poverty and vulnerability.

The scale of vulnerability and the recurrent nature of crises, whether at local or national levels, raise issues of how aid and development is delivered. In particular, this brings into focus once again the divide between humanitarian and long-term development responses, and the limitations that this causes.

Box 2 - Typical coping strategies in the Sahel

Rural producers in the Sahel deal with unpredictable conditions all the time. They are experts in juggling multiple strategies, and research suggests that they do not consider themselves "vulnerable" (Heijmans, 2001). Some of the strategies they use to cope with their unpredictable environment are outlined here (Manvell and Abdoulkarimou, 2006). Many households depend on these strategies even during "good years" (E.g. Republique du Niger 2006)

Pastoralists' strategies include:

- different forms of mobility
- spreading risk by spreading livestock among different herders
- keeping a variety of breeds and species of livestock adapted differentially to wetter and drier conditions
- livestock trade (destocking and restocking).

Farmers' strategies include:

- spreading risk by having multiple fields in different areas (with different soils, different slopes and aspects, and just different spaces the rainfall variation in the region is such that even fields a few kilometres apart can fare very differently)
- using early-maturing plant varieties and selecting for genetic diversity.(CIRAD, 2006)
- investing in smallstock.

Both pastoral and agricultural families also:

- send part of the household to find work elsewhere during the hungry season or longer in the case of drought (women are often less able to migrate, and adopt a different range of strategies from men)
- forage for wild foods
- collect and sell wild products

1 We use the word agencies when referring generally to NGOs, bilateral and multilateral donors and government departments. Where a comment applies to a specific type of agency, we are specific.

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Chapter 1

- engage in small-scale trading (often specialized, e.g. Woodabe women are famous for their knowledge of traditional medicinal herbs)
- use credit
- choose to go hungry reducing the number of meals a family eats each day in order to protect their assets to ensure long-term viability.

Coping strategies in times of widespread crisis

Where a shock, such as drought, affects many households at the same time, coping strategies such as reliance on wild foods, sale of assets, or looking for alternative sources of income, e.g. through working in fields or as herders, become over-subscribed. The returns no longer cover the costs of feeding the household and when this happens households become much more vulnerable to acute malnutrition.

1.3.1 - Poverty, vulnerability and development criteria

The theory on vulnerability clearly **distinguishes between vulnerability and poverty**, although there is most certainly an overlap (Villegran, 2006; Blaikie et al, 1994; Twigg, 2001). In the context of the Sahel, the distinction between poverty and vulnerability is harder to make, and much of the development literature appears not to make any distinction at all, or else it incorporates an element of vulnerability into its definitions of poverty. However, the distinction is important if efforts are to be made to target the most vulnerable people.

For example, patronage, a form of social capital rarely measured in any poverty analysis, can be an important strategy to mitigate vulnerability even among the poorest households. Social ties and relationships with other families and patrons render even very poor households less vulnerable than, for example, wealthier migrant households with no ties in the community or claims on patronage (Swift, 2006). As another example, female-headed households tend to be more vulnerable than male-headed households, not only based on their tangible assets but also based on access to wage labour and alternative sources of income. In Niger women are typically paid less than men for the same agricultural labour. Women with children to care for² may be less able than their male counterparts to migrate to find work elsewhere on a temporary basis.

Some development agencies use vulnerability to describe the risk of falling below a specific benchmark of poverty. This may reflect an influence of the Millennium Development Goals (MDGs), which are strongly quantified. The use of simple quantified limits to define vulnerability is unhelpful where it disguises the importance of coping strategies. Vulnerability involves a constant shifting between states, and can move in both directions, but there is also a well-recognized "ratcheting" effect associated with loss of assets and increasing indebtedness that leads to everincreasing vulnerability.

Written definitions often show more analysis of livelihood possibilities. Oxfam GB in Niger is working on a more inclusive examination of "vulnerable livelihoods". CARE International in Mali has an analysis of causes of poverty that includes three hierarchical levels: underlying, intermediate and immediate causes. This work on developing a Unifying Framework for Poverty Eradication and Social Justice is interesting and useful in that it represents a serious attempt to progress thinking about vulnerability beyond the simplistic acceptance of immediate causes.

1.4 - Who is vulnerable?

Development practitioners most often apply the concept of vulnerability to geographic areas or zones and groups. Vulnerable areas are usually said to be well known and tend to be more closely surveyed (e.g. WFP, 2005; UNDP, Mali 2006; IRAM, 2005; Concern, 2006 a and b). Vulnerable groups are described in generic terms applied to people within vulnerable zones. But there is no universal approach to identifying vulnerable populations in the Sahel (CILSS, 2004)

- 2 Women's mobility depends on a range of cultural factors, which vary between ethnic and religious groups and it is often unhelpful to generalize.
- 3 These definitions are used by the World Food Programme in Mali.

Box 3 - An example of working definitions of "vulnerable"

Vulnerable zones

- Agro-pastoral areas characterized by low and irregular rainfall and limited natural resources.
- Pastoral areas characterized by seasonal out-migration, environmental degradation and limited opportunities for income-generating activities.

Vulnerable groups

- Women-headed households with limited access to land or livestock.
- Households without migration possibilities (weak potential to develop income-generating activities).
- Children and pregnant women.

While the crisis in Niger in 2005 brought into focus the extent of vulnerability throughout the Sahel, there has been a growing awareness of crises occurring year after year in localized "pockets" or zones where access to food is blocked by a combination of harvest failure and market prices making food inaccessible. This is particularly important for areas where the general situation is better.⁴

The Sahel is characterized by its highly variable rainfall patterns over time and space. Annual rainfall in Niger, Burkina Faso and Mali ranges widely. Almost 90 per cent of Niger usually receives less than 350mm; 10 per cent receives 350–600mm and only 1 per cent has over 600mm. The far north of Mali is desert, like Niger, and receives no rain, while the far south may receive 1550mm. In Burkina Faso the range is from 600mm in the north to 900mm in the south. In Burkina Faso and Niger, 80–90 per cent of the population is rural; in Mali the proportion of households in rural areas is 70–80 per cent. These populations are unevenly spread throughout all three countries, based largely upon the rainfall distribution. The vast majority of the population is concentrated within the most productive agricultural areas in the southern regions in Mali and Niger and in the southern and western regions of Burkina Faso. To the north, as aridity increases, population density declines.

The main livelihood strategies in the three countries are largely predetermined by the climate of the area. Pastoralism is practised to the north, relying on mobility between dry- and wet-season grazing to make opportunistic use of the arid areas to the north. Agriculture dominates further south, where rainfall levels can be higher. While there have always been agro-pastoralists, the climatic extremes have enabled highly specialized production systems to evolve in the Sahel, practised by different ethnic groups. This specialization was coupled with strong inter-dependence between the different groups in terms of trading produce and providing services (e.g. herders keeping cattle for farmers, and livestock grazing on stubble and bringing important organic manure into the land to maintain fertility and soil structure).

However, with increasing competition for natural resources, the distinction between pastoralist and farmer is becoming less clear. More farmers keep their own livestock to improve fertility on their land and to provide a means of "banking" or keeping savings on the hoof. Similarly, pastoralists are increasingly turning to agriculture as a means of either supplementing livestock production or replacing it, usually (in theory at least) on a temporary basis in order to save enough assets to reconstitute a herd. As more households become agro-pastoral, the inter-dependence between the two groups becomes less, and as competition for natural resources has increased, the relationship between the two groups has become increasingly characterized by conflict.

1.4.1 - Vulnerable farmers

As populations grow, subdivision⁵ is reducing individual field sizes in the most densely populated areas, and many farmers are struggling with reducing levels of fertility, reducing yields and few opportunities to diversify. Almost any analysis of poverty and vulnerability in the Sahel quotes the decline in land area per household, and reduction in soil-fertility levels in relation to the fast-growing population. Reliable crop production is limited to regions in the south where average annual rainfall exceeds 300–400mm (Sivakumar et al., 2003). Given the shift southwards of the 350mm isohyet, this has effectively reduced again the cultivable area available to a growing population.

Table 1 shows changes in land cultivation since 1977 in the Maradi region of Niger, an area, together with Zinder,

- 4 In Mali this is sometimes called the Sikasso paradox. Sikasso is the relatively better-off southern region, which is reported to contain pockets of very serious deprivation.
- 5 Subdivision is intensified by polygamy and high birth rates.

frequently referred to as the breadbasket of Niger. The figures in the table are averages. Many households will be farming fields much smaller than the 0.5ha average. In Zinder and Maradi it is not unusual to see fields that are just 1 metre wide (Vogt, pers. comm.).

Table 1 - Cultivation and population in Maradi, Niger, 1977-2001

District in	Area cultivated						Population density		nsity
Maradi Region	per person (hectares/person)			Total population			(persons/km2)		
	1977	1988	2001	1977	1988	2001	1977	1988	2001
Dakoro	0.73	1.28	1.66	178,107	258,098	429,975	10.1	14.6	24.3
Guidan Roumji	0.77	1.98	0.94	138,905	210,610	341,833	28.2	42.8	69.4
Madarounfa	0.87	0.80	0.49	186,305	306,216	431,833	49.4	81.2	114.5

Source: Data from the Regional Office for Agriculture and RGPH data for 2001, from Doka and Monimart (2004).

To the south of the region of Maradi (Madarounfa and certain parts of Guidan Roumji), where population is highest, the area cultivated per inhabitant has declined by approximately 50 per cent in 25 years, while the population has more than doubled. The area under cultivation increased by only 34 per cent, and most of this increase took place before 1988, after when it would appear from the data that very little new land was available to be brought under cultivation and people started to divide land to meet the requirements of the next generation. Land taken into cultivation in the 1980s was largely previously used as pasture. This decline in field size is in many places accompanied by a reported loss in soil fertility, with the result that harvests from these fields are declining even further (IRAM, 2006a).

Prices of cereals vary hugely during the year. Prices are usually low directly after harvest and then increase throughout the year to a peak just before the next harvest. Poorer families cannot choose when to buy and sell, and are impoverished by the cycle of price changes. Households that buy cereals on credit (or receive grain on credit) during the growing season do so when prices are at their highest. They have to repay many times over what they had borrowed, leaving them vulnerable to food shortages later in the year. For households that regularly have to borrow in order to get enough food to eat until the harvest, assets can be eroded until all that remains to cover the debt is land.

1.4.2 - A growing landless workforce

Land is the basis of production for farmers. It is their most important asset and the last to be held onto in time of crisis if the household is to have any hope of restoring a robust and sustainable livelihood once the crisis is past. According to a study published in October 2005 by the World Food Programme, in the regions most affected by the food crisis of 2005, such as Tahoua and Maradi, 7 or 8 per cent of households had sold their land in the previous six months in order to buy food. (In Mousseau, 2006)⁶ This represents a serious acceleration of the creation of a highly vulnerable landless class.

Farmers in the cash-crop areas in Burkina Faso and Mali are particularly vulnerable due to their reliance on credit. Cotton and irrigated rice crops both demand a high level of costly inputs. When the crop fails or the price of the commodity drops on the world market, farmers who have used credit to purchase inputs are highly exposed, particularly where they have used their land as collateral.

For some households an alternative strategy to selling land is "pledging", which consists of giving someone a field as security in exchange for the loan of money or provisions. There is usually no time limit on the transaction, and so long as the field is pledged the person receiving the field is not permitted to sell it and can buy it only through mutual consent. For many young men, this is the only way to finance migration to find work in Nigeria, Benin or Côte d'Ivoire. These men and their young families are then particularly vulnerable.

The reduction in field sizes in the most densely populated areas is also resulting in people becoming landless through

6 Some criticize the methodology of the study but there seems no doubt that there was a marked increase in sales of land to cope with the 2004/05 crisis.

lack of inheritance. In particular, this is affecting women and young men. In Mali, Niger and Burkina Faso, where land allocation is dominated by customary systems, a progressive erosion of women's rights to land is being seen (Diarra and Monimart, 2006, Monimart, pers comm.). Women's fields have played a fundamental role in feeding the household. Where women no longer have access to their own gardens they lose autonomy over the management of the household food requirements and become reliant on their husband or male relatives for access to food, or else seek work for minimal wages in others' fields. More fundamental still is the loss of identity and purpose for many of these women who are no longer allowed even to take part in the cultivation of family fields.⁷

As field sizes decline further, as in the most densely populated areas of Niger, Monimart (2006)has also witnessed the increasing occurrence of young landless men. These men have little alternative but to find work on fields in the area, or to leave in search of alternative employment elsewhere (Kelly and Khinmaung, 2007).

