

# PREPARE TO LIVE

Strengthening the resilience of  
communities to manage food  
insecurity in the Sahel region



**tearfund**

## **Prepare to live**

### **Strengthening the resilience of communities to manage food insecurity in the Sahel region**

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#### **Acknowledgements**

We would like to acknowledge the contributions of all who took part in developing this report, including Tearfund's partners, other NGOs, government and donor officials interviewed.

In particular: Abdoul-Azize Sarki and Siman Assoumane Issa from UEEP and Jeff Woodke from JEMED in Niger; Ardiouma Hema and Dieudonné Kafando from CREDO and Dieudonne Bargo from ODE in Burkina Faso. Thanks also to those who commented on drafts of the report.

Tearfund is an evangelical Christian relief and development agency working with local partners to bring help and hope to communities in need around the world.

Tearfund is a founding member of the Sahel Working Group, a network of British NGOs, 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.

# Prepare to live

## Strengthening the resilience of communities to manage food insecurity in the Sahel region

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## Acronyms and abbreviations

ALNAP	Active Learning Network for Active Participation
AEAD	Association Evangélique d'Appui au Développement (Evangelical Association of Support and Development), Tearfund's partner in Burkina Faso
BOND	British Overseas NGOs for Development
CREDO	Organisation Chrétienne de Secours et de Développement (Christian Relief and Development Organisation), Tearfund's partner in Burkina Faso
CILSS	Comité Inter-Etats pour la Lutte contre la Sécheresse au Sahel (Permanent Interstate Committee for Drought Control in the Sahel)
DEC	Disaster Emergencies Committee: a structure for consolidated public appeals by participating NGOs for disaster relief assistance in the United Kingdom.
DFID	Department for International Development, Government of the United Kingdom and Northern Ireland.
DRR	Disaster Risk Reduction
EIA	Environmental Impact Assessment
EC	European Community
FewsNet	Famine Early Warning Network, US Agency for International Development
ISDR	International Strategy for Disaster Reduction
JEMED	Jeunesse En Mission Entraide et Développement (Youth With a Mission for Aid and Development), Tearfund's partner in Niger
MT	Metric tonne
NGO	Non-governmental organisation
OCHA	Office for the Coordination of Humanitarian Affairs (UN)
ODE	Office de Développement des Eglises Evangélique (The Development Office of Evangelical Churches), Tearfund's partner in Burkina Faso
PRSP	Poverty Reduction Strategy Paper
ReliefWeb	UN managed information web site covering humanitarian activities, information and resources.
SAP	System d'Alerte Précoce (Early Warning System)
UEEPN	Union des Églises Évangéliques Protestantes du Niger (Union of Protestant Churches in Niger), Tearfund's partner in Niger
UEMOA	Union Économique et Monétaire Ouest Africaine (West African Economic and Monetary Union)
UN	United Nations
UNDP	United Nations Development Programme
US	United States
USAID	United States Agency for International Development

## Foreword

Since its establishment in 1968, Tearfund has gained considerable experience in disaster management. Through programmes implemented indirectly through national partners and directly by its Disaster Management Team, Tearfund has responded in recent years to a variety of disasters including food crises in Southern, East and West Africa; Hurricane Mitch; the Orissa cyclone; the Gujarat earthquake; flooding in Bangladesh and Mozambique; drought in Afghanistan; and the tsunami disaster in Asia.

Tearfund has developed closer links between its emergency and development programming through the adoption of an integrated approach to disaster management. The primary strategy of vulnerability reduction is to increase the capacity of local communities and organisations to prevent, prepare for and respond to the impact of disasters. It is a strategy that combines changes at community level with changes to national and international policies and practices.

Tearfund recognises that preventing disasters depends in part upon our ability to build just and equitable social, economic and political structures and processes, and affirms the moral duty of all people (particularly the non-poor) to accept and fulfil their responsibilities to uphold the rights and entitlements of the poorer members of our society.

In the Sahel region, Tearfund has been supporting relief, development and capacity building through local partner organisations for 25 years.

For further recommendations on disaster risk reduction see Tearfund's reports *Institutional donor progress with mainstreaming disaster risk reduction* and *Turning Practice into Policy*.

*Marcus Oxley, Disaster Management Director, Tearfund*

**TABLE 1**  
Integrating DRR  
into development,  
relief and recovery

Challenges	Proposed solutions
Other urgent priorities and rapid response to disasters leave limited time for DRR.	<p>Integrate DRR into the development project cycle, including specific DRR outputs, activities and indicators in logical frameworks, implementation, monitoring and evaluation.</p> <p>Before a disaster, identify possible DRR activities that can be integrated into relief and recovery and build capacity to manage disasters.</p> <p>Make integrated DRR a requirement in funding proposals and assess how ongoing activities are likely to reduce the impact of future disasters.</p>
Lack of awareness of the impact of disasters and ways to reduce future risk.	<p>Disseminate reporting on the impact of disasters and the ways that DRR can reinforce development and reduce spending on disaster response.</p> <p>Identify, analyse and address emerging risks – eg a deteriorating drought situation – in project design and implementation with community-based risk assessments. See Tearfund's <i>Participatory Assessment of Disaster Risk Tool</i> (Venton and Hansford) and the Disaster Risk Review table in Section 2.1.</p> <p>Develop a catalogue of options and train staff on practical and successful ways that DRR can be integrated into development, relief and recovery – eg through UN OCHA and the Humanitarian Information Centre during disasters.</p>
DRR is seen as the responsibility of disaster managers in emergency units.	Assign or second DRR advisers to build capacity and support the incorporation of DRR into development projects and staff's job descriptions, including training.
Difficulty in linking DRR and development outcomes.	<p>Ensure that projects have the flexibility to respond to hazards during the course of a development project.</p> <p>Link project activities to existing community risk management efforts and include communities in the design of development projects to ensure that they address vulnerability appropriately.</p> <p>Ensure that funding allows relief and recovery interventions to reduce future vulnerability rather than simply returning to pre-disaster conditions.</p>

## Executive summary

Communities in the Sahel region (Niger, Burkina Faso and Mali) in West Africa are faced with hazards like drought year after year. Those that are chronically poor, in debt and lacking sufficient assets, struggle to cope effectively with these shocks. Although it has long been recognised that communities, especially in Niger, face food crises roughly every three years, people are still chronically food insecure. The added hazards of widely variable environmental conditions mean that people and their livelihoods are even more vulnerable.

This report (commissioned by Tearfund and its Sahelian civil society partners) identifies disaster risk reduction (DRR) approaches to build on the resilience of communities and their diversified strategies to manage food insecurity in the Sahel. It focuses on short to medium term (harvest-to-harvest) hazard threats to communities in terms of food insecurity. It also analyses the relevant policies and practices of donors, governments and NGOs in Burkina Faso and Niger (the findings may be relevant to other countries in the Sahel like Mali). Research to inform the report was carried out through a literature review and interviews with communities, donors, governments, NGOs and other institutions in Burkina Faso, Niger, the UK and US from March to April 2007.

The report highlights ways to prevent food crises, reduce their impact and ensure that communities are prepared. It also promotes communities' understanding of food security and their strategies to manage food insecurity. Integrating these approaches into development, relief and recovery policy and practice will improve the effectiveness and sustainability of future development efforts. Tearfund hopes that the principles and practical suggestions in the report will provoke discussion and action by communities, NGOs, governments and donors in the Sahel and other regions to better tackle food insecurity together.

### Key findings and recommendations for Niger and Burkina Faso

#### 1 Strengthening community resilience to manage food insecurity with DRR

Integration of DRR into development, relief and recovery policy and practice by donors, governments and NGOs is limited. While some efforts in DRR are underway in Niger and expected in Burkina Faso, an immediate challenge is the lack of practical tools and knowledge with which to incorporate DRR into project implementation (Section 2.1). Opportunities to integrate DRR into government and donor policies and programmes include the review of PRSPs, donor strategies and programmes like the EC Country Strategy Papers.

#### RECOMMENDATIONS for donors, govern- ments and NGOs

Donors, governments and NGOs should:

- Integrate DRR into development, relief and recovery policy and practice, building on previous efforts and lessons learned, especially by NGOs and UNDP.

#### RECOMMENDATIONS for NGOs

NGOs and other key actors (eg UNDP, ISDR and the World Bank) should:

- Organise an annual DRR roundtable in each country to share knowledge, research and practice (drawing on local experiences) among donor, government and NGO participants.
- Produce practical 'hands-on' guides on DRR to raise awareness and train development policy makers and practitioners for specific contexts in the Sahel region.

## 2 Being able to feed one's family today and tomorrow

The focus on cereal production as the prime indicator of food security in the Sahel misses the true nature of how food security is achieved. Shifting the focus of food security to how women (as well as men) feed their families today and in the future, especially during difficult times, will lead to more accurate assessments and management of food insecure conditions.

It also more closely matches the internationally accepted definition of food security as *adequate access, availability, utilisation, access to safe water, sustainability and an absence of shocks* (Section 2.2).

### RECOMMENDATIONS for donors and governments

Donors and governments should:

- Use the broader definition of food security which more closely aligns with the communities' definition: *access, availability, utilisation and absence of shocks* in policy and practice, including risk assessments and management of food insecurity.

### RECOMMENDATIONS for NGOs

NGOs should:

- Provide testimonials and case studies on the central role which women play alongside men in assuring and improving the food security of a family.
- Pilot projects which better target assistance to women to support their role in assuring food security.

## 3 Improving mechanisms and building on community strategies to better manage food insecurity

Food insecurity is fundamentally defined by communities as a lack of assets, whether funds, goods, human capacities or connections with which to secure adequate food. Increasing assets and credit is used to address short term food insecurity in Niger and Burkina Faso.

Communities use the strategies of diversification, intensification of natural resources and opportunity seeking to reduce the risk of food insecurity. These strategies change over time and location and should be monitored and well understood (Section 2.3).

