# Food security in complex emergencies: enhancing food system resilience

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*This paper explores linkages between food security and crisis in different contexts, outlining the policy and institutional conditions needed to manage food security during a crisis and to rebuild the resilience of food systems in periods of relative peace. The paper reviews experiences over the past decade of countries in protracted crisis and draws lessons for national and international policy. It assesses the different alternatives on offer in fragile countries to address, for example, the disruption of institutional mechanisms and the decreasing level of support offered by international donors with respect to longer-term expectations. It proposes a Twin Track Approach to enhance food security resilience through specific policies for protracted crises that link immediate hunger relief interventions with a long-term strategy for sustainable growth. Finally, the article analyses policy options and the implications for both short- and longer-term responses vis-à-vis the three dimensions of food security: availability; access; and stability.*

**Keywords:** conflict, food security, food system resilience, humanitarian crisis, humanitarian response.

## Introduction

'Hunger is the most extreme manifestation of poverty and human deprivation. Hunger in a world of plenty is not just a moral outrage; it is an infringement of the most basic of human rights: the right to adequate food . . . Hunger breeds desperation and the hungry are easy prey to those who seek to gain power and influence through crime, force or terror' (FAO, AHP, 2002).

The interaction of poverty, food insecurity and crisis is a major factor in undernourishment in Africa (FAO, SOFI, 2002). Food systems that are repeatedly put under stress by conflict and institutional variability tend to move from predictable chains of production, processing, distribution and consumption to volatility. The response mechanisms adopted by the international community also seem inconsistent. In addition, although the need to address longer-term objectives is widely recognised, the apparatus for doing so does not seem to exist.

The Anti-Hunger Programme (AHP) of the Food and Agriculture Organization of the United Nations (FAO) clearly sets out the moral, legal, economic and political dimensions to hunger. Furthermore, it calls for a sustained and multi-pronged strategy to broaden direct access to food and to increase the availability of food, especially for resource-poor, rural communities (FAO, AHP, 2002). The programme asserts that rural and agricultural development must be an essential element of such a strategy because agriculture and off-farm income generation are a major source of revenue for the rural poor, comprising the majority of the people of the world who are hungry.

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The AHP identifies such a strategy as a Twin Track Approach, presented and endorsed in its entirety by the thirty-second session of the FAO Conference ('Strengthening Coherence in FAO's Initiatives to Fight Hunger') in December 2003. The latter noted that 'one track creates opportunities for the hungry to improve their livelihoods through policy reform and investment in agricultural and rural development. The other track equips the poor and hungry to take advantage of these opportunities by enhancing immediate access to food thereby increasing their productive potential. The two tracks are mutually reinforcing since programmes that enhance access to food offer new outlets for expanded production' (FAO, 2003; Broca, 2002).

This paper contends that the Twin Track Approach can be successfully adapted to a conflictual or post-crisis situation. It argues that such an approach must be based on a multi-disciplinary understanding of communities and their food systems, proposing modalities of intervention able to address key vulnerability issues, strengthening communities and their institutional inherent resilience. The paper identifies some of the issues related to food insecurity and hunger in the context of vulnerability, community- and household-level coping strategies and the limited response choices of the international humanitarian and development communities in crisis situations.

In September 2003, FAO organised an international workshop on the subject of 'Food security in complex emergencies—building policy frameworks to address longer-term programming challenges'.[2] Participants came from humanitarian and developmental institutions (research and inter-governmental agencies) and called for new response mechanisms during protracted crises able to address both short- and longer-term needs, save lives, protect livelihoods and restore the resilience of affected societies. The two major outcomes of the seminar were the identification of existing policy gaps and of possible ways to overcome the current limitations of response mechanisms. These gaps and limitations can mean that aid agencies, concerned governments and local actors end up 'surfing' among emergency, post-emergency and early rehabilitation operational modes, without being able to exit from the emergency phase over extended periods. Meanwhile, development agencies run the risk of being left to deal with the unintended 'blowback' from ill-informed crisis management thinking.