Much has been said of small-scale petty trade and the important role it plays in providing women with an income. In practice, however, in rural areas, 95 per cent of women's petty trade is natural-resource based, such as the sale of cash crops such as chickpeas and onions in local markets. Loss of access to fields renders these women and their children extremely vulnerable, as they are deprived of the raw materials necessary to generate their income.

The multiplicity of tenure systems in the Sahel allows vulnerable households to "shop" among the systems for the one that will assist them best. This forum shopping can lead to conflict, as different systems may lead to different outcomes. However it can also work well for some groups. For example, in Niger, women have made use of Islamic law, which guarantees female heirs 50 per cent of that left to male heirs. The system forces the head of the household to recognize the rights of women to land, whereas customary law keeps land in the hands of male heirs in the expectation that women will leave the household and be awarded land by their husbands (Doka and Monimart, 2004).

1.4.3 - Vulnerable pastoralists

The pastoral production system in the Sahel is evolved to cope with inherent climatic uncertainty and market opportunities. Different species and breeds have been selected over millennia to cope with different climatic conditions. Complex social ties at multiple levels allow for reciprocal access to resources according to availability and rainfall patterns. Trading routes that cover thousands of kilometres join the arid areas of the north of Mali and Niger to the important meat markets of the coastal economies.

In Niger, livestock production is estimated to account for 14 per cent of GDP and support around 30 per cent of the population. In Mali, in 2005, stock-breeding contributed to 10 per cent of GDP formation, making it the third-biggest export sector after gold and cotton (OECD/ADB 2005). The Sahelian pastoral system is entirely dependent on mobility to access resources and escape disease outbreak and localized drought. It also depends on access to key dry-season resources (water and forage) in order to capitalize on the scattered and unpredictable resources of the very arid north.

The droughts of the 1970s and 1980s exposed pastoralists to the extent to which dry-season pastures had become unavailable due to the extension of agriculture in the south. This extension was due to a combination of population pressure and national-level policies that did not recognize the productivity and value of pastoralism. Areas that in the past would have been open to pastoralists in the more humid countries to the south, such as Nigeria and Côte d'Ivoire, were effectively closed and many pastoralists lost all or most of their livestock. This process has continued, with pastoralists increasingly losing access to dry-season grazing areas due to the extension of agriculture.

The farmers cultivating fields to the north of what is considered the agricultural zone are particularly vulnerable to climatic fluctuations, while they are also creating greater vulnerability among the herders who are increasingly finding their migration routes encroached upon and blocked by fields. Pastoralists are also disadvantaged by the loss of reciprocal arrangements with farmers who for many generations allowed the herders' animals to feed on crop residues and provided access to water in return for the manuring of their fields. These forces have led to an erosion of the pastoralists' dry-season resource base, which effectively prevents the productive exploitation of the arid areas of the country to the north.

The increasing frequency of drought also makes it harder for livestock herds to recover. Livestock holdings per capita

⁷ This is particularly reported from predominantly Hausa areas of southern Niger.

are declining. As their asset base is eroded, pastoralists are less and less able to cope with drought and are becoming increasingly vulnerable to problems of malnutrition. Conflicts between pastoralists and between pastoralists and farmers are increasing, leaving pastoral communities vulnerable not just to hunger but also to violence. Privatization of veterinary health services since the introduction of structural adjustment policies in the 1980s is said to have eroded access to what were already relatively poor veterinary services.

In markets, Nigeriens are losing control over access to livestock markets as wealthier middlemen, mainly Nigerian, monopolize markets and control the terms of trade. The growing number of pastoralists with no livestock (like farmers without land) is leading to a growing workforce reliant on few employment opportunities as herders or watchmen. During times of drought, this labour market grows rapidly, and people are often left with no options other than long-distance migration or destitution.

Box 4 - The extension of agriculture into pastoral lands

In comparison to the situation in the south of Maradi Region, Table 1 above shows that in Dakoro, in the north of Maradi region, in the agro-pastoral zone, the area cultivated per inhabitant has more than doubled. Along with the demographic increase, the total area cultivated has increased more than five-fold. (Doka and Monimart, 2004). The extension of agriculture around Dakoro is frequently explained by the fact that "land is available" in the area.

In reality this "available land" is pastoral land. Wells belonging to pastoral families have been in existence in the area for generations. Pastoralist families would leave these wells during the wet season and head north in search of pasture, returning south to their wells and the rangelands around them to keep their livestock fed during the dry season until the arrival of the next rains. The area is also used by livestock travelling south on trade and transhumance routes; the pasture and water in the region is an essential part of this system.

Since the 1984 drought, when herd sizes were greatly reduced by the drought, herders started to return to their wells to find that a few Hausa households had cleared some land around the well for small fields. Each year the area cultivated has extended (as indicated in Table 1), to the extent that pastoralists can no longer access the water in the wells for fear of being fined for damage caused to the crops by their livestock. Moreover, there is a practice of cultivating "trap fields" whereby farmers plant isolated fields scattered throughout the grazing rangeland in such a way that herders no longer dare to enter the area at all for fear of the exorbitant fines that will be charged against them if their animals enter and damage the crop. In that way, farmers are able to claim the area "unused" and extend their fields further (pers. obs.).

The process is strongly supported by the Hausa traditional leaders who expect that land cleared by people under their jurisdiction, as well as the new hamlets and villages occupied by the farmers, will be incorporated into their territories. This process is distressing on two counts: the farmers encouraged to settle in the area are being encouraged to undertake agriculture in a region that is not viable for agriculture in the longer term. Interestingly, climate change models (Brooks, 2006) suggest that the climate in this region is likely to become wetter before drying again, encouraging more people to clear land in the area, only to become "sitting targets" for the types of drought and food crises seen in the 1980s.

Finally, the proliferation of arms in all pastoral areas in the Sahel is increasing the risks for herders searching for pastures. This is the case in the dry season, and also at the start of the rainy season – a critical time of year when herds are most vulnerable and pasture is often most hotly contested. In the pastoral areas in all three countries, whoever controls access to water also controls access to forage during the dry season. Many pastoralists rely on access to public wells. In more isolated areas to the north of Mali and Niger, control over these public wells is becoming increasingly dominated by armed groups who use their arms to establish territorial control over the common land surrounding the wells (Rass, 2006).

1.4.4 - Vulnerable children

Both pastoral and agricultural communities across Niger, Burkina Faso and Mali are acutely vulnerable to health problems due to lack of primary and secondary health care. This particularly affects children. The under-five mortality rate for Burkina Faso is 192 per thousand, for Mali it is 219 and for Niger, 259 (World Bank Africa Development Indicators, 2006).

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Chapter 1

Rural populations in Niger, Mali and Burkina Faso suffer from a chronic lack of health services and improved sanitation. In Niger, behavioural factors also play a significant role in the malnutrition rates of children. "In many cases in Niger, malnutrition in children is not principally caused by poor availability of food in the household. Parents may eat a variety of foods, while children are fed predominantly a millet-based porridge every day with very little dietary diversity. This results in a lack of quantity (energy) and quality (micronutrients) in the diet, which often leads to anorexia (lack of appetite) and concurrent weight loss" (FEWSNET in Mathys, 2007). Only 2 per cent of infants less than six months old in Niger are exclusively breastfed and colostrum, rich in antibodies, is expressed and discarded, depriving infants of much-needed protection from infectious diseases like diarrhoea (Hampshire et al., 2006).

Why are people in the Sahel so vulnerable?

In the Sahel, shocks from drought and flood are inevitable, but unpredictable in terms of location and timing, and largely uncontrollable. The people of the Sahel are thus intrinsically exposed to climatic shocks or hazards. However, drought alone does not make a population vulnerable. A recent study comparing vulnerability and risk in Indonesia and Australia, two countries with similar severity and incidence of drought, found that one country records 25,000 drought-related deaths per year and the other zero (UNDP 2005). What are the environmental, physical, social and economic factors that make the people of the Sahel so vulnerable to shocks such as those seen in Niger in 2005? Why are the people of the Sahel more susceptible to harm by hazards and why are their coping strategies so inadequate? An analysis in these terms would enable development agencies to focus on mitigation through strengthening coping capacities and reducing susceptibility.

Development practitioners, government officials and donors interviewed in this study all had immediate responses about the causes of vulnerability. Most were largely based on lists of conditions or elements of the situation that make life difficult for people. Most common responses concerned the climate, poor natural resources, weak government services and a high background level of poverty. People rarely prioritized the causes or made links between them.⁸ Table 2 illustrates the range of initial answers, from a range of agencies in Mali (governmental, NGO and multilateral⁹) offered to the question, "Why are people of the Sahel still vulnerable"? The absence of political and power dimensions of vulnerability is striking.

Table 2 - Perceptions of the root causes of vulnerability in Mali

Agro-climatic	Governance	Trade and markets	Other
• Drought/Irregular rain	Political marginalization	• Exchange rate of US Dollar/Euro	 No proper study on vulnerability has been done
• Climate	 Poor management of emergencies 	• Oil price	 Lack of technical knowledge
 Lack of land available for cultivation 		 World markets in rice, cotton, wheat 	Breakdown of family
Low production		 Perverse interventions in cotton 	Continued pauperization
• Locusts		 Subsidies that pervert prices 	• Vulnerability differs from zone to zone
 Inadequate/poor water management 		 Unstable markets in grain and livestock 	Structural forces
 Types of production practised 		 Inadequate mechanisms for moving food to permanent deficit areas 	 Insecure land tenure (poor excluded from ownership).
• Extensive monoculture		 No transformation in Mali but export of raw materials 	Difficult access to credit
			• Absence of agricultural insurance

⁸ Interviewees found it too easy to answer the question, 'Who is more vulnerable: herders or farmers?' Instead of a review of the different factors of vulnerability in each case, there was often a simple statement with only one reason being suggested.

In documents and conversation, the causes of vulnerability in the Sahel are frequently divided into structural problems and immediate problems. The structural problems are presented as immutable components of the situation. This has the effect of bundling the most fundamental issues facing the Sahel into a box and closing the door on further analysis. The literature on the Sahel tends to be focused on specific sectors rather than providing broad overviews, but does usually analyse the root causes of vulnerability. Much of the literature is focused on poverty, rather than vulnerability, but it is possible to extract issues of vulnerability.

The national-level documents from development agencies (such as country strategy plans) rarely address political issues in terms of power and interest groups. Central political issues are frequently described as governance questions. Good governance (including for example; accountability, transparency, efficiency) is sought as a foundation for good development. Mechanisms for promoting good governance are not easy to define and in most cases the declared aims are closer to reducing bad governance.

Tanzania is often mentioned as a success in the improvement of government functions as a result of donor support aligned with the Poverty Reduction Strategy (PRS). However, the independent study (*Merging the Circle*, Gould and Ojanen, 2003) suggests that PRS processes themselves were deeply flawed and had not improved the key elements of governance in Tanzania. The simple statements that people make in interviews about the political situation in the Sahel are not repeated in policy statements or country strategies. Important observations that affect policy, for example how a government may need support in the capital city but can afford to neglect rural populations, can have a bearing on how development agencies design their programmes but may not feature when the detailed plans are drawn up.

2.1 - Climate trends, 1950-2050

Respondents in the region often cited uncertainty in climate as a major cause of vulnerability. This assumption equates vulnerability with inadequate food production as opposed to food access. The levels of malnutrition seen in Niger, Mali and Burkina Faso in 2005 were out of all proportion to the drop in production levels and could not be explained on the grounds of climatic variation alone, not even in combination with the locust invasion (IRAM, 2006b).