The current official systems for responding to acute food insecurity are limited in scope and only partially correspond to communities' own strategies to manage acute food insecurity (Section 2.4):

- The present reliance on food stocks and food aid to respond to food insecurity does not effectively address or mitigate against the impact of acute food shortages and is not sustainable.
- The weak participation of the food insecure in official early warning and food aid structures means that they do not meet minimum standards for humanitarian assistance.

These efforts should link with ongoing improvements in early warning systems in Niger and Burkina Faso (eg by FewNet, CILSS, FAO, WFP and CARE Niger).

**RECOMMENDATIONS  
for donors and  
governments**

Governments and donors (particularly the EC, US, UNDP country programmes and the Bureau for Crisis Prevention and Recovery) should move towards a more diversified approach to managing harvest-to-harvest food insecurity, eg

- Transfer assets to individuals, families and communities threatened by acute food insecurity before conditions reach critical levels and after crises to facilitate recovery – eg transfers of food, cash, commodities, livestock, training, improved information flows and connections.
- Ensure a greater participation of communities in risk assessments and decision making about asset transfers before conditions reach critical levels.
- Ensure more effective commercial sector participation in supplying food to areas affected by shortages – eg reduction in tariffs and road taxes; strengthening linkages between commercial suppliers and early warning systems, food crisis response planning, and cooperatives and cereal banks in specific communities or regions.
- Decentralise capacities, resources and responsibilities for relief and early warning systems that are participative and focus on the potential disaster victim.

**RECOMMENDATIONS  
for NGOs**

NGOs should support governments and donors in the recommendations above by:

- Piloting new and different ways to respond to food crises as they arise – eg targeted cash transfers, vouchers for agricultural inputs, and training to improve short term income opportunities.
- Documenting options to manage food insecurity, including recent experiences with cash payments in Tanout, Niger, and cash for work.
- Increasing the involvement of communities in decision making on how to address food insecurity, through examples of how participation has improved food security, and raising awareness of Sphere standards and monitoring and evaluation.

#### 4 Supporting newly-emergent landless labourers

Newly-emergent landless labourers in Niger face significant challenges to immediate and long term food security. With a reliance on seasonal agricultural income to purchase food, the newly-emergent group is particularly vulnerable to poor harvests and changing market conditions for commercial crops.

Local civil society organisations, especially faith-based organisations, are well suited to supporting these individuals and families at the local level (Section 2.3.2).

**RECOMMENDATIONS  
for NGOs**

NGOs in Niger, especially faith-based organisations, should:

- Support targeted individuals and families most at risk of food insecurity, due to the emergence of a landless labourer class. For example, with education and skills training by which the vulnerability of this group can be reduced over the long term.



# 1 Introduction

## 1.1 The current situation in the Sahel region

At the halfway point for reaching the Millennium Development Goals by 2015, many communities are still chronically food insecure in the Sahel, the world's poorest region, in West Africa. It has long been recognised that communities in Niger face food crises roughly every three years, but these slow onset disasters seem to be building up more frequently and intensely in the Sahel.

This report promotes disaster risk reduction (DRR) to build on the resilience of communities and their diversified strategies to manage food insecurity. It highlights examples of DRR approaches to encourage donors, governments and NGOs<sup>1</sup> in the Sahel to prevent food crises, reduce their impact and prepare communities in advance. Integrating these approaches into development, relief and recovery policy and practice will improve the effectiveness and sustainability of future development efforts.

This report identifies:

- the extent to which DRR is integrated into development, relief and recovery by donors, governments and NGOs in Niger and Burkina Faso
- how communities understand food security and manage food insecurity
- the policy constraints that limit the success of these strategies
- how donors, governments, NGOs and communities can address food insecurity more successfully.

The focus is on the impact on communities in terms of food insecurity and the policies and practices of donors, governments and NGOs. The timeframe is short to medium term (harvest-to-harvest) hazard threats. This includes pastoralists who are dependent on pasture and purchasing grain for consumption, both of which are currently largely dependent on harvest-to-harvest conditions in the Sahel.

## 1.2 Methodology

To inform this report, research was carried out by Charles Kelly from March to April 2007, including:

- a literature review, drawing on materials found on the web, in books, field reports and documents collected through direct contact with those involved in food security or DRR efforts in the Sahel and elsewhere
- interviews with 49 representatives from donors, governments, NGOs, academic and other institutions in the UK, US, Niger and Burkina Faso who were identified as having specific knowledge or information on food security and DRR in the Sahel
- meetings with communities in the north-central areas of Niger (Tahoua, Tillaberi and Dosso) and Burkina Faso (Seno, Sanmatenga, Soum and Yatenga), which usually took less than one and a half hours. They were organised by Tearfund partners in Burkina Faso (CREDO and ODE – five groups visited) and Niger (UEEPN and JEMED – six groups visited). Extra ones were arranged by CARE Niger and Mercy Corps in Niger.

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1 The term *donor* refers to institutional donor agencies/governments (multi- and bi-lateral) such as the European Community, the French Cooperation, DFID, the World Bank and the UN organisations.  
The term *government* refers to the Government of Niger and the Government of Burkina Faso, but the recommendations could also apply to other governments in the Sahel region.  
The term *NGO* is used broadly to include civil society organisations like local NGOs and faith-based groups (eg churches and church development organisations) as well as international NGOs.

Analysis used in the report was guided by

- a matrix, identifying factors which affect access to food and possible DRR entry points (see Appendix 1). This is useful in identifying specific successful or unsuccessful strategies at the community level.
- a review of the structures for managing food insecurity and risk reduction in each country.

## 1.3 Concepts

### 1.3.1 Food security

The definition of food security widely used by host governments, donors and NGOs focuses on a situation where:

- a wide variety of food is available in local markets or fields (availability)
- people have enough money to purchase a variety of foods (access)
- food is eaten in an environment that supplies appropriate care, clean water, and good sanitation and health services (utilisation) and
- the risk of losing these levels of availability, access, and utilisation due to shocks is low (Haddad and Frankenberger).

In contrast, work by de Waal in Sudan suggests that individuals faced with acute food insecurity may engage in actions, including foregoing immediate food consumption (ie: worsening short-term food security), to ensure an ability to produce food (as well as assure social continuity) in the future. This suggests that individual or communal views of food security may be more context-specific than the *access, availability, utilisation and sustainability* definition set out by Haddad and Frankenberger.

### 1.3.2 DRR

Disaster risk is defined as *the characteristics and frequencies of hazards experienced in a specific location, the nature of the elements at risk, and their inherent degree of vulnerability or resilience* (Benson et al).

DRR focuses on reducing vulnerability and the impact of hazards through:

- **mitigation** – measures to minimise the impact of hazards and thus lessen the magnitude of a disaster
- **preparedness** – measures to ensure the readiness and ability of a community to forecast and take precautionary measures in advance of an imminent hazard, and to respond and cope with the effects if a disaster were to occur (after La Trobe and Davis).

The *Pressure and release model* shows the interaction between vulnerability and hazard and ways to reduce vulnerability and the impact of the hazard. This is one of the frameworks on which analysis in this report is based.<sup>2</sup>

DRR efforts often focus on early warning and preparing to respond to disasters. However, DRR is also preventative and must be an integral part of development efforts. When DRR is incorporated into development efforts:

- fewer disasters occur, and
- when disasters do occur, damages are lower and recovery faster.

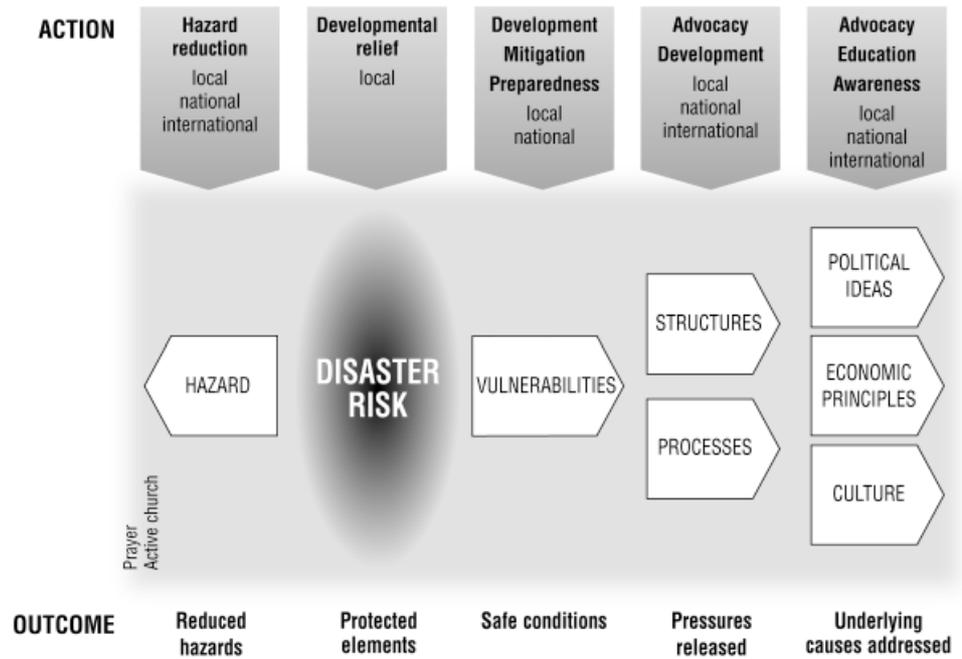
DRR reaches into almost all aspects of development, making it hard to separate one from the other. Within the development context, DRR focuses on reducing vulnerability to hazards. Purely development outcomes focus on overall improvements in lives, livelihoods and wellbeing without necessarily considering the

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<sup>2</sup> The *Pressure and release model* was adapted by Tearfund from Blaikie P, Canon T, Davis I and Wisner B (1994) *At Risk: Natural Hazards, People's Vulnerability, and Disasters* London, Routledge

shocks which may occur at points in time, or to specific groups, in the overall development process. Further information on the integration of DRR and development efforts can be found in *Tools for Mainstreaming DRR: Guidance Notes for Development Organisations* (Benson et al).

**FIGURE 1**  
The *Pressure and release model*





## 2 Findings

The findings are presented in two sections. The first focuses on DRR, setting the DRR context for the second section, which presents results on how food insecurity develops and is addressed in Burkina Faso and Niger. Nine examples of DRR are given in case study boxes throughout the section.

### 2.1 Integrating DRR

The integration of DRR into development, relief and recovery efforts is at a very early stage in Burkina Faso and Niger.

In Niger, UNDP and the government have held a workshop on disaster prevention and identified 32 actions necessary to prepare for, mitigate against and respond to the risk of disasters. Efforts are underway to incorporate these results into a revision of the Niger Poverty Reduction Strategy Paper (World Bank). The box on the right lists some of the challenges faced in the integration process.

In Burkina Faso, the government's National Committee for Emergencies is aware of risk management concepts and the Hyogo Framework for Action. UNDP is beginning to implement their 2006–2010 assistance programme and an effort similar to that started in Niger can be expected.

DRR (particularly in addressing the risk of food insecurity) is considered as important to development success by donors and NGOs. However, there does not seem to be any systematic or in-depth analysis of risks associated with development, relief and recovery activities.

For example, development projects do not seem to pay sufficient attention to the risks of poor rainfall, food shortages or other disaster risks and they do not tend to pursue a diverse and flexible strategy toward the management of these risks. In fact, some activities intended to improve food security, such as cereal banks, may actually be often implemented without a good understanding of the risks involved.

#### Government of Niger/UNDP disaster prevention workshop

Sectors for which actions were identified:

- food security
- mining
- tourism
- education
- health, HIV/AIDS, population
- access to water
- urban development
- good governance
- reinforcement of institutional capacities and decentralisation
- road transport
- energy
- private sector
- water and sanitation

Source: Programme des Nations Unies pour le Développement

#### Challenges to integrating DRR into development, relief and recovery

- Immediate compelling priorities leaving limited time for actions to prevent or mitigate against future disasters.
- Seeing DRR as a trade-off with development activities.
- Accepting the status quo as not being liable to change – eg the high levels of chronic malnutrition.
- Poor awareness of impact of disasters on society – eg the impact of drought is not integrated into project design and it is assumed not to affect development.
- Poor understanding and practical application of DRR.
- Limited analysis of risks and awareness of options to reduce the impact of hazards.
- DRR is seen as the responsibility of emergency units rather than development departments.
- Difficulty in seeing the difference between DRR and development outcomes.

**DRR EXAMPLE 1****An environmental approach to disaster risk reduction****ASSESSMENT AND MITIGATION**

An exception to a lack of risk analysis in project programming is US Government funded activities (through NGOs in both Niger and Burkina Faso). US procedures require environmental impact assessments (EIA) of development and protracted food aid relief operation. Assessments can identify major environment-related risks and lead to plans to address these negative impacts. For instance, an EIA could identify the risk of disease transmission from building a dam, flooding from building in low areas or unsustainable food production systems from the provision of hybrid seeds, fertiliser and pesticides.

To aid EIAs to consider disaster risks the Caribbean Development Bank developed a natural hazards impact assessment tool (see [www.caribank.org](http://www.caribank.org)). Guidance on integrating environmentally sound design (which incorporates disaster risk reduction) into small projects can be found in *Environmental Guidelines for Small-Scale Activities in Africa: Environmentally Sound Design for Planning and Implementing Development Activities* (Office of Sustainable Development). EIAs provide a practical way to identify and reduce the often associated risks of environmental and disaster damage.

**DRR EXAMPLE 2****Cereal banks: primary and secondary storage facilities****PREPARING FOR FOOD INSECURITY**

Cereal banks are a popular development and post-disaster recovery intervention to address food insecurity. Properly run, a bank smoothes seasonal price variations (offering grain at below market prices when prices are high) and assures accessible supplies. Banks provide psychological support, allowing potentially food-insecure populations to know that stores of grain are close at hand when needed.

In crisis years, when prices are high and funds are short, cereal banks come under pressure to provide grain in credit or at prices below cost. This leads to a depletion of capital, which needs to be rebuilt in good years. But when one poor production year follows another, banks face a severe problem. Purchasing capital is down due to below-cost sales in the previous year (and the likelihood that credit sales were not fully repaid) while prices are high, and rising. Under these conditions, banks cannot rebound from the losses of the first year, and need to be fully recapitalised after the crisis is over.

CARE Niger addressed this situation by creating second level stocks of cereal which banks can access when prices are high and supply short. Again, the system works as long as the secondary stocks can be paid for their grain and can themselves re-stock at reasonable prices. But these second level stocks are also vulnerable to one poor year following another. From a risk management perspective, the second level stocks need to be linked to another source of grain or funds to ensure their sustainability.

It is not widely recognised that cereal banks could fail when needed most in a crisis year, possibly because of a lack of risk assessment. CARE Niger's effort is a good start at risk reduction, but needs to go further to make the cereal banks sustainable and risk-resistant. This innovative effort is an example to be followed.

Talk of DRR is said to be 'à la mode' (fashionable), but practical application was not evident. The only, and partial, exception is the use of Environmental Impact Assessments (EIAs – see DRR Example 1).

The contrast with rural populations who pursue a diverse strategy to manage potential food insecurity and negative impacts on their lives and livelihood is remarkable. Moreover, strategies used to manage food insecurity at the community level clearly shift and evolve. A process of flexible development interventions would reduce the risk of a project failing because of changing short-term food security conditions.

The general lack of risk analysis or specific reduction actions in development practice echoes Tearfund's finding that EC global policy supports DRR but lacks follow-through (La Trobe and Taylor), and supports the conclusion that DRR is seen as too complicated or abstract for day-to-day application. The reality is often the opposite, but there appears to be a lack of a reference point for practical DRR measures which can be mainstreamed into development planning and practice.

### Improving learning on DRR

A challenge to incorporate DRR into development and relief activities is an apparent weak learning of successes and failures. Discussions in Niger and Burkina Faso indicated that information sharing on DRR and successes and failures is not optimal. The problem is not a lack of means, but a lack of time to absorb.

There is no need for a new dissemination programme on disaster risk information. ReliefWeb, Active Learning Network for Active Participation (ALNAP) and other channels already exist for sharing information. Provention ([www.provention.org](http://www.provention.org)) and the International Strategy for Disaster Risk Reduction (ISDR – [www.isdr.org](http://www.isdr.org)) cover integration of DRR into development activities.

What needs attention is the up-take of available information on past efforts and experiences with DRR. In the face of high workloads and weak understanding of DRR in development circles, a dedicated DRR champion may be effective in facilitating the learning necessary to integrate DRR into relief, recovery and development efforts.

#### 2.1.1 Improving learning and practical DRR

One way to address the information gap in knowledge and awareness about DRR measures is to share learning (see box). DRR can be integrated into development in other ways, eg identifying potential risks to a project in the logical framework.

However, as one NGO pointed out in Burkina Faso, logical frameworks don't always make it to the field when project activities are being implemented. The DRR challenge then becomes how to identify, incorporate and address local risks into site-specific implementation of a project.

A practical solution lies in developing a short set of questions linked to likely disaster risks in the project area. For example, risk-aware questions for construction of a health clinic could include:

- Is the location of the clinic at risk of flooding?
- Does the community experience high winds which damage roofs?
- Does the water source for the clinic run dry in some years?
- Is the clinic near a road that has heavy traffic?
- Are there trees near the clinic site that can fall and damage the building or endanger patients?

These questions need not be elaborate and in discussions with communities they help to focus attention on likely risks. A broader intervention-based review list is provided in Table 2. This list can be developed in a generic manner and then adjusted to disaster risk conditions in a specific location. Once risks have been identified, they can be mitigated against through practical actions within the scope of the project.

A more programmatic approach to DRR in development projects relies on identifying likely DRR actions to be incorporated into a project budget and implementation plan. Communities should decide on appropriate activities that are adapted to the local context. Figure 2 shows examples of activities to:

- mitigate against food insecurity by reinforcing capacities, assets and livelihoods
- prepare people for drought or flood with reserves, assets and coping mechanisms
- ensure that people survive a food crisis without losing too many assets
- ensure that people recover sufficiently from the food crisis so that they are less vulnerable to future hazards.

**DRR EXAMPLE 3**  
**Working with**  
**pastoralists in**  
**northern Niger**

**PREPARING FOR DROUGHT**

Since 1990, Tearfund partner JEMED has been working in the north central Niger with pastoralists to reduce their drought vulnerability. Activities include water harvesting, well digging and rehabilitation, cereal and fodder banks, improved herd management, small business development for women, education and improved healthcare. These activities are development, but also improve the ability of pastoralists to survive drought years with the least damage possible.