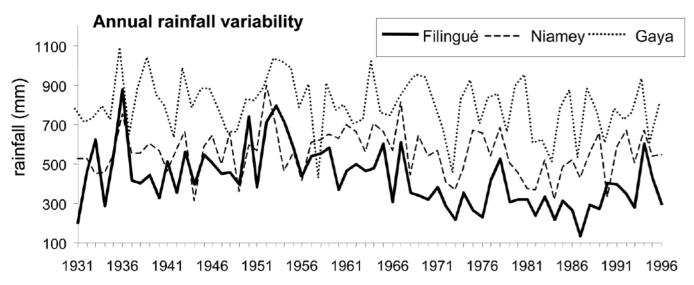
Climate does not cause vulnerability. Nonetheless, the changes in climate over the last 50 years, and those predicted for the coming 50 years, places traditional coping mechanisms and decision-making under much greater stress. Figure 1 shows the variation in rainfall in three sites in Niger from the 1930s until 1996. Looking carefully at the figure it is possible to see how mean annual rainfall increased during the 1940s and 1950s, when many development strategies were designed. These strategies included agricultural intensification, expansion of agriculture northwards towards what were traditionally pastoral lands and intensification of livestock production through improved breeds and ranching models. During the three decades that followed, rainfall levels declined significantly, particularly in the drier areas, and drought became increasingly frequent. In Niger, the 40mm isohyet has shifted 200km south in the West and 100km south in the East (CIRAD 2006).

There is much uncertainty about what changes to expect in rainfall and climate in the Sahel in the context of global warming. The Third Assessment Report (TAR) of the Intergovernmental Panel on Climate Change suggests that climate change is likely to be associated with increased water stress in much of Africa. In his review of the current state of knowledge regarding climate change in the Sahel, Brooks (2006) suggests that there is a significant possibility that rainfall will increase slightly over the next 50 years, only then to decline significantly to levels drier and more variable than those of today. Other models, however, suggest that climate change will lead directly to a drier climate with overall rainfall down by 20 per cent on current averages.

Farmers and herders in the Sahel experience climatic variation as a fact of life, and their livelihood strategies are a complex mix aimed at spreading risk and optimizing returns. However, long-term shifts in climate place considerable strain on these coping strategies. The increase in the frequency of drought has impacted significantly on both agricultural and pastoral populations due to their inability to recover their assets between droughts, leading to a downward ratcheting effect.

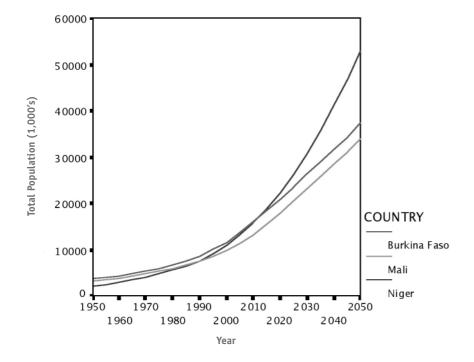
⁹ Responses from WFP, AFD, FAO, Oxfam, SAP, CSA, UE, Afrique Verte, Helvetas, BM, FMI.

Figure 1 - Annual Rainfall Trends in Niger from 1950 - 1996



Source: Graef, 2000

Figure 2 -



Source: United Nations Population Division website.

2.2 - Growing demands: population trends, 1980-2050

Niger currently has the dubious honour of the world's highest population growth rate, of 3.4 per cent per annum. The UN Population Division (http://esa.un.org/unpp) estimates that between 2005 and 2050, the populations of Mali, Burkina Faso and Niger will increase by factors of 2.9, 2.7 and 4.0 respectively. By 2050, the population of Niger is predicted to reach nearly 55 million, from around 13 million people today (Figure 2).

Chapter 2

Box 5 - The role of irrigation

In September 2005, Nigerien Prime Minister Hama Amadou declared that Nigerien farmers had to open themselves to modernity in order to avoid similar food crises in the future: "the rural world must change mentality; we need to stop depending on rain fall.... We must modernize agriculture and develop irrigable land." He added that the Niger River offers much irrigable land, which, if exploited, could produce more than 300,000 tons of food every year. Yet 300,000 tons would cover merely the needs of the additional population of Niger over the next three years. Developing irrigation might be necessary, but it is not sufficient to address the problem of recurrent national food deficits; gGiven current trends, the country might never again see a food surplus. Given that food deficits are projected to exceed one million tons a few years from now, the development of irrigation constitutes a minor part of the solution.

Source: Mousseau, 2006

The proportion of the total population moving to urban areas in Niger, Mali and Burkina Faso is also growing exponentially (among the fastest in the world). By 2050, much of the increase in national population will be located not in rural areas but in large towns and cities. Mali currently has a larger urban population than Burkina Faso or Niger: the population of Bamako is currently approximately 1.7 million compared to 775,000 for Niamey and 750,000 for Ouagadougou.¹¹ If the urban population growth were to stay contained within each country, by 2050 the urban population in Mali would approach 15 million, while in Niger it would approach 22 million.

Given current trends, however, it is likely that many of urban residents in the Sahel will migrate towards the coastal economies, particularly to Nigeria and Côte d'Ivoire. Internal population growth in these countries suggests that there will be few opportunities for immigrants. It is possible that economic migration outside the region will increase in the near future with likely destinations being European countries, as well as a growing trend of migration towards Saudi Arabia and other Arab states (Monimart, pers. comm.). Evidence is accumulating to indicate that labour availability and the pressure to innovate increase along with increases in population density (Mortimore et al.2001, Reij et al., 2005). These views of population are still considered controversial and many observers see the high rates of growth as negative trends. Growth rates tend to decline with increasing standards of living and education, and given the current situation in the Sahel this decline is not imminent.

2.3 - Reliance on natural resources

With 70–80 per cent of the population being rural and largely dependent on natural resources, and population growth of around 3 per cent, investment in support for rural producers has been entirely inadequate to assist them in their attempts to increase production in line with demand. Furthermore, national policies have tended to restrict farmers and herders from exploiting natural resources in an opportunistic and flexible way (Hesse & Thebaud, 2006; Rass, 2006; IRAM, 2006a).

2.3.1 - Inadequate and inappropriate investment in intensification

Intensification of agriculture is an urgent priority for farmers in the Sahel, as is the availability of alternative livelihood systems (IRAM, 2006a). Nevertheless, national-level development policies and practice have focused on cash-crop cultivation for export, and large-scale mechanized production (OECD country reports). Most of the ideas presented are appropriate only to well-off farmers who can afford the additional investments and risk-taking. There seems to be a shortage of new ideas in national agricultural programmes that would be useful for poorer farmers.

Attempts at intensification, whether for pastoral or agricultural production, must be appropriate to the unpredictable nature of the climate and the resources available to local communities. The promotion of inputs to increase productivity, particularly when those inputs require credit, is highly risky for farmers in the Sahel due to the probability of crop failure. This applies particularly to farmers growing cotton, which has such a heavy reliance on pesticides and fertilizers. Even the promotion of micro-fertilizers in Burkina Faso, Mali and Niger has resulted in low uptake in areas of 400mm of rainfall or less, due to the risk of inadequate rainfall. This is true even where farmers have seen the effectiveness of fertilizers when rainfall is good. Overall, Sahelian farmers adopt strategies to reduce their risks, and investments in uncertainty are often very unattractive.

¹⁰ Based on UNPD medium variant estimates.

¹¹ These figures are almost certainly underestimates.

There are important exceptions to this negative scenario, which suggest that appropriate and adequate investment, and support to these communities, could help farmers regain their assets and yield significant reductions in vulnerability. The potential for investment in individual smallholdings to reduce vulnerability has been demonstrated in Niger and Burkina Faso (Reij et al. 2005). Agro-forestry, a long-term investment, and small-scale techniques for irrigation and to reduce soil erosion proved their worth in reducing household exposure to the food crisis in 2005. In contrast to the many who point to population growth as a disaster, there is evidence that the growing population is essential to provide the incentives for intensification and innovation required to meet the growing demands for food (Mortimore et al. 2001).

2.3.2 - Undermining of the pastoral production system

Despite its contribution to the national economies, Sahelian pastoralism, with its extensive nature, is not popular with national governments. The system has been constantly undermined by both design and neglect (vedeld, 1993). National livestock policies consistently favoured alternative production methods, whether conversion to agriculture or ranching, which have all been discredited as impractical given the climatic conditions of the Sahel. More recently, Mali and Burkina Faso have passed specific legislation in support of pastoralism, while Niger is in the process of defining specific legislation to regulate the pastoral sector in the context of the Code Pastorale (Hesse and Thebaud, 2006).

These laws undoubtedly provide an improved framework for the management of rangelands, and greater tenure security for pastoralists. They are also a vast improvement in terms of the acknowledgement and recognition that they offer of the pastoral production system. Until very recently, the system was considered backward, destructive of the environment and in need of modernization by many livestock experts and central government officials (Hesse and Thebaud, 2006). For example, mobility is now explicitly recognized as a crucial part of the pastoral system and protected by the new legislation.

The new legislation includes provisions to protect grazing lands and livestock corridors from agricultural encroachment and to secure herders' access to key strategic resources such as wetlands in drylands. However, the means by which the legislation proposes to implement these provisions, and ambiguities in the legislation with regard to defining productive land use, raise serious concerns. The emphasis of the new legislation lies in developing formalized land-use plans that define areas for livestock production and areas for agriculture, as developed by technicians. The state reserves the right to fix specific conditions of access and use, and remains focused on "development" and "modernization" of the sector.

Decentralization of power to assign village land use should offset this tendency and allow more local and flexible use of land. However, little progress has been made on this to date, and mobility requires a larger scale of approach than village level. There is little recognition of pastoralists' rights to own and manage resources, or of their expertise in negotiating access to resources in a flexible way according to the availability of resources at different times – availability that is entirely dependent on irregular rainfall patterns and therefore fits poorly with fixed rules and regulations associated with static land-use plans. Mobility is the essential element of livestock-raising in the Sahel. It is mobility that is most threatened by legal systems and the expansion of arable farming. However, mobility will be the most essential component of animal-rearing as rainfall patterns become more erratic and variable.

Furthermore, the concept of "mise-en-valeur" (roughly meaning "to make good use of") remains current in legislation concerning land use. "Mise-en-valeur" traditionally recognizes only land use that involves some form of physical improvement or alteration of the landscape – such as planting trees or ploughing fields. It is not clear that the "positive actions of pastoralism through the simple transformation of biomass into animal products for pastoralists or the national market" are recognized by governments even now (Hesse and Thebaud, 2006: 17).

Where agriculture is extending into pastoral areas, the focus in much of the development literature has been around the pressure from the south to find new land to cultivate due to the saturation of available land there. Individual households and farmers experience this extension of agricultural land northwards onto pastoral lands as a means of escaping the land pressure of the south. However, there is a highly strategic element to the expansion of land into the agro-pastoral areas, which relates to the lack of recognition and protection awarded to pastoralism as a means of production.

Box 6 - Growing civil society

The assault on pastoral land by encroaching agriculture has led to the emergence of pastoral associations. This represents the beginning of a civil society movement challenging the status quo and promoting the rights of pastoralists in a political climate that has been hostile to pastoralism since independence.¹²

2.3.3 - Inappropriate privatization of veterinary and agricultural support services

The broader liberalization agenda of Sahelian governments includes pressure to privatize many services, such as rural marketing. This includes the elimination of subsidies on agricultural inputs such as fertilizers and pesticides, and deconcentration of government technical support services in tandem with decentralization. The aim of privatization is to improve efficiency and availability of services, and to eliminate costly, inefficient and corrupt practices that have typified many government services in Africa.

Research has shown that the privatization of veterinary health services makes little sense in the Sahel where populations are highly mobile and scattered across the vast expanses of northern Mali and Niger. The costs of reaching such a scattered population would make it impossible for private veterinarians to make any profit.¹³ Likewise, the provision of costly inputs to farmers in the drier zones is risky due to the high probability of crop failure in drought years. Private suppliers are not prepared to bear this risk, resulting in very high prices in the areas that arguably could benefit most from very small levels of inputs.

Deconcentration of services also aims to improve the efficiency and accountability of government-provided services. However, this also offers little hope so long as professionals such as agricultural and veterinary technicians resist being sent to serve in the isolated rural communities, especially in the pastoral areas in the north of Mali and Niger. Government veterinary officers and technicians remain paralysed by the lack of resources available to them to reach the populations they are meant to serve. Community Animal Health Workers are increasingly seen as the only rational solution for providing herders with access to crucial inputs such as de-wormers, vaccinations and acaricides (Rass, 2006).

2.3.4 - Land-tenure systems, and insecurity of access

In Burkina Faso and Mali, land-tenure laws are under review and have been so for a number of years. All three countries are struggling with the multiplicity of land-tenure systems that are *de facto* in effect: modern written law, Islamic law and multiple customary laws. As a result, conflicts arise where people apply different tenure systems to the same resources (Lund, 1993). Niger has explicitly recognized the potential for conflict that the Rural Code exposes in its attempt to give priority to customary tenure claims, with the establishment of local conflict-management committees.

In Burkina Faso there is uncertainty about how the law will change, together with increasing population pressure in the western cotton belt regions, compounded by in-migration. This is resulting in land-owners attempting to renegotiate the terms by which land has been leased long term to in-migrants so as to secure their own rights to the land. On their part, the migrants are attempting to use the longevity of their occupation and use of the land as a means to secure their ownership (Pare, 2001; Lavigne Delville et al., 2001Faure, 1995). There is rapid commoditization of land in Burkina with a lot of land near urban centres being bought speculatively by wealthy investors. In some cases they use the ignorance of local people to obtain traditional title to land for nominal sums and sell it for large sums using the modern tenure contracts.

2.3.5 - Lack of investment in protecting common property

The most vulnerable households are highly dependent on the exploitation of common-property natural resources, particularly during drought years. Examples include firewood collection for sale, collection of leaves and other wild foods for human consumption and for medicine. In northern Nigeria the dependence on wild products is an effective indicator of low levels of wellbeing at household and at community level. Households unable to access common-property resources, such as wild foods, are more susceptible to draw on their assets and get into debt.

¹² A possible exception might be Mauritania (Hesse and Thebaud, 2006).

¹³ In Tanzania, Danida is supporting private veterinary practices to provide services to pastoralists in order to make the services available.

The capacity for local communities to manage common-property resources, such as village forests and water sources, has been eroded through the expropriation of many of these resources by the state. Government agencies put in place to take responsibility for the management of these resources have largely failed. Since the 1990s there has been a drive for community-based systems of natural-resource management to redress the situation.

The expectation by many was that "communities" would be relieved to get control of their resources and would take up the responsibilities and manage the resources as they had in the past. In practice, government departments were reluctant to pass on authority over resources (such as timber from forests) that often provided a valuable source of income, and communities were expected to assume responsibility with very few benefits other than limited local access. Experience has also shown that community management of resources, while possible and very important, requires a significant investment in institutional capacity- and confidence-building. It is valuable to note that, where such investment has been made, villagers reported that they felt less affected by the crisis of 2005 (Reij, pers. comm.; Vogt, pers. comm.).

2.4 - Lack of economic alternatives

The proportion of people dependent on rural production reflects a very real lack of alternative income sources within the landlocked countries of the Sahel. The principal alternative facing Sahelians is economic migration to the coastal countries of Ghana, Côte d'Ivoire and Nigeria. For the people who remain, the opportunities are few and, as the number of landless and stockless poor grows, the demand for labour to work in local fields or as herders is falling below supply. Women may hope to earn approximately US\$1per day in Niger for working in another household's field, and this rate falls further in times of crises when labour floods the market (Diarra and Monimart, 2006).

In 1998 it was estimated that there were 3 million foreign Africans living in Côte d'Ivoire, mostly Burkinabé and Malian. Most of these migrants are seasonal or temporary, 14 although some take up permanent residence in the destination countries (Cotula and Toulmin, 2004). In addition, a significant number of individuals migrate to Europe and North America. In 2001, France issued 25,000 visas to Malians, compared to 7000 in 1997, and the US issues about 5000 visas to Malians each year. These figures do not include illegal immigration. It is estimated that 10 per cent of the residents in Kayes region have emigrated. Migrants left the Kayes region during droughts of the early 1970s, and the region now has an economy based on migrant remittances, with an estimated 80–90 per cent of remittances spent on current consumption.

To date the value of remittances from migrants is largely unquantified. A recent USAID study found that the aggregate value of remittances from migrant labourers across West Africa might amount to US\$2 billion annually (Orozco, 2006). Remittances to Mali, Niger and Burkina Faso for 2004 totalled US\$155 million, US\$26 million and US\$50 million respectively, 15 and these figures may underestimate the actual value by up to 50 per cent due to small amounts being transferred and not registered (Gupta et al., 2007). As an indication of the importance of remittances to the national economies of these countries, France in 2004 provided about \$50 million in aid to Mali. In wellbeing ranking exercises, a higher number of household members in economic migration tend to correlate with higher ranks of wellbeing.

Economic migration undoubtedly brings benefits to the communities concerned: not least the hope of remittances to supplement household income, and one less mouth to feed at home. But it has a high cost in terms of reduced labour (it is usually young men who leave for economic migration), and the increased risk of HIV/AIDS infection brought back to villages by returning migrants.

Migration is also a costly undertaking, with many households having to borrow, sometimes against their land (see Section 1.4.2 above on pledging) in order to leave their community in the hope that the returns will more than make up for the loan. The returns are not always sufficient, and members of the household who are left behind are left with little or no assets to draw upon in times of need, and no guarantee of recouping their losses. People undertaking migration within the region are already seeing reduced returns as labour markets in the coastal areas become

- 14 Economic migration takes different forms, which are all referred to in the Sahel by the word "exode". This can mean moving to a town in the same country to earn money during the dry season, moving to a neighbouring country for short or long periods and moving out of the region for usually long periods of time.
- 15 Remittances here aggregate worker remittances, compensation to employees, and migrant transfers series from the IMF Balance of Payments database, supplemented by the data from World Bank (2006) from Gupta et al 2007).

saturated both by migrants and in response to internal population growth. Nigeria's population is set to increase from around 125 million today to 288 million in 2050.

2.4.1 - Diversification of income

The diversification of income sources is undoubtedly crucial in the Sahel, where population growth is already leading to rural exodus as rural production systems are unable to absorb the increased numbers (Batterbury, 2005). However, it is important to differentiate between **diversification** of livelihoods and **fragmentation** of livelihoods. The former represents a virtuous cycle of reinvestment in different opportunities in a manner that reduces a household's vulnerability to shocks. An example may be a relatively wealthy household with one son involved in livestock trading, another who is a watchman and leaving his livestock in the care of his father, and two wives who sell excess milk at the local market.

Fragmentation represents a vicious cycle whereby household labour is diverted due to immediate demands, and so is unable to make the most of any productive assets it may have and thereby risks losing them. An example of this may be a small, young household; the husband has left for Abidjan to try his luck and has pledged most of their land in order to raise funds to get there. The wife is left with a small field and declining yields due to loss in fertility. She does not have the labour to invest in improving soil fertility and has to work in the fields of others in order to get cash to buy food for their small children. As a result, yields decline further to the extent that she may end up so indebted that she loses her land and becomes largely reliant on her husband's family.

2.5 - Lack of investment in education and health

Table 3 shows the proportions of school-age children in school, and the levels of adult literacy in Niger, Burkina Faso and Mali. Even given these low rates of school attendance, the student-teacher ratios for Mali, Niger and Burkina Faso are 52, 44 and 49 respectively, indicating the serious lack of human capacity in this sector, in addition to the lack of infrastructure. The problem of growing class sizes is likely to get worse due to programmes promoting education for all, with subsequent decline in the quality of education. The sector also suffers from a lack of transparency and accountability that is undermining the investments being made (Adomako-Bonsu et al., 2007).

Thus, while education may in theory be more accessible to the poorest, it does not at present offer much promise of great economic security in the longer term and is therefore an investment in human capital that the most vulnerable can ill-afford. With such low levels of education and literacy, however, the most vulnerable are disadvantaged still further through lack of access to information, be it related to governance and decisions made in their name, or to health risks, nutrition and medication.

Table 3 - Literacy and school attendance, by sex and country

		Mali	Niger	Burkina Faso
Adult literacy rate (%, ages 15 and older, 2000–2004)	Men	27	43	29
	Women	12	15	15
Net primary enrolment	Boys	50	46	46
	Girls	43	32	35

Source: World Bank Africa Development Indicators 2006

The importance of education is hard to overestimate. But the conditions imposed on Niger appear to have badly damaged the provision of education. Experienced teachers have been lost and only partially replaced by relative novices. There is a great deal of evidence ¹⁶ that the educational level of mothers is a major influence on child nutrition status.

Health is similarly chronically under-funded. In Niger, 50 per cent of the population has no access to basic health services; there is one health centre per 25,000 people and one pharmacy per 22,500 people (Hampshire et al., 2006).

¹⁶ See for example: Pamela A. Marinda (2006) Child-mother nutrition and health status in rural Kenya: the role of intra-household resource allocation and education, International Journal of Consumer Studies 30(4): 327–336.

In Burkina Faso and Mali there is one physician per 10,000 people, and most of those are to be found in the urban areas. Access to improved sanitation in rural areas is 4 per cent in Niger, 5 per cent in Burkina Faso and 38 per cent in Mali. Access to an improved water source is marginally better, but still very low: 36 per cent in rural Niger, 44 per cent in rural Burkina Faso and 35 per cent in rural Mali (World Bank Africa Development Indicators, 2006).

Decentralization of the healthcare system was initiated in Niger in the mid-1990s, primarily to increase healthcare coverage into the rural areas. The approach is a two-tier referral system whereby the rural population relies on a network of basic health centres and, depending on the severity of the illness, the patient could be referred by the health centre to a district hospital (second tier) (Adomako-Bonsu et al., 2007). However, there are still concerns about the accountability in establishing the system, the adequacy of preventative approaches (better nutrition and water supplies) and the service that people receive when they visit the health centres. And the scale of changes required is overwhelming, including staffing decentralized centres with qualified doctors and nurses, providing supplies and maintenance (Hampshire et al., 2006; Adomako-Bonsu et al., 2007).

2.6 - Weak governance, powerful actors

Underlying the questions of governance and access to resources (most often viewed sectorally) is the question of power. No report on root causes of vulnerability should omit this most fundamental aspect of poverty and vulnerability. The question of power is a combination of culture and asset control, and disparities exist at all levels, from local to national and international. The erosion of social capital is often referred to in analyses of the current situation in the Sahel, but by its very nature it is hard to define and quantify. The levels of extreme poverty have eroded the degree to which poorest members of the community can rely on very wealthy individuals to help in times of need – a social tradition that played a crucial role in customary community relations. At household level, there is erosion of the claims that women can make in relation to land access, which has undermined their capacity to provide for the family and invest in their own assets.

At a national level, Transparency International (TI) assessments of Niger find it to be one of the most "corrupt" states in the world. In 2006 Niger ranked 138 out of 163 countries in TI's Corruption Perceptions Index. Burkina Faso and Mali rate better (ranked 79 and 99 respectively), but still fall far below the threshold for serious corruption. Also at the national level, there is evidence that governments are increasingly being driven in their decisions and policies by obligations to international institutions financing their operation.

Decentralization offers real opportunity for rural people in Mali, Niger and Burkina Faso. In theory it allows local people to have a say in decisions about natural-resource management and planning. Locally elected government bodies (rural councils) have been given responsibility for providing social and economic services (health, water, education, marketing, etc.) as well as for making decisions about the use and planning of natural resources. Rural councils are responsible for drawing up land-use plans defining agricultural, forestry, pastoral and other land uses. They are mandated to provide services in a participatory way, with adequate consultation of local communities and in theory represent those people most affected by the plans.