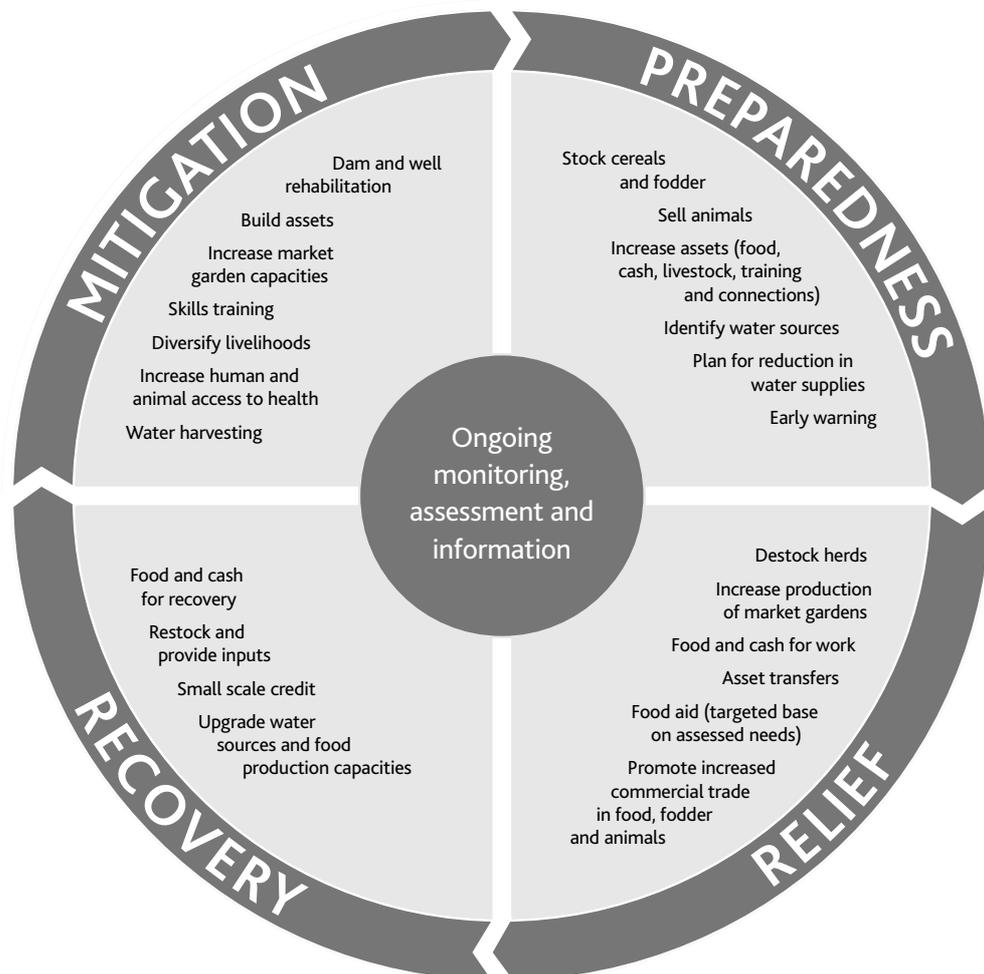
Poor rainfall and insect damage led to poor pastures from late 2003 into 2004 in the project area. Local knowledge indicated that pastoralists would face challenges in maintaining their herds. This early warning allowed JEMED to start efforts – including destocking, increasing cereal and fodder supplies and supporting families which remained with their herds instead of migrating – to weather the impact of reduced pasture. These interventions did not prevent all the impacts of poor pasture, but did mitigate against some potentially disastrous outcomes.

Conditions in 2005 were again poor, placing pastoralists at further risk of disaster. JEMED continued mitigation and relief efforts that were started in 2004 and prevented the situation from becoming considerably worse. The JEMED experience demonstrates the value of integrating disaster risk awareness and reduction efforts into long term development programming.

Source: Jeunesse En Mission Entraide et Développement and Field Notes.

**FIGURE 2**  
**Possible**  
**interventions**  
**in the food**  
**insecurity cycle**

Adapted for the Sahel  
 from *The Drought Cycle*  
 (IIRR, Cordaid and Acacia  
 Consultants)



**TABLE 2**  
Activity-specific  
disaster risk review

<b>Risk</b>	<b>Questions to be answered before project design and implementation</b>
<b>AGRICULTURAL INPUTS</b>	
Fire, drought, flood, insects	Has the risk of drought, fire, flooding and insect damage been included in calculations on rates of return on the equipment/inputs provided (if on credit)?
<b>LIVESTOCK PROVISION</b>	
Disease	Will animals provided be at risk of endemic or epidemic diseases? If yes, will they be vaccinated or is this the responsibility of the beneficiary?
Failure to repay credit	Has the risk of disease been included in calculations on rates of return on the animal provided (if on credit)?
<b>CEREAL BANKS</b>	
Food shortages (high prices, low production); Failure to recover costs	Can the bank weather two poor production years? Does the bank have links with other banks or producer co-operatives which can provide cereal in times of difficulties? Can the bank expand activities into other commodities (seed, cash crops) to reduce the risk from cyclical price changes in cereal crops?
<b>MARKET GARDENS</b>	
Flooding	Is the garden area liable to flood?
Conflict	Are the ownership and rights for use clear to all parties? Are there procedures to resolve conflict over access and land use?
Lost production and investment	Can wild or free-ranging animals damage the site?
Lack of water	Can the source of water used for the garden be depleted using the delivery methods (buckets, treadle pumps, motor pumps) planned?
<b>CREDIT</b>	
Fire, drought, flooding, insect damage	Has the risk of drought, food shortages, political disruption, fire, flooding and insect damage been included in calculations on rates of return on the credit provided? Is the borrower insured against likely risks?
Failure to repay credit	Is collateral provided if a loan is at risk from drought, fire, flooding, insect damage or disease?
<b>WELLS (LARGE AND SMALL BORE)</b>	
Death/injury	Will above-ground structures be safe for children?
Disease	Will waste water be drained away safely?
Lack of water	Is the interior of the well stabilised to prevent collapse? Can the well be used if the pump is not operational?
<b>DAM CONSTRUCTION (SMALL SCALE)</b>	
Overtopping	Does the dam have adequate spillway capacity to prevent overtopping?
Flooding	Do flows through the spillway threaten down stream structures or communities? Is there a warning system for high flows from the dam?
Death	Is there adequate security to prevent drowning?
Erosion	Is the dam slope protected from erosion and animal damage?
Disease, erosion	Is access to the reservoir controlled, for instance to prevent livestock from entering the reservoir?

Risk	Questions to be answered before project design and implementation
<b>ROAD CONSTRUCTION (SMALL SCALE)</b>	
Flooding	Are road surfaces above flood levels? Are bridges and culverts designed to resist flood damage?
Erosion	Are erosion and landslides onto the road minimised? Is vegetation on the sides of the road maintained to limit erosion and road damage?
Disease	Will borrow pits create potential health problems (eg from standing water)?
<b>BUILDINGS (LESS THAN THREE STORY)</b>	
Lack of water	Does the building have gutters and water storage capacity? Could the local water supply run dry during part of the year? (For clinic, schools and other public use buildings.)
Wind damage	Will the roof, walls, doors/windows resist high winds? Is the building threatened by trees which can fall in heavy winds?
Flood	Could the building be flooded?

## 2.2 Understanding and managing food insecurity

### 2.2.1 What is food security?

Conversations in Niger and Burkina Faso and the literature reviewed indicate that food security in Niger and Burkina Faso can be grossly defined:

- by farmers, agro-pastoralists, governments and often donors and NGOs, as *adequate cereal production*, with *adequate production* being defined as at least as much cereal as needed for adequate<sup>3</sup> per capita consumption in a specific location
- by herders, as the *ability to purchase cereal at reasonable prices and healthy herds*, with *healthy herds* often but not always meaning large herds
- by women, as the *ability to feed a family today and have adequate food for the future*.

The issue of water, a key element of the utilisation component of the dominant food security definition, was paramount in community conversations and is implicit in each of the three views of food security.

The cereal production definition of food security focuses on only one aspect of availability and largely ignores access and utilisation. The herder definition considers access and availability (herders gain food from their animals and move to where supplies fodder or cereal are available), but not fully utilisation.

The women's view of food security more closely corresponds to the dominant *access, availability, utilisation and absences of shocks* definition by focusing on availability (production of cereals and other crops), access and an absence of shocks (food available now and in the future). Women grow food, sell and purchase food commodities and engage in commercial cropping and trade to finance food procurement. These responsibilities exist during normal times, but increase during crises (Plaut, Sengupta).

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3 What is 'adequate' varies by actor, from always having grain in the family granary to research-determined per capital calorie consumption requirements.

Where women fall short in terms of utilisation of food for good nutrition is not clear. Some sources suggest that poor weaning and feeding practices are a major cause of child malnutrition (Hampshire et al, Tricks et al). Others see malnutrition as due to a much wider set of conditions (Harrigan). Conversations do suggest that women with access to a diverse food supply (eg from gardening or trade) are better able to prepare more nutritious meals (*Field Notes: École Biblique Bon Berger, Djibo, Burkina Faso*).

Shifting the focus of food security to the demands faced by women in ensuring a family eats adequately now and in the future better captures the real nature of day-to-day food security in Burkina Faso and Niger. It also more effectively links the dominant model of food security to family-level actions to address food insecurity.

Women's responsibilities for family feeding are similar across herding and farming-based livelihood systems. A shift in focus would provide a better basis for understanding food security under two separate livelihood systems, which is at present a challenge for most food security assessment and early warning systems.

Clearly, male-led cereal production and herding are major sources of food intake for a family. Moreover, men are socially responsible for a number of strategies to support family food intake when fields or herds are inadequate. If men are successful at these strategies, the burden on a woman is reduced. At the same time, an approach which recognises the overall importance of women in assuring family food intake will provide a more realistic and accurate understanding of how well food security is being met in Niger and Burkina Faso.

### Food security now and in the future

In discussing food security and the future, a group of women in Toukounous, Niger spoke of:

- having enough food during both wet and dry seasons
- being able to manage their food supplies without problems.

Once they achieved this level of food security, the women would have the ability to aid others.

This view of food security is echoed by men and women across Niger and Burkina Faso.

## 2.2.2 What is food insecurity?

Communities associate food insecurity with poor rainfall that results in poor harvests or poor herd condition, leading to an inability to feed one's family from one's own production. The high price of cereal is also seen as having an effect on food insecurity.

Overall, however, the lack of assets to purchase food, and specifically cereal, is a more fundamental indicator of food insecurity. Assets include funds, goods, human capacities or connections with which to secure adequate food (see also FewNet (a) and Ghizzi).

Actual cereal production by a family unit may not, in most years and in many cases, meet actual cereal needs (see Mathys, FewNet (a) and Ghizzi). This leads to a heavy reliance on generating assets with which to purchase food. Change in the ability to secure assets is a significant indicator of family food insecurity over both short and long terms.

One long-term issue that arose frequently in community conversations was the lack of capital.<sup>4</sup> Capital (as credit or physical inputs) is seen as critical to addressing food insecurity by increasing

- food availability, through improved or expanded production
- food access through expanded commercial activities (many, but not all, linked to agriculture and livestock).

<sup>4</sup> *Capital* is used here with reference to the Livelihood Model ([www.livelihood.org](http://www.livelihood.org)), and with specific reference to physical and financial capital.

**DRR EXAMPLE 4**  
**Using short term relief to strengthen long term food security**

### MITIGATING AGAINST FOOD INSECURITY

Short-term relief assistance often focuses on support to maintain or promote livelihoods damaged in a disaster. Where these programmes involve non-food transfers (eg ploughs, seeds, animals), cash grants, cash or food for work, skills building or infrastructure (eg wells, roads), the interventions can link into existing or newly exploitable food security strategies to improve future food security. Such diversified and forward-looking assistance was provided by Tearfund partner JEMED, in north central Niger (see DRR Example 3).

Relief-driven asset transfers need to be implemented with caution to avoid damaging development efforts. Still, capital, in the form of physical assets, is key to addressing immediate food security (eg to be able to make something to earn money to buy food) and reinforcing the ability to deal with future threats. Designed and implemented properly, short term relief can speed disaster recovery and lay the basis for reduced food insecurity in the future.

Providing 'micro-credit' to women helps them to better address their responsibilities of feeding a family. Providing farm implements (eg pumps, ploughs) and inputs for men also increases the capital dedicated to assuring food security.

## 2.3 Managing food insecurity at the community level

Food insecurity in rural Niger and Burkina Faso is managed in three ways:

- diversifying livelihoods
- intensifying land use
- exploiting opportunities.

### 2.3.1 Diversifying livelihoods

Reliance on one source of food is too risky for survival in Niger and northern Burkina Faso. Instead, strategies are diversified in an effort to find the right combination of effort which makes the risk of food insecurity manageable.<sup>5</sup> Pastoralists engage in farming, farmers engage in herding, herder-farmers expand both activities, and everyone is into trading (see FewNet (a), Ghizzi).

The ways to secure food listed in the *Reduced food consumption and responses matrix* (Appendix 1) indicate the diversity of activities which can make up an overall strategy to assure food security. The specific mix of strategies changes over years, from year to year, and even within a year.

The overall effectiveness of the diversification strategy is not clear. High levels of malnutrition and poverty suggest that many families are treading water at best and definitely not getting ahead of food insecurity on a year-to-year basis. At the same time, work by Ghazis suggests that there are gainers as well as losers over time (this view is supported by research elsewhere, see Krishna et al).

Discussions with communities and NGOs indicated a number of entry points to improve food insecurity risk management strategies. These include:

- credit, especially for women
- inputs, including farming implements and supplies to increase cereal and other agricultural production
- livestock rearing and trading, also suggested as a woman-focused activity
- access and availability to water

<sup>5</sup> Diversification is discussed from an Africa-wide perspective and with reference to Burkina Faso in Barrett et al.

**DRR EXAMPLE 5**  
**Market gardens:  
 food for today  
 and income for  
 tomorrow**

**MITIGATING AGAINST FOOD INSECURITY**

In both Niger and Burkina Faso, market gardens have become a major focus of food production diversification. Market gardens became common in Burkina Faso in the late 1970s, and in Niger after the 1984 drought. Vegetables, tubers and fruit from the gardens are sold locally and in major cities. Crops such as onions from Niger or potatoes from Burkina Faso are exported within West Africa.

With access to water and capital, a grower may be able to cover his annual food needs and input costs, and have income to spare from a good market garden. For women, involvement in market gardens can also improve the quality of family food consumption. Even in years of poor rainfall, garden sites usually have water. This means that market gardening can help prepare for and mitigate against food shortages, as well as building capital for extreme crises (eg drought or illness).

The importance of market gardens is poorly captured in normal food security assessments. Yet the popularity of market gardens in rural areas suggests an important contribution to addressing food insecurity, as a source of income and food.

Not everyone can establish a garden. Sites with access to water are not widespread (and when available can be contested). And, as noted, access to capital is a major challenge for most people.

Drawn from conversations with J Naugle, Enterprise Works/VITA, S Boubacar, and B Portier, Promotion of the Use of Agricultural Inputs by Producer Organisations Project (Niamey), and Pastor Salam Napa, Titao, Burkina Faso.

**DRR EXAMPLE 6**  
**Reducing food  
 consumption and  
 conserving food  
 stocks**

**PREPARING FOR FUTURE FOOD NEEDS**

Reports emerged during the 2005 food crisis in Niger that men had locked their granaries and abandoned their families without access to food (Plaut, Sengupta). The story was discussed with several Nigerien involved in food security activities. Their reaction was somewhat incredulous. They could see someone leaving their family in search of work or to reduce demand on scarce family food stocks, but allowing one's family to starve was just not seen as possible.

The men said that setting aside grain to eat during the heavy work of planting is a normal strategy to ensure that a family can produce food for the next year. Seasonal migration effectively reduces demand on a family's own food supplies.

The challenges faced in managing food insecurity can present difficult decisions. It is important to understand the context of risk management strategies that best support individual and community efforts to manage and reduce these risks over the short and long term.

- land reclamation or land value improvement (eg water retention structures)
- training farmers and herders.

Other entry points that were not often mentioned include improving human capital (eg training seasonal manual labour to become masons), or sharing information on seasonal employment opportunities to improve income potential.

### 2.3.2 Intensifying land use

Intensification of land use (together with diversification) is a key way to manage food insecurity. More intensive land use has been documented in Niger (Larwanou et al, Polgreen), driven by population pressure and physical limits to further expansion of farming and herding. A similar trend has been noted in north central Burkina Faso (Reij and Thiombiano).

Information from Niger indicates that the management of livestock is shifting from extensive herding to smaller but higher quality herds, together with efforts to increase pasture quality and related natural

## DRR EXAMPLE 7 Innovation and opportunity in the Sahel

### MITIGATING AGAINST FOOD INSECURITY

El Hadji Nuku Sawadogo is relatively successful for someone living in the Sahel. He says that his fields produce enough food to cover the needs of his family of 50. His animal herds assure income for other needs, he saved enough to go to Mecca, and people come to him asking for food. In relative terms, he could be considered, at 60, a wealthy and successful man.

When asked why he was so successful, he cited two things: the use of 'Zai' technique (placing seeds in specially-prepared holes in a field containing manure) to increase the production of his fields, and opportunities. As translated from his native Maori, he said that it was opportunities in addition to his hard work, which have allowed him to accomplish what he had attained over his life.

resources. There has also been an increase in animal husbandry by farmers, with small ruminants particularly important as a food and income source for women.

More intense land use has increased agricultural productivity in Niger and Burkina Faso and led to a measurable increase in biomass (Larwanou et al, Reij and Thiombiano). These changes have probably improved the food security of land owners. In Niger, improved natural resources partially cushioned the impact of the 2005 food shortages (Larwanou et al, Polgreen, also see Diarra).

These results are significant and suggest that gloom and doom reports, particularly for Niger, may not be fully accurate (contrast Action Against Hunger, Mousseau and Mittal with Polgreen), at least for some segments of the population and in some years. If confirmed, these changes suggest an increased resilience to poor rainfall as well as greater capacity to mitigate against drought and other hazards when they occur.

There are indications in Niger of a newly-emergent group of rural inhabitants with limited access to land for their own farming and with a heavy reliance on agricultural labour to meet food needs (Harrigan). If agricultural employment is not available then these labourers face significant challenges in assuring their food security. This group should be monitored and steps should be taken to ensure that they can develop a risk-balanced set of strategies to manage acute and long term challenges to their food security.

Control over land is an important factor in managing food insecurity. In Niger, farmland that has encroached into pasture, competition for pasture, and market gardening have all made the control of land important to assuring one's access to food, or income to purchase food. In Burkina Faso, land rights issues are emerging as a result of policies favouring large-scale farming over family-scale food production.

Discussions in both countries indicated procedures for defined land ownership and use can be manipulated to the disadvantage of some groups, for instance herders in Niger and small farmers in Burkina Faso. The application of procedures governing land access and use should be monitored, especially as it appears that access to land is being controlled in a way to decrease strategies to manage food insecurity.<sup>6</sup>

### 2.3.3 Exploiting opportunities

People are constantly searching for opportunities to make money to meet food and other needs. In Niger, some dry season migration shifted to Libya and Algeria when tensions increased in Nigeria. In Burkina Faso, artisan gold mining has become a major income source for rural populations in the north of the country. Ambulant sales of items ranging from water to radios have become common even in small towns.

At the same time, opportunities are probably the most difficult element of the overall strategy to manage food insecurity and considerable work may be needed to create opportunities.

6 These comments respond to concerns expressed about how policies and procedures governing land access were being implemented in both countries. The issues in this section were also discussed with Chris Reij, a geographer and specialist in the Sahel at Vrije University in the Netherlands.

**DRR EXAMPLE 8**  
**Opportunities wanted: three women's groups in Toukounous in search of ways to improve food security**

#### MITIGATING AGAINST FOOD INSECURITY

Toukounous is a small community north of Filingue in western Niger, dependent on herding, uncertain agriculture and trade for livelihoods. The community has three women's groups which between them have been involved in the following food security related activities:

- a cereal bank
- a credit mutual
- collecting funds for sharing by members
- producing cheese
- producing peanut oil (halted because peanuts cost too much to make a profit)
- producing neibe couscous (also halted because neibe cost too much to make a profit).

Individual women also collect firewood, haul water, sell cakes and other food items to fund food and other needs. The groups are now interested in seeing if they can grow and produce oil from sesame seeds, and are also looking for support to install a garden near the community. The three women's groups pursue both a diversified strategy to meet food needs, and actively seek out new opportunities to enhance their overall food security.

**DRR EXAMPLE 9**  
**Social solidarity: an evolving tool for addressing food insecurity**

#### MITIGATING AGAINST FOOD INSECURITY

Social solidarity is often mentioned in the context of addressing chronic and acute food insecurity in the Sahel. The concept is based on a sharing of resources between those who have more and those who have less to ensure that all survive a crisis. Such exchanges may be small in value or volume, but provide important social and psychological support by assuring crisis-affected populations that they are not on their own.