In practice, however, many challenges remain. High levels of poverty and illiteracy among local populations make it harder to ensure transparency and accountability of leaders, and adequate access to information for the rural population they are meant to represent. Investment in training of new mayors and their elected officers in, for example, accounting, planning and governance, are essential, but run the risk of becoming redundant every 2–4 years as a new council is elected. The high rates of illiteracy and impoverishment also mean that rural councils are often dominated by local elites, such as community leaders, retired civil servants and local businessmen whose priorities are unlikely to match those of the poor rural producers they are meant to represent. Local government is almost entirely dominated by men.

Decentralization is working in very different ways in the three study countries. Mali has progressed furthest in the process of decentralization, and began earliest – in 1992. In Mali, the first municipal elections were held in 1999, followed by a second round of elections in 2004. Niger, by contrast, held its first municipal elections in 2004, having enjoyed five years of political stability since a coup of 1999 and a subsequent peaceful transition to a democratically elected government in the same year. As well as the relative newness of decentralization in Niger, observers consider that, in contrast to the Malian experience, there is no real political will in Niger to transfer powers from a highly centralized national government. In fact, in Niger only the community-level officials are elected and all other layers

of administration up to the central level are appointments. And challenges still remain in Mali, in particular with respect to the need for greater transparency, accountability and communications, the lack of involvement of women and in-migrant communities, and financial needs (Coulibaly and Hilhorst, 2004).

2.7 - Overexposure to inequitable markets

Wage and commodity markets are extremely important in increasing or decreasing vulnerability. These markets provide opportunity for off-land income generation as well as a means of transferring production into savings or assets and accessing food (Swift, 2006). The reliance on natural resources translates for many farmers in the Sahel to a reliance on national and international markets for natural resources (Harragin, 2006).

Most people in Sahel rely on bought food at some point in the year, and so must earn the cash to exchange for it. This is particularly true of the poorest in the agro-pastoral and pastoral zones of Niger who, according to the FEWS NET Livelihood Profiles, obtain over half of their annual food consumption from purchase on the market (50 per cent and 60 per cent for poor pastoral and agro-pastoral households respectively) for which they require access to cash (In Mathys, 2007). Indeed, this awareness has shifted stated goals away from self-sufficiency towards the concept of being "food-secure", and also increased recognition of the need to consider markets much more closely when monitoring food security (e.g. IRAM (2006b), CILSS (2004)). Nevertheless, one can still come across descriptions of producers as *subsistence farmers*, which term implies incorrectly that producers can subsist on their production.

2.7.1 - Inadequate infrastructure

Physical access to markets is extremely poor and therefore very costly. Even in the areas with the highest concentration of people, most rural communities are extremely isolated due to an extremely weak road and rail network.

Box 7 - Extent of road networks

Niger, with a land area of 1.2 million square kilometres, has 3677km of asphalted roads, 4107km of modern and rudimentary earth roads, 6781km of rural roads and 60,000km of tracks. With 18,709km of road in Mali, the density level of the Malian network is among the lowest in West Africa: 1.18km of road for every 100 square kilometres, compared with an ECOWAS average of 3.1. By comparison, France covers 0.55 million square kilometres and has 893,300 km of serviceable roadway.

Lack of access to markets is often cited as a constraint on production and therefore on livelihoods. Poor roads severely constrain the development of market gardening – the lack of vegetables in the market affects nutrition status and health. The lack of paved roads and adequate transport also affects livestock trade in particular. Exports of livestock are mainly in the form of live animals trekked south along livestock corridors to the meat-hungry coastal economies. The cost in terms of mortality during the long trek, not to mention border tariffs and bribes, reduces the profitability of livestock marketing considerably (OECD/ADB 2006 – Niger report).

2.7.2 - Inappropriate market liberalization

At a regional level a liberal market agenda has been driven by the umbrella organization, ECOWAS (the Economic Community of West African States), made up of 16 West African countries. Under ECOWAS, the Sahelian states have pursued the idea of regional food security, abandoning the ideal of achieving national food security. A major objective of ECOWAS is the creation of a common market with a common currency, the elimination of all trade barriers between member states, the adoption of a common external tariff and a common trade policy with third countries. Supported by strong ethnic and familial ties, and pre-established trading routes and partnerships between countries in the Sahel, integration of national markets into ECOWAS is well developed, although the adoption of a common currency remains an elusive goal.

Despite these agreements, some states appear more prepared than others to protect their markets, perhaps reflecting the reality of economic power. Thus, in 2005 when Mali saw the predicted food deficit, it did not formally close its

borders to Niger, but the forms required to transport grain across the border were "unavailable at the border". At the same time, the expected flow of cereals from Nigeria into Niger did not occur. (Many reasons are given for this, including a narrow privatization of grain markets in Nigeria and a Nigerian attempt to protect its chicken producers, leading to increased local demand for grain, and purchases by international organizations within the country.) The result was a peak in cereal prices that put food out of the reach for so many households in Niger.

Nonetheless, the importance of ECOWAS for the land-locked Sahelian countries lies in the weight of larger West African economies such as Nigeria in negotiating trade agreements internationally. The current negotiations with the European Union on Economic Partnership Agreements are a case in point, where decisions made at regional level will have major implications for the Sahelian economies(CTA, 2006). The ECOWAS Agricultural Policy document states that "in the short term, and in particular in the agricultural and industrial sectors, west Africa excludes all form of liberalization as long as support policies affecting the competitiveness of European companies and producers on west African markets persist. Given the timetable adopted in Hong Kong for the elimination of subsidies (2013 for agricultural products), West Africa will reconsider its position in the light of concrete progress achieved in the framework of the resultant reform of the common agricultural policy (CAP)."

However, the adoption of common external tariffs (CETs) in 2006 has not led to the desired changes. A case study by the OECD Sahel and West Africa Club (SWAC/OECD 2007) on the effects of inadequate protection against inequitable markets looked at the example of poultry imports in Senegal (SWAC/OECD, 2007). With the CET set at 5 per cent, Senegal saw a 12-fold increase in its poultry meat imports from 1999 to 2003. In the same period, local production fell by 25 per cent. Farmers lost an estimated FCFA 2 billion over three years, while the government collected FCFA 600 million in duties in 2003. With CET set low, the government raises less than the value of the market to local producers and risks closure of livestock farms, with negative secondary effects on rural livestock breeders as well as on farmers supplying feed and others in the production chain.

How do these macro-level economic policies translate into the growing vulnerability of rural producers in Burkina Faso, Mali and Niger? The producers of the Sahelian countries are actors in global markets but are largely unaware of this, and largely powerless to influence the global situation. As producers, farmers and pastoralists are vulnerable to falls in the international market (often caused by dumping from countries where production is subsidized). Costs of production are no longer covered by the market price of their produce, and farmers are at risk of losing their assets to cover their new debts. As consumers, Sahelian farmers and pastoralists may find costs are lower, but their lost earnings undermine their purchasing power.

As Mousseau (2006) puts it so clearly, "There is actually no reason for regional trade to ensure an adequate supply in a country like Niger: if there is tension in the regional market, the poorest country in the region may not be able to compete with coastal countries that have higher purchasing powers." Furthermore, transport to and around Niger is difficult and costly so there may be no incentive for any food dealer to import food if people cannot afford to pay for it, especially given the higher price due to transport costs. Mousseau continues to make the case that without any regulation mechanism to ensure stability of food prices, and an adequate distribution of food supplies in the region, it is likely that the crisis seen in Niger in 2005 will recur. We may also see a repeat of the tragic absurdity of trucks transporting food aid on the road to Zinder passing trucks carrying grain harvested in Zinder in the other direction.

How has aid affected vulnerable people in the Sahel?

Since independence, development agencies and development programmes have been promising real change in these three incredibly poor countries. Why has this development been unable to break the cycle of poverty and erosion of assets? Evidence shows that the root causes of vulnerability in the Sahel are a dependence on rural livelihoods in the face of limited natural resources and a fast-growing population, the lack of investment in these livelihoods, the pursuit of neo-liberal models of development which do not serve the rural poor, and the inability to rely on traditional sources of support and social and political capital (Batterbury, 1998). In this section we examine the delivery of aid to the Sahel and the role this has played in exacerbating and ameliorating these conditions.

The analysis of aid delivery in this section is divided into four main areas (each with its own subsection below):

- 1 the evolution from structural adjustment to the Poverty Reduction Strategy Framework, and liberalization policies at the macroeconomic and international level
- 2 bilateral agreements and an increasing trend towards general budget support at national level
- 3 project based development approaches
- 4 rapid humanitarian responses.

At a general level, there is a nominal understanding of the nature and causes of vulnerability among the people in different international development and donor agencies. However, the analyses are often simplistic and contain many generalizations that would not hold for many specific circumstances. Personnel in many organizations do not stay in the same country for very long. In five or six years there could be a complete change of staff in all the major development agencies, leading to institutional forgetfulness and a lack of profound understanding of the issues. NGOs are not immune to this lack of learning, as reported in a DEC¹⁷ review: "In spite of rhetoric around learning, NGOs find it very difficult to apply lessons on the ground. The DEC should make it clear that member performance will be assessed in terms of lesson learning, accountability to beneficiaries and impact on the ground."

Also at the general level, it is noteworthy that gender issues seem to be easily glossed over, and mainstreaming of gender may have led to a weakening of awareness. Many descriptions of farming, herding, marketing, conflict and health issues do not contain comments on how these situations affect differently the vulnerability of men and women.

Aid flows to Sahelian countries are notoriously difficult to calculate. Websites from the multilateral donor institutions such as the World Bank and UN as well as the OECD provide overviews of the trends in aid delivery. However, these figures do not always match the figures of the development agencies themselves. Many donors provide funds from a range of departments and budgets and it is not always certain if all sources are included in the sums published.

Table 4 - Data from the OECD and World Bank on top donors per country, 2004/05

Donora	Mali		Burkin	a Faso	Niger	
	Amount (US\$ million)	Percentage of total	Amount (US\$ million)	Percentage of total	Amount (US\$ million)	Percentage of total
Bilateral						
France	112	17	96	17	143	30
Netherlands	65	10	54	10		
Canada	40	6	16	3		
USA	52	8	19	3	25	5
Germany	28	4	34	6	21	4
Japan	55	8			30	6
Switzerland			21	4		
Belgium					12	3
Denmark			41	7		
Multilateral						
IDA	111	17	140	25	98	21
EC	124	19	96	17	84	18
AfDF	49	7	49	9	24	5
Arab agencies	24	4			18	4
IMF					15	3
TOTALS	660	100	566	100	470	100
Total (US\$) per capita	otal (US\$) per capita 43		40		48	

Donors shown are the top ten per country, gross ODA 2004/05 average. Other donors to the region include the West Africa Development Bank, UN agencies, World Food Programme, South Africa.

Table 4 shows the rough distribution of aid and also demonstrates the relatively small sums involved in aid budgets compared to, say, municipal budgets in developed countries. Niger ranks 1st among the world's poorest nations and only 71st in terms of aid received per capita. This is not to say that these sums are not significant. In Burkina Faso, 80 per cent of pubic investment comes from international cooperation and development. The reliance on external aid flows has increased in all three countries following the decline in value of major exports (rice, cotton and uranium), although Mali's gold reserves represent a highly promising export. The total for all aid and debt relief combined for all three study countries for 2004¹⁸ is slightly less than that received by Tanzania alone in the same year. It is hard to see how \$40 per person per year will restore the damaged livelihoods of the people of the Sahel.

Much was made of the debt relief offered Highly Indebted Poorer Countries in 2005. Debt relief announced for Mali in 2005 was equivalent to FCFA40 billion, roughly equivalent to the losses of the Compagnie Malienne de Développement Textile (CMDT) in supporting cotton prices to producers in that single season. In fact debt relief by the end of 2004 was more significant for the study countries, with each of them benefiting from about US\$900 million in estimated total nominal debt service relief. However, this has not translated into improved spending on government services, and part of the reason for this is the conditions of the debt cancellation themselves. Overall, it is hard to avoid the conclusion that the Sahel is not important enough to warrant particular attention or particular funding. This is a mistake, since the predictions of considerable unrest and disaster need not become true if effective development action is taken soon.

3.1 - Multilateral development approaches in the Sahel

Structural adjustment programmes (SAPs) have been implemented by the World Bank and the IMF since the 1950s as conditionality for loans. Initially introduced to reduce fiscal imbalances within the borrower country, they shifted in emphasis in the 1990s towards an agenda of poverty reduction. The focus of SAPs has been to implement free-market

17 DEC commissioned report.

programmes and policy, most noticeably privatization and deregulation of services and the reduction of trade barriers. Structural adjustment policies mandated economic liberalization and limited government intervention in markets.

The aim of the structural adjustment policies was to reduce ineffective, inefficient and often corrupt centralized control of food stocks and internal markets. Enabling African producers to have greater access to world markets would boost local production, and prices for the consumer would be reduced. The role of government in managing food stocks and supplies was limited to emergency situations in times of national scarcity. The fundamental assumption behind the policies was, and remains to this day, that national-level economic growth will drive a reduction in poverty.

The Poverty Reduction Strategy Framework that replaced the SAPs intended to increase national governments' ownership in creating and implementing development policy, and to improve coordination between multiple donors at national level in terms of accounting and prioritizing programmes. Participation and consultation is a condition of donors in the preparation of national PRS papers (PRSPs), which by their nature emphasize poverty reduction, with a particular focus on the Millennium Development Goals. Vulnerable groups are identified in the PRSPs for Mali, Niger and Burkina Faso, but there is little depth in analysis of who is vulnerable and why (Bindraban et al, 2003), nor is it clear that there are real strategies to address vulnerability (Benson and Twigg, 2007). While PRSPs represent a valuable opportunity for individual countries to adapt their own development agenda, and avoid the problems associated with the blanket application of the SAPs, in practice the external influence in PRSPs is evident. Many have argued that the content in terms of using market liberalization and deregulation to drive economic growth and reduce poverty has remained much the same."In theory, economic growth and poverty reduction could, of themselves, reduce the vulnerability of the poor to natural hazards, with no explicit risk reduction strategy required. However, this ignores the facts that vulnerability is both a cause and a symptom of poverty, implying that gains in poverty reduction may be unsustainable if disaster risk is not tackled, and also that the development process can influence vulnerability negatively as well as positively. Win-win solutions for reducing poverty and strengthening hazard resilience therefore need to be identified and pursued." (Benson and Twigg, 2007)

Opening markets to international competition may reduce prices for the consumer but places the producer at great risk unless all markets in a particular commodity are liberalized. The political reality is otherwise. In 2005, the US subsidized its 25,000 cotton producers to a total of \$US4.5 billion (Robinson and Jerbin, 2005). In 2002, direct support to farmers in OECD countries totalled US\$235 billion, almost 30 times the amount provided as agricultural aid to developing countries. The World Bank Country Assistance Strategy for Mali sets out in detail the hugely negative impact of US subsidies to cotton production; if the subsidies were reduced then millions of families in the Sahel would have higher incomes. However, rather than confront a powerful member state, the remedy proposed by the World Bank is to "modernize" the cotton sector in Mali and support the continued privatization of the cotton marketing board. The disconnect between analysis and proposed action is stark. It is hard to see how, in this case, Mali can trade its way out of poverty when opposed by perverse subsidies but this is exactly what the World Bank suggests.

Under the PRS framework, there has been major investment in infrastructure, particularly for education and health. The emphasis on reducing government spending on services, however, means that much of the expansion of facilities has not been matched with an increase in investment in the people required to staff and manage the facilities.

The degree to which consultation and participation is integrated into national rural development strategies is not always evident. For example, the *Code Pastorale* is an exemplary piece of legislation that validates and supports pastoral production systems in the Sahel. However, it is yet to be passed into law and the PRSP for Niger emphasizes the importance of modernizing the pastoral system through the promotion of ranches. This leads one to speculate about the real intention of implementing the *Code Pastorale*, a battle currently being fought by pastoral civil society within Niger.

With regard to the most vulnerable in society, there is no mention of the use of social transfers to respond in the short term to extreme poverty in any of the PRSPs of the study countries. Likewise, there is little reference to the need for policies that specifically address extreme levels of malnutrition. Despite an analysis that shows the degree of reliance on small-scale agriculture for 70–80 per cent of the populations, there is an emphasis on the "modernization of the rural sector". This stresses intensification, mechanization and irrigation of agriculture and ranching, and intensification of livestock production.

Thus a contract worth \$234.6 million from the Millennium Challenge Corporation for the development of the Alatona Irrigation Project in the Niger Delta in Mali, seeks to develop a further 16,000 hectares, and "represents an almost 20 per cent increase in 'drought-proof' agriculture in the Office du Niger area".(MCC press release, 2007) There is little evidence that the drive towards irrigation will adequately take into account the downstream costs of irrigation on livestock production and fisheries, particularly as these costs will be borne by completely different communities and ethnic groups (the pastoral Fulani, and the Bozo and Somono fisherfolk) from those that stand to gain from the development (the Sonrai and Bambara farmers). (Wetlands International 2007)

In theory, the existence of the PRSP should lead to better coordination of donor efforts. However, most donors are able to describe better and worse donor coordination in different places where they have worked, which seem to be independent of the use of the PRSP.

Internal World Bank reviews of progress against the PRSPs have expressed concern that in Africa, economic growth is not being converted into a reduction in poverty. The use of trade as a way to promote growth has been especially strongly criticized in PRS approaches. The politics of international trade and in particular the cost of subsidies paid to farmers in the developed world in terms of lost income for farmers of the poorest countries of the world are under ever-growing scrutiny, as witnessed in the Doha round of the WTO. It is claimed that the revised PRSPs currently in preparation will have a greater focus on poverty and vulnerability. It is hoped that the revised Papers will include an acknowledgement of the emburdenment of so many people and propose novel approaches to assist them to regain viable livelihoods. However, in Mali, the Country Assistance Strategy adopted in 2003 continues to focus on promoting economic growth, and the revised PRSP in Niger (launched in April 2007 but as yet unavailable 19) is also said to maintain this focus.

The reliance of Sahelian governments on international assistance has perverted the direction of accountability within the Sahel. This is exemplified by the weakness in their position with respect to resisting the liberalization agenda and the market inequities that place their own producers in such a vulnerable position with respect to world market trends. The IMF requires economic liberalization for access to loans; Sahelian countries need those loans and have little international political or economic weight to defy the institutions that provide them. West African governments, with enormous pressure from the OECD governments and major multilateral donors and lenders such as the IMF and the World Bank, have "forsaken their responsibility to address the food needs of their citizens, leaving this crucial task to the market" (Mousseau, 2006).

Box 8 - The special case of cotton production

The production of cotton shows an unusually simple case of trade injustice. There are a number of minor considerations concerning the production of cotton in other countries, but the main elements of the story are the subsidies paid to some 35,000 producers in the USA and the effects these have on the world price which deprive several millions of households in West Africa of a significant increase in income.

There are negotiations between the USA and four West African states (Benin, Burkina Faso, Chad and Mali) and a USA Trade Representative is quoted as saying that the USA "is fully committed to a comprehensive, multilateral agreement"

(http://usinfo.gov.us, 26 October 2006). This is a way of saying that the USA is not going to comply with the WTO judgement (and a non-compliance suit) without more delays and use of its bargaining power in other negotiations in the Doha round. It seems a shame, since it would bring such benefits to the Sahel and would cost the USA so little. However, the situation demonstrates the power issues that matter a great deal in international development.

The Cotton Club contains a range of interested actors who combine to work on trade justice in cotton. A Swiss-based NGO, Ideas coordinates activities to promote better understanding of the issues. Oxfam GB works on the issues in West Africa, and Oxfam America supports lobbying in the USA. In West African states there are a number of initiatives aimed at reducing dependence on conventional production practices. These include promoting a move to organic cotton that attracts an important price premium, and the use of genetically engineered cotton that requires no pesticide treatments.

Attempts to privatize parastatal cotton bodies in the region have been largely unsuccessful so far. In Benin, the

privatization is considered to have failed and confusion was created over the importing of fertilizers and pesticides. In Mali, the privatization of the cotton marketing body has been postponed several times and it is not clear who would buy a loss-making business that has important debts.

There may be an instructive example from Zambia, where a bilateral donor and a private enterprise have cooperated to promote cotton production. One distinctive feature of the project is the injection of large funds by the company concerned. It is not obvious where such funding would come from in the Sahelian context, until the world price increases significantly.

3.2 - Bilateral agreements and growing dependence on general budget support

Bilateral donors have uniformly accepted the Poverty Reduction Strategy process supported by the World Bank, and focus their interventions on the priorities as set out in the PRSPs according to their particular areas of interest and development priorities. Thus Danida has four axes of intervention in Burkina Faso:

- 1 economic growth in favour of the poor
- 2 increasing social security and access of the poor to health services, education and water
- 3 broadening opportunities for alternative employment and income generation among the poor, and
- 4 promoting good governance.

In Mali, France has selected five areas from the PRSP in its focus for projects and programmes: education, water, health, agriculture, and governance and decentralization/deconcentration. Although donors state their alignment with the PRS they do not necessarily share the liberalization agenda.

Donors have also agreed to focus on the Millennium Development Goals (MDGs) agreed at the UN Millennium Summit in September 2000 and contained in the Millennium Declaration. The main concern with respect to the focus on the MDGs is that quantity will be favoured over quality. Thus in Niger class sizes of 60 children are reported, which increases the figures for the number of children attending school but raises important questions about the education they can hope to receive and the sustainability of the increases.

The use of the PRSP has been linked to more aid being delivered through various forms of budget support. Budget support allows significant sums to be disbursed at relatively low cost and promotes the host government as the best actor to implement programmes that address poverty and vulnerability in the long term. The approach has increased markedly in the last four years. For example, Burkina Faso has been a test country for general budget support following assessments that show a decent macroeconomic and financial performance linked with chronically low revenue from taxation. As a result, general budgetary assistance has increased from 14 per cent of total international assistance in 2000 to 38 per cent in 2005. This shift has been accompanied by a corresponding decrease in funds available for project and programme support.

However, there are doubts about the ability of national government to deliver the results expected of general budget support. For example, one key text²⁰ suggests that the delivery of outcomes in the medium to long term would be:

- "• The creation of a stable macroeconomic environment, conducive to private investment and economic growth.
- An improvement in the quality of services delivered to the public, particularly in the delivery of pro-poor services and in the targeting of those services to the poor.
- Effective assumption by government of its role as a regulator of private initiative.
- Provision of a framework ensuring justice, law and order and respect for human rights.
- Appropriate public actions to address market failures, including those arising out of gender inequalities."

These outcomes appear absurdly optimistic and it is hard to see how the desperately poor governments acting under aid conditionality could provide, for example, pro-poor services or manage markets. The underlying assumptions are also highly ambitious:

"Specifically, we assume that private agents accumulate assets and/or total factor productivity increases, leading to faster economic growth; the pattern of growth is pro-poor and/or effective redistributive mechanisms are in place; the growth is environmentally sustainable and the incidence of insecurity, injustice and abuse of human rights is reduced."

A number of donors, including France and Denmark, have expressed considerable concern at the fact that it is almost impossible to link general budgetary spending with specific outcomes, particularly those targeting the poorest and most vulnerable. A review of the 2000 Poverty Reduction Strategy of Burkina Faso for Danida (Danida 2002) identified a lack of coordinated mechanisms to implement and link between strategies for poverty reduction and the Burkinabé budget. Continued support to national PRSPs is based upon fiscal responsibility and it is not clear how provision of budget support is being linked to better overall governance, in terms of accountability, decentralization and transparency.

Overall, there are many questions about the effectiveness of budget support, and severe doubts about the possibilities for assessing the approach.

3.3 - Project-based development approaches

There is a general weakness in the design of development interventions in the Sahel, in that the inevitability of drought or poor rains is not an automatic feature of design. Most programmes and projects have aims typical of development initiatives from the last twenty years: production will rise, productivity increase, health will improve, incomes will go up and wellbeing will grow. The possibility that erratic weather will disturb these plans is often considered as a setback in a normal course of events in which things tend to improve and grow.