Concerns have been raised that social change is reducing the importance of social solidarity as a survival mechanism in a food crisis. However, the examples below show how people are adapting and developing new ways of sharing resources.

##### **Feeding the family**

One source of food for the insecure is through gifts from better-off relatives. However, in poor times, demands on the better off can be so high as to threaten their own food security.

Abdoul-Azize Sarki, UEEP Program Officer, can meet the needs of his family from the salaries he and his wife receive. He does not depend on cereal produced in the fields that he has been provided with by tradition in his village. However, each year he works through his relatives in the village to farm the land and store the harvest. When approached for aid, he draws on his harvested stocks to meet these demands.

While not a perfect risk management strategy, Sarki has established a way to protect his family's needs and also provide for relatives who need support. Many similar small, unofficial safety nets may exist across the Sahel. This approach is likely to become more common as urbanisation and salaried employment increase.

Source: Interview with Abdoul-Azize Sarki.

##### **Using cereal banks to help the less advantaged**

Cereal banks supported by CARE Niger near Birn'i Konni Niger make an effort to purchase cereal locally to replenish stores. Local procurement reduces transport costs (keeping down sales prices) and links the bank more closely to the village.

When buying cereal, the banks often need to compete against traders by offering a slight premium on market prices to attract sellers. They also target purchases from families which face difficulty meeting their food needs, with the premium price adding a little extra to the family's capital. This targeting does not result in a major transfer of capital, but represents a facet of social solidarity using locally controlled resources.

Source: Interview with Cereal Bank Committee, Satchim Niger.

Ironically, disasters provide circumstances in which new opportunities can be created, because of the rather quick input of assets and efforts to find quick ways to provide relief. Such efforts link well into the combination of diversification, intensification and opportunity-seeking which are at the core of strategies to manage food insecurity in Niger and Burkina Faso.

## 2.4 Managing food insecurity at the government, donor and NGO level

### Overview

Following donor-initiated market liberalisation and structural reforms, governments are largely removed from the management of food markets. Governments have policies related to food security (*Journal Officiel du Faso*, Comité de Rédaction de la SDR) and undertake projects to address acute and chronic food insecurity with significant donor support. NGOs are also supported by donors to address food insecurity. Projects related to food insecurity include agricultural inputs and technical assistance, primary healthcare, child feeding, education and credit.

The official structure for responding to acute food insecurity in Niger and Burkina Faso is divided into two elements:

- An early warning process, operating at the
  - **local level** – usually managed by NGOs and not currently widespread,
  - **national level** – through the System d'Alerte Précoce (SAP) early warning structures
  - **regional level** – through CILSS and USAID's FewsNet
  - **international level** – through FAO's GIEWS and USAID's FewsNet.

NGOs have a formal or informal involvement at all levels through their presence in food insecure areas.

- A structure for providing assistance to acutely food-insecure populations involving the government, the UN system (eg WFP, FAO, UNICEF), donors and NGOs.

These two elements are discussed further below.

### 2.4.1 Early warning systems

The crisis in 2005 served as a wake-up call for early warning in Burkina Faso and Niger. The SAP in Burkina Faso was not operating in 2004 (CILSS) and warning structures covering Niger did not fully understand the food crisis in the Zinder and Maradi areas (Humanitarian Policy Group, FewsNet (b)).

Since 2005, the SAP in Burkina Faso has been re-established, early warning efforts in Niger expanded, and a greater attention given by FewsNet, the Sahel and West Africa Club, CILSS and others to the food supply/demand situation in Nigeria and commercial activities across the Niger-Nigeria border (the Sahel and West Africa Club, OECD).

Cereal production tends to be the most common official reference point for food security in Burkina Faso and Niger. Considerable importance is placed in the respective government's annual calculation of production surpluses or deficits. These production numbers are aggregated into regional and national totals and used to indicate whether a region or country is facing a food crisis or not.

Using cereal production to define food security is attractive for the following reasons:

- An existing network of government agents can collect data.<sup>7</sup>
- A simple calculation generates a single number defining whether food security exists or not.

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<sup>7</sup> Data accuracy has been an issue in the past but is not addressed in this research.

However, focusing on cereal production misses much of the substance of the *access, availability, utilisation and absence of shocks* definition of sustainable food security.

Some efforts have been made to go beyond a simple cereal balance approach to provide effective warning.

- FewNet has been using a broader definition of food security for many years (FewNet (a)).
- Events in 2005 sparked a renewed awareness that terms of trade and market conditions play a key role in determining whether an individual, community or country is facing a food crisis (see Sahel and West Africa Club, OECD and Trepnd).
- The recent *Enquête sur la vulnérabilité à l'insécurité alimentaire des ménages* (Republique du Niger) in Niger was an assessment of food security using data of different variables from over 12,700 households and generating a clear statement of levels and locations of food insecurity. Regular surveys of this type would greatly improve warning and response in Niger and Burkina Faso.
- In Niger, CARE is working with the government to move the collection and analysis of data on food security physically closer to the communities concerned. Similar efforts have been underway by CRS and Helen Keller International, also in Niger, for several years.

#### Challenges for early warning systems

Early warning systems focusing on *access, availability, utilisation and sensitivity to shocks* are limited in terms of sustainability because they are considerably more resource intensive than cereal production/deficit calculations.

- Government field agents, the backbone of both approaches, face difficulties in collecting quality data without external support. Due to a lack of quality data, cereal balance sheets and analysis of variables are largely guesstimates. The result is an imperfect understanding of an emerging food crisis and flawed decisions on how to respond, as happened in Niger in 2005.
- Under current procedures, the collection and processing of data does not comply with the minimum standard on participation set out in the Sphere Standards (*The Sphere Project*). The populations covered by the early warning process:
  - are not aware of how analysis takes place
  - do not know the specific results of the analysis
  - are not given any formal chance to contest the results or be otherwise involved in the assessment process except by answering questions at the time of the initial data collection.

#### Sphere Common Standard 1: Participation

The disaster-affected population actively participates in the assessment, design, implementation, monitoring and evaluation of the assistance programme.

Source: The Sphere Project

These conditions are far from what is acceptable under the standards to which many NGOs in Niger and Burkina Faso have subscribed.

As a result, warnings, and actions on which they are based, have low credibility as few at the community level understand why specific results were reached. A typical outcome is discontent over why one area might receive more assistance than another, with a common recourse to explanations of corruption, political manipulation, or an intentional denial of assistance due to ethnic or cultural prejudices. All these outcomes result in tensions that can help fuel conflict.<sup>8</sup>

Until the fundamental issue of participation is addressed, it is unlikely that early warning systems in Burkina Faso or Niger can make a significant contribution to reducing short term food insecurity.

8 Such tensions were reported in Niger over the allocation of relief in 2005 and 2006.

## Local purchases and other options

### PREPARING FOR ACUTE FOOD SHORTAGES

The *Food Aid Charter* calls for local purchases (as opposed to procuring imports) to meet food shortages in the Sahel when possible (Jackson p294). In 2005, Niger considered purchasing cereal within Niger or the Sahel for emergency distributions, only to realise that such purchases would push up prices by temporarily tightening supplies. Such action would hit consumers already faced with very high prices. Niger eventually procured cereal from India, and had to wait four months for delivery.

This highlights the challenges faced in responding to a food crisis situation. In most cases, a single response, for instance food for work, will not address all aspects of the crisis. Increasingly, food distributions are seen as only one of a range of responses to critical food insecurity, which can include cash payments, cash for work, education and non-food assistance.

A wider range of approaches is more likely to successfully mitigate acute food insecurity.

#### 2.4.2 Institutional response to acute food insecurity

The response to acute food insecurity events in Burkina Faso and Niger has typically been through national-level cereal reserves (held as cash or cereal), complemented by imported cereal (purchased or donated). This food is provided through subsidised sales, free distribution, targeted feeding (eg nutritional recuperation) or labour intensive works.

Government cereal security stocks play a central role in the immediate response to acute food insecurity. These stocks were originally founded on the view that food security was directly related to food supply, and the government could (and should) physically deliver food to areas with shortages.

At present, security stocks serve two purposes:

- to cover localised food needs – eg during and after droughts and floods
- to provide an initial response in food crisis years when large scale food aid is needed, providing time for external assistance (purchased or donated) to arrive for a more extensive response.<sup>9</sup>

Because of the high costs of the security stocks (the 80,000 MT of cereal in Niger's stock has a market value of approximately \$17 million),<sup>10</sup> stretched government finances and irregular external funding, the security stocks are often not at full capacity.

Niger is resurrecting an earlier practice of cash for work as a relief option to mitigate against the impact of food shortages before they develop. There have also been limited experiments in Niger with direct cash grants to families in severely food insecure areas to help them mitigate against impacts, for instance by the British Red Cross in Tanout, Niger.

The use of the national cereal security stocks and allocation of external assistance (usually food and the cash for work funds in Niger) is decided by committee at the national level, based on early warning reports and other considerations. The committee approach is based on the concept that donors and UN organisations work together with the government to decide on common operational plans and resource allocations to provide disaster assistance (usually food aid). In Niger, the committee is composed of 13 donor and UN organisations plus the government, and the committee is smaller in Burkina Faso. NGOs are not currently members of these committees.

9 Niger's security stock is set at 80,000 MT, plus funds to purchase 30,000 MT. Burkina's stock is 35,000 MT. The size is based on estimated critical food needs for a three to four month period before external supplies arrive.

10 Based on cereal price of 12,000 FCFA per 100kg, or \$214/MT times 80,000 MT.

Using committees to reach consensus on emergency response has diplomatic advantages. On the other hand, decision-by-committee is not often seen as good practice in disaster management. The committees also allocate limited stocks<sup>11</sup> in the face of competing needs, limited information, uncertainty as to future sources of food, and political and financial pressures. A result is that stocks may be allocated too widely or distributed in ways that do not address the immediate impacts of the food crisis, and decisions may be delayed by requests for additional information.