The term 'food security' has taken the place of 'self-sufficiency' in the design of aid initiatives. However, it is increasingly found to be too narrow an approach and does not focus sufficient attention on access to food as well as other basic material and non-material needs and on issues of nutrition (Maxwell and Frankenberger, 1992). Personnel in development agencies have their own analyses that are often in advance of the formal analysis of their agency. Nutrition includes the importance of quality of food and the needs of different members of the household, in particular the specific needs of infants, children and pregnant women, whereas food security has tended to focus on availability of staples. Nutrition has been raised as an important issue separately from access to food for many years in some arenas, but there are few explicit treatments of nutrition issues in country policy documents. Nutrition appears as a medical issue rather than an issue of access and power. The Early Warning System (SAP²¹) in Niger decided in 2006 to include observations on nutrition in its reports. Likewise, project design is said still to emphasise food production rather than how people can afford to feed themselves and their families. Food security is too easily seen as a set of **technical questions**, but is in fact based on profoundly **political issues**.

Funding schedules applied to project financing indicate a disconnect between the analyses of the difficulties in development in the Sahel and the commitment of resources to address the difficulties. In interviews, the difficulties were described as deep-seated structural issues that would require considerable attention to resolve, but also that funding schedules were of one or two years' duration. Many projects and other initiatives have several phases so the overall duration is longer than the individual grants but nevertheless the duration is usually far too short to bring about the kind of changes that the projects envisage. Furthermore, projects are expected to report tangible results after each year: "A growing tree seedling is not a final result; it is only a promise of one" (Josef Garvi of Eden Foundation, Niger, quoted in Mousseau, 2006).

Within the region, a number of research studies have found that, as field sizes and soil fertility decline, farmers have started to intensify production, using means available to them, including the increase in labour availability. Production is intensifying, with the use of simple techniques such as zaîs (small pits dug by farmers for planting that improve water and nutrient retention) and other small-scale anti-erosion techniques, micro-irrigation, and agroforestry. However, agro-forestry is a long-term commitment, poorly suited to the demands for a quick fix that most donors place on development funding today.

Box 9 - Success in agricultural intensification at the small scale

In the northern plateau in Burkina Faso, by the mid-1980s, researchers were predicting disaster in production, given the degradation of land during the 1950s to 1970s as farmers were cultivating land extensively and with very little investment in protecting the soil from erosion and exhaustion. Development projects concerned with soil erosion focused on huge mechanical fixes, with miles of contour-bunding established using machines that crossed livestock

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transhumance corridors and took little account of local farmers' needs or capacities. Unsurprisingly, the short-term gains of such projects were soon lost as maintenance proved unrealistic.

Since the 1980s, with long-term support from projects and the introduction of more appropriate soil-erosion control, water in wells has been seen to increase by several metres. People are investing in new wells and irrigating small vegetable gardens, and the perception among the people concerned is a decline in poverty. They have cash to invest in livestock, which helps in providing manure to improve soil fertility as well as providing an alternative source of cash when required as opposed to selling their crop. Farmers expelled from the Côte d'Ivoire are returning to the plateau and investing in rehabilitating degraded land that had previously been abandoned.

In Burkina Faso this rehabilitation effort has largely been limited to areas of project intervention. In Niger, farmers have spontaneously been "regreening" their fields, with over 3 million hectares of parkland rehabilitated, supported in places by projects that promote natural regeneration and planting of Baobab and Acacia Faidherbia parkland. In Tahoua, investments in digging "Tassa" (contour-dug bunds) have demonstrated substantial increases over the last six y ears. Systematic construction of very simple dams in valleys has allowed small-scale irrigation and enabled a second crop using the residual moisture due to the controlled flow.

As a result, farmers say "we are producing more food and better, but we have many more mouths to feed". In three project areas, during the food crisis of 2005, these communities experienced food shortages but considered themselves less vulnerable than people who had not made the same investments. They could exploit the leaves of trees and bushes on their land, and they could sell wood to raise funds.

Sources: Mousseau (2006), Reij et al. 2005), Mortimore et al. (2001), Kees Vogt pers comm.

NGO-led projects have spearheaded the most innovative approaches to integrating participation in local development. However, the development paradigm is still largely based upon an assumption that the development agencies can "bring a solution to a problem" and deliver change in very short periods of time. The rapid replacement of one approach with another implies an inexhaustible optimism that solutions can be found. There remains insufficient participation of local people and little use made of traditional knowledge (notwithstanding the lip service paid to "participation"). Farmers and pastoralists are acutely aware of the problems they face but are rarely included in formulating solutions because of the uncertainty that this represents for donors and development agencies in the short term.

3.4 - Humanitarian responses in the Sahel

Food production in sub-Saharan Africa has followed two major trends since independence in the 1960s. In terms of per capita production, there have been dramatic reductions from the Sahelian drought in the early 1970s until the mid-1980s. Since then there have been slow increases in per capita production. At the time of the major climatic shocks of 1984, 1990 and 2000, the per capita production was about 20 per cent lower than in 1974. The gains from the early 1980s are mostly due to increased production not increased productivity. Over the same period, food aid (in tonnes delivered) has increased significantly, with peaks at the times of climatic shocks. Emergency relief operations as a share of total food aid doubled from 20 per cent to 45 per cent between 1989 and 1999 (OECD, 2005).

The Sahel is a major recipient of USAID Title II assistance. Under Title II, the US Government allocates a budget of US\$1.2 billion annually to purchase surplus grain for food relief, with the overt objective of creating export markets overseas. This food may be distributed in kind or "monetized", sold on local markets in exchange for cash to be spent on activities related to emergency relief and recovery. The process is hugely costly and inefficient once transporting and marketing is taken into account. Further, the risks of flooding local markets, depressing the price of grain and thereby undermining local producers' livelihoods is well known.

USAID has put in place stringent procedures for organizations that apply for Title II grain that are lengthy and complex to mitigate for these negative effects. However, even USAID is aware that its "do no harm" policy is hard to put into practice, and some agencies, such as CARE International, are planning to shift entirely to local sourcing of food relief, on ideological as well as practical grounds. Local sourcing is itself risky in that it can lead to peaks in food prices, taking food beyond reach of the poorest and most vulnerable consumers.

The humanitarian response in Niger in 2005 is thought to have saved more lives than that in 1984 in Ethiopia, largely through the availability of new technologies, specifically high-energy biscuits (HEBs) that can be easily distributed in the most remote areas and given to mothers to take and feed their children at home (Bradol, 2006). However, the strength of the antagonism between long-term development workers and humanitarian workers in the aftermath of the Niger crisis is shocking. Development experts are concerned about how humanitarian responses, which are by definition designed to be implemented as rapidly as possible and over a short time, undermine long-term development efforts and weak local and national government institutions.

In their haste to respond to a disaster, humanitarian efforts in emergency situations tend to bypass local government structures, providing relief directly to local people and paying scant regard to local or national level representatives, undermining the role that these institutions play outside emergencies. Bypassing locally accountable institutions in favour of a more rapid impact also allows for enterprising individuals to "hijack" the process to their own benefit, and reduces the confidence of local communities in the capacity of the structures that are meant to represent them. Taking time to invest and strengthen existing local institutions may take longer but will act to reduce vulnerability in the longer term.

The role of humanitarian assistance is generally to save lives and help populations get back to where they were before disaster struck. This is less clear in slow-onset disasters such as those seen in the Sahel, where it is generally considered insufficient to leave people as exposed to risk as they were when the shock occurred. For their part, humanitarian organizations felt that long-term development failed to recognize the scale and severity of the crisis facing Niger and Burkina Faso and were negligent in allowing levels of acute malnutrition to become so high without raising international concern. The "slowly, slowly" approach to participatory development, it is argued, was practically immoral in accepting what were by international standards intolerable levels of acute malnutrition and potential mortality among children in particular.

Although this divide has been seen as a barrier to good development work for years, and has been the focus of some discussion, it remains unresolved. The divide is reinforced by separate budget and administrative systems but more importantly by different cultures and strong personal identification with one side or the other. Most people involved see themselves as either development experts or humanitarian experts. The examples of attempts to marry the two approaches are not well known and observers express scepticism that the experiments in social-transfer work in Ethiopia, Malawi or Zambia could be made to work in the Sahel. Nevertheless, there is an important realization that the two approaches need to be made to work together at the same time. This realization is found principally among NGO personnel, and is not yet widespread.

There is an awareness that the model of moving from development work to emergency methods and back to development work over time, as a crisis arrives and is overcome, has not been seen to work and is no longer appropriate to the situation of vulnerable people in the Sahel. The Livelihoods Framework may offer opportunities for common work between humanitarian and development institutions and between these departments within institutions. The divisions between humanitarian and development work are very deep and very serious, and must not be underestimated.

Essentially, it is necessary to accept that the basis for any planning in the Sahel is that drought *will* happen at some stage of any initiative, during planning, implementation and after completion. It follows that projects and programmes should aim to reduce vulnerability, and reduce the impact of drought, instead of more conventional development objectives.

Chapter 4

Conclusions and recommendations

4.1 - Conclusions

4.1.1 - The current situation

Continuous decline in assets has increased vulnerability

The populations of the Sahel have suffered continued shocks and stress to their livelihoods and are now dangerously vulnerable. Material goods have been given up to obtain food, and financial debts have been incurred. The ability to survive stress and shocks for some populations is now so low that new measures of support are required.

Pastoralism

Mobile livestock production is a major feature of production in the Sahel, and demonstrates the flexibility and opportunism that is crucial in managing the uncertain environment. However, the essential element of mobility is being dangerously restricted and the production method is under great threat. The threats come from the expansion of arable farming and the loss of access to dry-season grazing, but mostly from a lack of understanding and a lack of sympathy for the pastoral means of production.

Most commonly proposed approaches to livestock rearing do not address the issues facing pastoralism – the loss of access to resources, and the need to improve access to services while maintaining mobility. Instead, they focus on methods of animal production that are not appropriate in the Sahelian context, where mobility is essential for success.

Successes

There are some important success stories in the Sahel, and despite the largely negative tone of the findings of this study there are genuine reasons for hope. Civil society organizations across the Sahel are growing in status and importance and are increasingly being heard in national and international debates (e.g. Sidibe et al, 2007). Agroforestry and soil-conservation techniques that are labour- rather than cash-intensive are being adopted and adapted by local communities once their effectiveness has become clear. A "regreening" has been described for millions of hectares in Niger and on the central plateau in Burkina Faso. The successes however are built on long-term commitment, good communications, dialogue, flexibility and trust. Where development agencies are able to listen, and design their interventions on the basis of local understanding and analysis, there have been sustainable changes in production methods, and more secure livelihoods are developing.

4.1.2 - Causes of vulnerability

Dependence on natural resources

The populations in Sahelian countries are predominantly rural, and their livelihoods depend on natural resources. Rural production systems, whether cultivation or pastoralism, are well adapted to the erratic Sahelian climate, but increasing population pressure and increasing frequency of drought is placing ever greater strain on these systems. Potential for Intensification of production is limited in a drought-prone environment and **current development models** focus on costly inputs that carry high risks for poor farmers and herders.

Depletion of asset base

With increasing pressure on productive assets, vulnerable people are forced to rely on unsustainable coping strategies. Coping strategies among the most vulnerable rural households are oversubscribed. Economic migration is bringing fewer returns, and while it reduces the number of mouths a household needs to feed in times of stress it carries significant

costs and risks. Female-headed households rarely have this option and must rely on poorly paid work that reduces production in their own fields. Wild foods for household consumption or for sale are increasingly unavailable due to neglect of common property resources. The growing **landless and stockless poor** have few if any assets, and alternative sources of income are extremely limited. These households are highly vulnerable in times of drought.

Dismal access to services

Citizens of Sahel countries receive very poor government services. Health and education provision is among the worst in the world, and health, literacy and education statistics reveal scandalous deprivation. Part of the reason for the low level of services is the poverty of national budgets, although conditionalities of donors (such as the privatization of services) have also resulted in reduced access.