The challenges in effectively using the security stocks, emergency funds and emergency food assistance highlight the highly centralised and opaque nature of the current system. Systems in both countries appear to be relatively limited in their ability to mitigate against acute food shortages and to include the participation of communities.

The systems do not effectively incorporate the private sector (the major source of food for most people in each country) into emergency response.<sup>12</sup> Overall, the systems for dealing with acute food insecurity in both countries see the problem as one of food transfers, rather than a response based on improving access, *availability, utilisation and a reduction of shocks*.

In Niger, NGOs have attempted a more decentralised approach to both warning and immediate response. While a decentralised approach also faces challenges (not the least of which is accountability), a greater degree of decentralisation in both warning and resource allocations may result in a more effective (and standard-compliant) system than the one that is currently used.

### **Unclear impact of decentralisation**

Decentralisation of government operations to the local level (commune/township) is underway in both Niger and Burkina Faso. In theory, decentralisation should move control of government actions closer to citizens and link these actions more closely to expressed needs. Projects such as those by CARE, CRS and Helen Keller in Niger are moving early warning and relief capacities closer to the commune level and could set a model for decentralised crisis management.

However, it is unclear what level of resources the decentralised structures will have available. Will the commune level of government command resources comparable to the food reserves held at the national level? Will they be forced to make decisions through committees dominated by organisations which do not represent local citizens? Will the assessment and mitigation of food crisis conditions more closely meet minimum international standards?

Until these and other questions are answered, the impact of decentralisation on the management of food insecurity is difficult to anticipate. However, the process could yield a more participative and effective process for preparing for and mitigating against acute food insecurity in Niger and Burkina Faso.

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- 11 In Niger, the stock is 2.5 per cent of annual demand [2006–2007: 80,000 MT stock against a total cereal demand of 3,251,000 MT] and 1.3 per cent in Burkina Faso [2006–2007: 35,000 MT stock against a total cereal demand of 2,676,900 MT].
- 12 Commercial rice imports cushioned (to a degree) food shortages in Burkina Faso and Niger in 2005 as rice was less expensive than other cereals. Similar impact from the commercial market has been documented in Bangladesh (del Ninno et al).



## 3 Conclusions

### 3.1 Strengthening community resilience to manage food insecurity with DRR

Limited steps have been taken to integrate DRR into development, relief and recovery in Niger and Burkina Faso. The major challenge is moving beyond policy statements to actual DRR at a practical level.

Better incorporation of DRR into development starts with an acknowledgement that DRR is crucial to sustainable development. UNDP efforts (underway in Niger and anticipated in Burkina Faso) should yield progress in this area and identify lessons learned in terms of challenges and opportunities.

In many ways, efforts to address the 2005 food crisis in Niger were a repeat of earlier efforts which had limited success. Better learning on DRR is needed, for example what determines food insecurity, how food insecurity is managed and how to best respond to acute food insecurity. This will increase understanding of what is needed for DRR to reduce food insecurity in reality. This is a participatory process, as it is the food insecure who know whether efforts to overcome this risk to their lives and livelihoods will be effective in their context.

### 3.2 Being able to feed one's family today and tomorrow

Food security is defined in different ways, mostly in terms of cereal production which misses the true nature of how food security is achieved. Of these definitions, the one focusing on the ability of women (as well as men) to feed their families today and in the future, most closely matches the internationally accepted definition of food security as *adequate access, availability, utilisation, access to safe water, sustainability and an absence of shocks*.

The burden on women is increased, especially in difficult times, when men's ability to support families is reduced. An approach which recognises the overall importance of women in assuring family food intake will provide a more realistic and accurate understanding of how well food security is being met in Niger and Burkina Faso. It will also lead to more accurate assessments and management of food insecure conditions, which is an integral element of DRR in this context.

### 3.3 Using multiple strategies to increase assets

Food insecurity is fundamentally defined by communities as a lack of assets, whether funds, goods, human capacities or connections with which to secure adequate food. Increasing assets, through food or cash transfers, commodities, livestock transfers, training, improving information flows or building connections, is critical to addressing acute food insecurity.

Communities manage food insecurity through a strategy of diversification, intensified natural resource use and opportunity seeking (to increase assets). The elements of the strategy change from location to location, from time to time and from individual to individual.

Agricultural production, animal husbandry and cash labour remain core elements of food security strategies. But the overall strategy is constantly evolving and needs to be regularly monitored. Understanding the changing elements of how food insecurity is managed is critical to successful development, incorporating DRR.

Development efforts contribute most to managing food insecurity by increasing assets, particularly those most easily turned into disposable capital in crisis situations. Disaster relief and recovery can also focus on

asset transfers to provide the food-insecure with means to quickly regain their ability to feed themselves in the present and future. Education should not be excluded from relief and recovery if DRR is to be successful.

Credit is a major tool used to address short term food insecurity in Niger and Burkina Faso. More rigorous and innovative ways are needed to increase affordable credit to the food-insecure so that they can more effectively take actions on their own to address persistent food insecurity.

### 3.4 Managing food insecurity with better mechanisms

The current official approach to responding to food crises in Burkina Faso and Niger faces a number of significant challenges:

- Poor linkage between the predominant focus on cereal production and how people actually assure their own food security.
- The present reliance on food stocks and food aid to respond to food insecurity does not effectively address or mitigate against the impact of acute food shortages in either country and is not sustainable.
- The weak participation of the food insecure in official early warning and food aid structures. This raises governance issues and means that early warning and assistance structures do not meet minimum standards for humanitarian assistance (Standard 1, *The Sphere Project*).

### 3.5 Newly-emergent landless labourers

Niger is experiencing a social shift with an increase in rural landless labourers. This trend is expected to increase. With a reliance on seasonal agricultural income to purchase food, the newly-emergent group is particularly vulnerable to poor harvests and changing market conditions for commercial crops.

As a newly-emergent group, these rural agricultural labourers need specific attention in DRR efforts, as well as support during food crisis situations. This group is likely to be invisible to outsiders and to official needs assessment structures, but the risk of this group needs to be addressed proactively to prevent acute food insecurity in the future. Local civil society organisations, especially faith-based organisations, are well suited to supporting these individuals and families at the local level.

# 4 Recommendations

## 4.1 Promote and integrate DRR into development, relief and recovery

### Donors Governments NGOs

Donors, governments and NGOs should integrate DRR into development, relief and recovery policy and practice, using the proposed solutions to the challenges in Table 1 (page 4).

Opportunities to integrate DRR into government and donor development policies and programmes include:

- The review of PRSPs
- EC Country Strategy and National Indicative Programme reviews
- The US government review of development options for Niger
- The new UN Country Development programme for Burkina Faso
- The development of food security profiles for Sahelian countries (Sahel and West Africa Club).

### NGOs

NGOs and other key actors (eg UNDP, ISDR and the World Bank) should:

- Organise an annual DRR roundtable in each country to share knowledge, research and practice (drawing on local experiences) among donor, government and NGO participants, covering local to international views. This could then lead on to more regular networks, like the BOND DRR group in the UK for future sharing of learning.<sup>13</sup>
- Produce practical 'hands-on' guides on DRR to raise awareness and train development policy makers and practitioners at the implementation level for specific contexts in the Sahel region. Starting points for this process include work by La Trobe and Davis, Venton, Benson and Twigg and this report. These guides should have a significant level of community input and be promoted at the annual DRR roundtable.

## 4.2 Understand food security as being able to feed one's family today and in the future

### Donors Governments

Shifting the focus of food security to one where individuals and families, especially women, in Niger and Burkina Faso meet, or do not meet, their food needs now and for the future, donors and governments should:

- Use the broader definition of food security which more closely aligns with the communities' definition: *access, availability, utilisation and absence of shocks* in development policies and programmes, including assessments and management of food insecurity.

### NGOs

NGOs in Niger and Burkina Faso should:

- Provide testimonials and case studies on the central role which women (as well as men) play in assuring and improving the food security of a family
- Pilot projects which better target assistance to women to support their role in assuring food security

<sup>13</sup> The DRR group is a working group of the British Overseas NGOs for Development for NGOs to share learning and coordinate programme and advocacy activities related to DRR.

### 4.3 Improve mechanisms and build on community strategies to manage food insecurity

#### Donors Governments

Governments and donors (particularly the EC, US, UNDP country programmes and the Bureau for Crisis Prevention and Recovery) should move away from a reliance on food stocks and food aid towards a more diversified approach to managing harvest-to-harvest food insecurity which includes:

- Asset transfers to individuals, families and communities threatened by acute food insecurity before conditions reach critical levels and to facilitate recovery – eg transfers of food, cash, commodities, livestock, training, improved information flows and connections
- Greater participation of communities in risk assessments and decision-making about asset transfers before conditions reach critical levels
- More effective commercial sector participation in supplying food to areas affected by shortages – eg reduction in tariffs and road taxes; strengthening information sharing between early warning systems and commercial suppliers; incorporation of commercial supplier organisation representatives in food crisis response planning; and linking major food suppliers to cooperatives and cereal banks in specific communities or regions.

This should be supported by well founded analysis concerning:

- The economics, costs and inefficiencies of the current mechanisms
- Options for a more diverse set of mechanisms to address the root causes of acute food insecurity.

Decentralisation can improve the management of food insecurity risk. However, this will occur only if:

- Early warning and response capacities are decentralised
- Relief resources and responsibilities are also decentralised
- Decentralised activities to address food insecurity are participative
- Governance places the potential disaster victim at the focus of early warning and assistance.

#### NGOs

NGOs should support governments and donors in the recommendations above by:

- Piloting new and different ways to respond to food crises as they arise – eg targeted cash transfers, vouchers for agricultural inputs, and training to improve short term income opportunities
- Documenting options to manage food insecurity, including recent experiences with cash payments in Tanout, Niger, and cash for work
- Increasing the involvement of communities in decision making on how to address food insecurity, through examples of how participation has improved food security, and raising awareness of Sphere standards and monitoring and evaluation.

These efforts should link with ongoing improvements in early warning systems in Niger and Burkina Faso (eg by FewNet, CILSS, FAO, WFP and CARE in Niger).

### 4.4 Support landless labourers

Newly-emergent landless labourers in Niger face significant challenges to immediate and long-term food security.

#### NGOs

NGOs, especially faith-based organisations in Niger, should:

- Support targeted individuals and families most at risk of food insecurity, due to the emergence of a landless labourer class. For example, with education, skills training and micro-credit by which the vulnerability of this group can be reduced over the long term.

## Appendix 1 **Reduced food consumption and responses matrix**

The following table sets out the ways that people in Niger and Burkina Faso respond to reductions in sources of food. It was initially developed from secondary sources including the FewNet food security profiles for Burkina Faso and Niger (FewNet (a), (b) and FewNet 2005 (a)) and based on the *Pressure and release model*.

An initial draft of the table was discussed with Tearfund staff and revised. Data in the table was updated and revised following community and other discussions and a review of literature collected in Niger and Burkina Faso. Specific input was also provided by Laouali Mahamadou Ibrahim of FewNet.

The table could be used

- to frame input from communities on ways to address food insecurity
- as a tool to generate a common understanding of strategies and barriers to addressing food insecurity across a number of communities
- to develop a common understanding amongst development staff on strategies and barriers to addressing food insecurity.

In reviews of the table, a number of 'underlying causes' to food insecurity were identified such as weak training of farmers and weak animal health service delivery. These can be expanded upon by mapping causes of food insecurity in communities and then applying a political economy approach to elaborating deeper causes of the insecurity. Once these underlying causes are identified, they can be tackled by advocacy activities, along with technical and programmatic interventions.

### **Reduced food consumption and responses matrix: causes, reactions and ways to strengthen reactions**

Source of food for an individual	Reason why availability of food from this source may be reduced	Proximate cause of the reduction in the availability of the food source	Community reactions to food insecurity	Ways to strengthen communities' strategies to cope with food insecurity
Own agricultural production	Drought	Poor rainfall	Increase drought resistant nature of agricultural practices	Technical advice
		Too much rainfall	Increase alternate agricultural production	Provide inputs, skills, funds, water, markets for production
	Floods	Poor utilisation of rainfall (including poor soils)	Better plan location of fields relative to flood vulnerable areas	Improved land use planning
		Inappropriate location of fields	Increase access to land (rent or buy)	Improve opportunities for land sales/rental
	Pest damage (insects, birds, animals)	Ineffective pest management	Use of other food sources to meet needs	Promotion of methods for the storage and conservation of food
Own stores of food	Inability to store food	Season-to-season demand for food limits stock growth	Shift away from a reliance on season-to-season production	Support diversification of food sources
		Cultural expectation that stocks are shared		Training on harvest management

Source of food for an individual	Reason why availability of food from this source may be reduced	Proximate cause of the reduction in the availability of the food source	Community reactions to food insecurity	Ways to strengthen communities' strategies to cope with food insecurity
<b>Monetisation of assets (crops, land, animals, etc)</b>	Reduced assets	Expenditures exceed asset growth	Increase assets in good years	Savings, insurance
	Lack of transparency in market	Producers have weak bargaining positions when faced with better organised buyers	Reinforce producer organisations	Training
<b>Savings (funds and goods)</b>	Lack of sufficient savings	Limited savings opportunities	Increase savings disposal	Provide savings to dispose
	Lack of means to dispose of savings (eg overloaded markets)	Expenditures exceeding income		Improve market conditions (terms of trade)
		Shocks (illness) reducing savings	Decrease shocks (or impact of shocks)	Insurance
		Heavy costs of non-food expenditures (health, clothing, transport)	Improve the quality of social services (health, roads, markets) and move them closer to users	Improved health care
	Weak management capacity	Poor management of available resources	Improve management of family farms	Training in family economy and agricultural management
<b>Exchange</b>	Reduced social sharing	Stressed social network	Increase exchange network and obligations	Strengthen social connections
		Lack of resources to share		Increase supply of food that can be exchanged
<b>Labour</b>	Lack of sufficient employment	Lack of employment opportunities	Find additional/new labour opportunities	Increase labour opportunities Increase labour income
		Lack of skills		Increase skills (income for effort)
	Disability	Disease, physical defect or age	Begging	Increase skills (income for effort)
	Illness	Endemic or epidemic disease	Increase health expenditures	Reduce cost of preventive health care
	Inflexibility in willingness to work outside of socially defined occupations	Social factors and remnants of caste system		Development of information and education programmes to break social taboos

Source of food for an individual	Reason why availability of food from this source may be reduced	Proximate cause of the reduction in the availability of the food source	Community reactions to food insecurity	Ways to strengthen communities' strategies to cope with food insecurity
Own animals	Animal disease or death	Poor health and nutrition Lack of pasture or fodder	Shift animal assets: change nature of animals held, sell animals	Provide markets for sale of animals and animal products Improve animal health (impact on quality and quantity)
	(Forced) sales of animals	Overstocking Need for disposable income		Provide extra sources of income
Debt	Inability to secure loans	Lack of assets (to avoid the need for loans)	Improve access to credit	Increase access to credit
	Limited value of loans (poor terms of trade)	Shocks	Reduce demand for credit	Reduce need for credit
	Poor management and use of herds	Poor training in management for herders and weight of poor social view of herding	Improve the management capacities of herders	Training in the management and use of herds
Gifts	Death or displacement of food provider (patron)		Increase receiving and giving of gifts	Strengthen social connections
Food aid	Failure/reduction of aid	Changes in donor policies Change in food aid allocation criteria	Find food aid	Facilitate access to food aid
	Poor targeting	Lack of a capacity for the appropriate distribution of aid	Review the manner aid distribution will be handled in the decentralisation process	Training and raise awareness of communities to good aid distribution norms and practices
Non-food aid (including cash payments)	Failure/reduction of aid	Changes in donor policies Change in non-food aid allocation criteria	Find non-food aid	Facilitate access to non-food aid
Monetisation of aid	Failure/reduction of aid	Changes in donor policies		Increase monetisation of aid Facilitate access and capacity of markets
	Poor terms of trade	Excess supply		Improve terms of trade

Source of food for an individual	Reason why availability of food from this source may be reduced	Proximate cause of the reduction in the availability of the food source	Community reactions to food insecurity	Ways to strengthen communities' strategies to cope with food insecurity
<b>Wild food</b>	Inability to access areas of wild food collection	Land tenure claims	Increase collection of wild food	Remove legal barriers to wild food collection
	Disappearance of many species due to desertification	Increasing desert areas Poor land management	Replant lost species and improve land management	Train local populations in management of their lands
<b>Migration (to remove consumption)</b>	Insufficient local food supplies	Poor production, terms of trade and/or market supply or prices	Migrate (to remove consumption)	Facilitate migration (and jobs at destination)
<b>Migration (to generate income)</b>	Insufficient local food supplies	Poor production, terms of trade and/or market supply or prices	Migrate (to generate income)	Facilitate migration (and jobs at destination)
<b>Remittances</b>	Poor/weak income at source	Reduction in labour demand or income for labour	Push for additional remittances	Reduce barriers to remittances Increase employment skills and income at source
		Corruption		Reduce corruption
		Civil strife (in source country)		Tackle the causes of civil strife
<b>Semi-legal or illegal activities</b>	Poor success in other means to secure food	Lack of alternatives to securing food	Increase illegal or grey activities (eg prostitution, theft, increase natural resource collection)	Increase (legal) alternatives to sourcing food
<b>Other employment</b>	Lack of employment	Changes to labour demand	Secure employment	Job training, job creation
<b>Poor water supplies (quality and quantity)</b>	Poor food and animal production	Poor services/weak maintenance	Increase water supply	Improve water quality and quantity
	Poor food use (disease)	Poor knowledge, attitudes and/or practice	Migrate	Public health education
<b>Food consumption habits</b>	Weak variety in food basket, and high consumption of cereals	Few opportunities to change food consumption when lower production reduces nutritional intake	Change food consumption habits	Promote more flexible food consumption which is more adapted to variation in food availability

Note that rent seeking and corruption are common problems to all sources of food.

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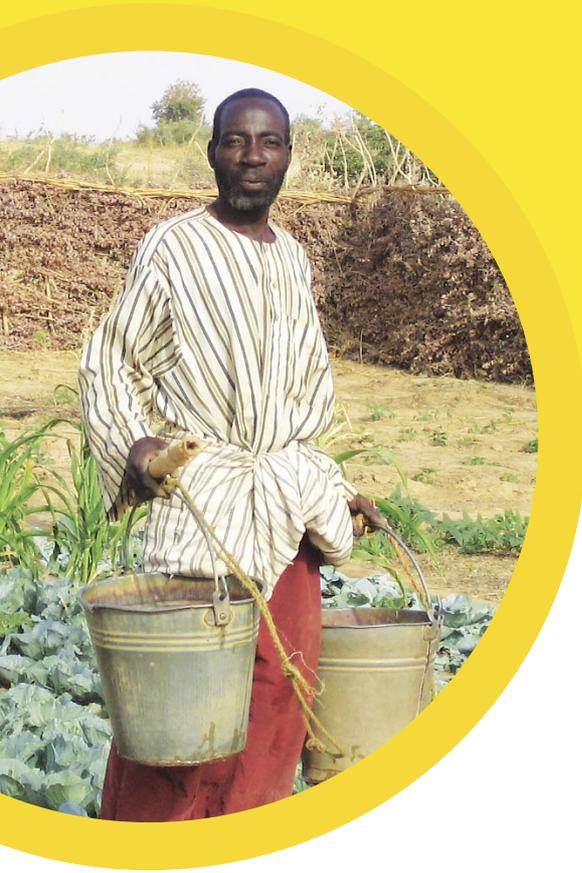
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