Restricted markets

International commercial procedures tend to pressurize Sahelian states to liberalize their markets, although the management of markets within the countries is often subject to informal forms of monopoly or restricted trading opportunities. Internationally, the Sahelian countries are very weak and suffer from unfair practices. While they are unable to force the abandonment of subsidies to production in other countries, they are also prevented from protecting their own producers and imposing measures that would increase their food sovereignty. Poor infrastructure restricts the functioning of internal markets and depresses the earning potential of many producers who cannot access markets easily.

4.1.3 - Challenges

The needs in the Sahel are not matched by the support offered

The landlocked countries of the Sahel are among the very poorest in the world. They have little to offer of strategic importance, as a source of raw material or as a market for exported goods. The total amounts of aid and debt relief are tiny compared with the needs.

Developing economic alternatives

All analyses point to the lack of economic alternatives as part of the fundamental problem for Sahel populations. Economic growth may bring relief in the longer term but there is little evidence that growth alone will help the vulnerable in the short to medium term. Welfare programmes are necessary to support the most vulnerable in the short term, and to help them achieve viable livelihoods.

Drought happens

Droughts happen and will continue to happen. The nature, extent, location and timing of droughts will vary, but there is no doubt that they will be a feature of life in the Sahel for a long time to come. Climate change is likely to make droughts and rainfall patterns more extreme and variable. Current planning methods do not deal with drought as a necessary element of the situation of the Sahel, but as an unfortunate event that causes a setback in normal progress.

Decentralization is weak

The decentralization of government functions from central to local structures is underway in all the Sahelian countries although the models are different. Currently the processes are not providing new means for the populations to access services or make claims on their governments.

Analyses are ineffective

Many analyses of the situation of vulnerable populations in the Sahel do not examine the root causes and tend to

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divide causes into immediate and structural issues, allowing the structural issues to be largely ignored. The situations of vulnerable people in the Sahel are complex and nuanced. Vulnerability can be influenced by gender, ethnic group and generation issues, and by contemporary and historical social processes that are often not analysed and not explained. The short-term nature of many contracts in international development makes it difficult for staff members to develop profound and detailed understanding of the situation, and the management systems in development agencies do not demand such understanding.

Too much aid is inefficient

Many aid initiatives are based on the shallow analyses mentioned above and are almost always driven by externally imposed ideas of development. Notwithstanding the lip service paid to "participation", the majority of aid organizations develop their programmes on the basis of their own priorities and their own visions. In most cases there is an external analysis of what local people lack, and plans are designed to address this lack.

Use programme support to enhance budget support

Budget support restores the centrality of national governments in the provision of services to the people. However, it does not represent new money; rather, it is a new way of spending the old money and expectations appear unrealistic. At the same time, there are no adequate systems in place to evaluate how budget support is being spent and targeted towards the poorest and most vulnerable. For budget support to work, it requires much greater commitment on the part of donors in terms of magnitude, innovation, sustainability and systemic monitoring.

Incompatibility of humanitarian aid and long-term development

- The divide between emergency and development work is a major barrier to successful development initiatives in the Sahel. This applies to administrative and financial systems, and more importantly also to the personal approach and understanding of personnel in the two disciplines.
- The livelihoods framework is a powerful meeting point for both approaches, and can offer improved understanding of the root causes of vulnerability and effective means of measuring and monitoring changes.
- It will be necessary to overcome the divides between the disciplines, as the situation in the Sahel requires a new integrated approach that allows welfare and development to work alongside each other in flexible and variable configurations.

Population trends

Rapid population growth is putting additional pressure on livelihoods, but it is possible that higher numbers of people will be necessary to implement changes in production methods. Rapid urbanization means that people are likely to be entering new forms of vulnerability in towns and cities. Development support will need to change to address urban issues in the near future.

Looking for a quick fix for a long-term issue

- Programme and project support is often short term, and designed and managed in ways that are not sufficiently flexible to cope with the uncertainty of the Sahelian situation. There is a tendency to apply simplistic attempts to increase productivity that are not appropriate to the high-risk environment of the Sahel.
- The need to develop a long-term approach is made obvious by the observations and the need to invent new ways of working in the future. The old approaches are not going to be appropriate in the future. Vulnerability will remain for a long time and cannot be reduced by quick fixes, and has not been reduced by the repeated use of food aid and other emergency measures.
- The sums of money used in emergency work are unnecessarily huge and much more impact can be achieved by the delivery of regular smaller sums. However, this will require a change of approach that values local ownership and accepts the need for real long-term commitment.

4.2 - Recommendations

These recommendations call for a different approach to how vulnerability is analysed and incorporated into development, as well how development and humanitarian responses are planned, financed and monitored. As such they apply to governments, donors and development agencies alike. No one group can take this forward alone. For example, NGOs cannot change the way they work unless donors are prepared to change financing mechanisms, and many NGOs will not change the way they work unless donors require it of them.

A new Sahel strategy

The following recommendations go together. The commitment to understand the situation, to invest for the long term, to expect droughts, to be responsive and to provide a range of supporting initiatives are all linked to by the need to respond to the new situation in the Sahel. A new strategy for the Sahel is required, and a piecemeal approach will be ineffective.

- Negotiate with decision-makers' head offices and regional centres for new criteria for assessing and designing interventions that address the need for new approaches.
- Insist that new country strategy documents or policy statements address the issues of chronic vulnerability.

Increase long-term assistance; stay the course

All these recommendations require greater and longer-term commitment, and this requires a willingness at high levels to attempt new approaches. Meanwhile, long-term commitment can be generated by commitment to a consistent series of short-term engagements. All interventions should be over at least ten years, even if this has to be made up of many different steps and phases.

- A new strategy for the Sahel will require significant increases in funding levels.
- Lobby for longer-term budgets.
- Create funding baskets (pools) so that funding can be extended beyond individual grants.
- Produce project proposals with long durations.
- Support the climate of opinion that accepts that significant changes take ten years to achieve.
- Link short-term budgets into a sequence of funding that allows longer periods of support.
- Manage hand-over mechanisms so that new staff members can support projects that are longer than their contracts.

Accept that the situation has changed

The people of the Sahel are more vulnerable now than at any time. The type of support they require and deserve is different from most common development approaches. It is necessary for development organizations to look at innovative ways of supporting communities that are extremely vulnerable.

- Set aside a proportion of budgets for new ways of working.
- Form a working group on vulnerability to review assessments of vulnerability in the region.
- Insist that the situation analyses in the revised PRSPs contain understanding of the dire situation of many more vulnerable households, and that measures will be required to address their vulnerability.

Understand the detail

Invest in a deeper understanding of the situation. This requires effective methods of participation and a genuine desire to learn. It also requires an acceptance that development is essentially a political process, and that politics have to be explicitly examined. Staff members must also have a commitment to pass on and share learning to counter and replace the current culture of forgetting and reinvention. Local circumstances should be used to define policy and strategy to reduce the tendency to impose thinking from outside.

- Commission local studies and demand to hear the voice of the most vulnerable in local analyses.
- Arrange for project work to include continuous learning and reviews of understanding of the local context.
- Insist on analyses that are detailed and nuanced do not accept simplistic reviews that contain vague generalisations about ethnicity, gender or politics.

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- Start analyses from the realities of the local situation and not from institutional directives, strategies and policies.
- Make arrangements for staff overlap and invest in briefing and induction in-country.

Plan for drought

All development initiatives should be based on the certainty that drought will occur during the initiative, and plans must include methods for reducing the impact of drought and building resources to increase resilience. This awareness of the hazards and acceptance of the need to plan for drought – and susceptibility to drought – is a key element for reducing vulnerability. Development work should support methods for improving water management and social transfers so that populations are less susceptible to droughts when they occur (DFID, 2005). This will require building up the resources of many who do not currently have the resources to manage a viable livelihood. A mixture of methods will be necessary and should be explored.

Plan to improve capacity to resist and recover

The use of emergency approaches in discrete episodes will need to be replaced by continuous welfare and work to reduce disaster risk. The rebuilding of livelihood assets needs to be adjusted according to the severity of the situation, with more support (in terms of amounts of support and the numbers of recipients) provided in bad years and less in better years. Relief aid should no longer be provided in isolated short-term events but should be linked to ongoing work and should be prolonged to improve the possibilities of recipients establishing viable livelihoods.

Build on successes

Incorporate learning from studies and long-term development projects that are showing signs of success into strategic planning. There are important examples in the region, and there is useful learning that can be drawn from these experiences.

- Develop and finance forums (e.g. workshops in the area of projects and in the capital city) to share successful interventions.
- Fund the production of simple reports.
- Arrange exchange visits (for local people and development agency staff) to sites of relative success.
- Develop a code for successful community development.
- Study and share results of experiments in other parts of dryland Africa (e.g. Ethiopia, Zambia, Malawi).

Believe in flexibility

Although lip service is paid to flexibility, most development management systems are used in narrow and inflexible ways. Interventions should include methods for including change and an expectation that changes will be necessary. Flexibility should be included in project and programme proposals, with uncertainty being expressed as a positive element of management. The acceptance of real flexibility has to be at high management levels but must be driven by the practitioners in country-level initiatives.

- Introduce reviews that welcome changes to programme activities coupled with the longer-term commitment described above.
- Introduce management methods that include an expectation of changes; this might include open sections of planning which can be filled in only after some time in operation.
- Where Log Frames are required, insist that the entire framework can be modified in the light of new learning and changes in the situation.
- Insist that programme and project plans contain "break points" where the initiative can be reassessed and redirected.
- Do not accept detailed plans that presume knowledge of the future that cannot be assured.

Support pastoralism

The role of pastoralism is important for the future of production in the Sahel, but is under serious threat. Pastoral means of production will not achieve their potential unless there are significant changes in support from donors and governments. Where mobility is possible it seems that the flexible use of natural resources offers the best chances of successful production. It is necessary to reassess the contribution of pastoralism and introduce new approaches that will make the most of its potential.

- Form a pastoral working group to support study, funding and lobbying.
- Create a funding basket for pastoral work.
- Commission national and local workshops on the future of pastoralism, to include NGOs, donors and government departments.
- Insist that pastoralism is included in the revisions of the PRSPs.
- Support the participation of pastoral groups in consultation on the PRS.

Integrate humanitarian and development work

The reduction of vulnerability requires continued flexible support to different parts of the populations, and this requires the skills and techniques of both development disciplines. Development agencies should experiment with small projects that oblige a joint analysis and joint working of personnel from humanitarian and development sections. The attempts at social transfer in other parts of dryland Africa should be examined, and new models developed for the situation of the Sahel.

- Set aside a budget for experimental work in joint emergency and development work.
- Build teams that contain personnel from both emergency and development backgrounds.
- Allow the teams to explore new ways of building relationships with communities that allow different types of support, for example:
- examine with communities new methods of providing different types of support to different groups within the same community
- examine with communities how support to different sectors can be modified and adjusted as situations change.
- Monitor in detail how the experiments work, and develop new, more effective methods.
- Share results and findings through working groups or workshops.

Integrate different approaches to aid delivery

Project support should be developed alongside particular budget-support initiatives, so that the two approaches can inform each other. Project work will provide donors with ground- level observations of the reality of work in the sector, and serve to provide insight on the effectiveness of the budget support in the same sector.

- Form a donor and government study group to examine how budget support can be improved.
- Carry out a trial of budget support and other aid approaches by focusing on a particular sector and combining and comparing results from the different delivery methods.
- Assess how budget support can be successfully combined with other methods.
- Examine how budget support is compatible with the Paris Declaration.

Support decentralization and civil society

The landlocked countries of the Sahel are committed to a process of decentralization. Donors and development agencies need to support this process. Decentralized municipalities and councils require support in terms of finances and skills and capacities if they are to be expected to understand the issues faced by their constituents and respond. Even if they find it expedient to bypass these institutions during crises, humanitarian responses must engage with these nascent institutions if they are to be able to respond to the needs of their constituents and reduce vulnerability in the long term. Support must be extended towards civil society responsible for holding elected officials to account.

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