While the short-/long-term dichotomy is useful in directing policy options, long-term information for action must be predicated on an appreciation of changing narratives of resilience and resistance and the response combinations available to individuals, households and communities (Lautze and Raven Roberts, 2003). While these are new questions for FAO, it is vital that we pose them if we are to see a genuine reduction in hunger, food insecurity and related protracted crisis.

## Crisis and food security

FAO's latest report on the state of food insecurity in the world (FAO, SOFI, 2004) highlights the fact that international efforts to reduce hunger in the developing world have fallen far short of the pace required to reach the 1996 World Food Summit goal of halving world hunger by 2015. As of July 2004, 35 countries faced food crises requiring

emergency assistance (table 1). According to FAO, over the past two decades, the number of food emergencies has risen—from an average of 15 a year in the 1980s to more than 30 a year from 2000. Much of the increase has occurred in Africa: the average number of annual food emergencies has tripled there. Drought, conflict and HIV/AIDS are cited as major contributory factors (FAO, SOFI, 2004).

Table 1 clearly indicates the growing importance of human agency in inducing crises, either directly (such as wars and civil strife) or through interaction with natural hazards that would otherwise have been of minor importance. Approximately 50 million people worldwide live in an area marked by a protracted crisis that has lasted for five years or more. Ethiopia, Somalia and Sudan, for example, have each been in a state of protracted crisis for over 15 years (FAO, SOFI, 2004).

Crisis is a cause and an effect of food insecurity, and inadequate or inequitable access to assets (financial and others) are common to both (FAO, SOFI, 2004; Collier and Hoeffler, 2000; Berdal and Malone, 2000). The majority of the world's poorest people—and those with the least transferable skills—is situated in rural areas, locations where the opportunity costs of armed violence are low (UNU/IAS, 2004) and the incidence of conflict is high. In a study of 38 countries that experienced conflict between 1961 and 2000, Teodosijevic (2003) shows that per capita agricultural and food production levels are ten percent lower during a conflict and in the five years after a conflict than in the five years before the fighting began. The overall loss from conflict-related agricultural production in Africa between 1970 and 2000 was approximately USD 52–55 billion (FAO, SOFA, 2000). And, as Flores (2004, p. 7) notes, 'the average losses of US $4.3 billion per year in agricultural value added for all conflict-affected developing countries exceed the amount of the food aid bill'.

Crisis is often taken to mean violent, overt conflict or a rapid-onset disaster (like a flood or tsunami). However, while there is often a (not necessarily causal) relationship between these and acute food emergencies,[3] irrefutable evidence from the field has fuelled an emerging consensus on a multi-layered notion of crisis. This is implicated in, and interacts with, dynamic narratives of social relations,[4] food production systems,[5] unsustainable natural resource management,[6] resource predation,[7] institutional corruption and shadow economies,[8] epidemic disease, especially HIV/AIDS,[9] and more exogenous hazards, such as drought, flooding[10] or Force Majeure.[11]

**Table 1** Food emergencies, 2004

| Dominant variable | Africa | Asia | Latin America | Europe | Total |
|---|---|---|---|---|---|
| Human | 13 | 3 | 1 | 1 | 18 |
| Natural | 5 | 1 | 0 | 0 | 6 |
| Combined | 6 | 1 | 4 | 0 | 11 |
| Total | 24 | 5 | 5 | 1 | 35 |

**Source:** FAO, GIEWS, 2004b

Comprehending the socio-political and economic dynamic of a community in crisis is therefore central to understanding food-related emergencies (Korf and Bauer, 2002; Le Billon et al., 2000). This has become even more critical because of the HIV/AIDS pandemic, as this touches on some of the most fundamental hierarchies, vulnerabilities and exclusions in any society (Campbell, 2003; UNICEF/UNAIDS, 2003). Crises triggered by HIV/AIDS have led to calls for new paradigms to analyse and respond to 'new variants' (de Waal, 2001) of famine affecting social and community structures and relevant institutions (UNAIDS/Penn State, 1999; Panos Institute, 2003).

HIV/AIDS has decimated already weakened governmental institutions, such as agricultural extension services (Qamar, 2004), and disrupted the transmission of traditional agricultural knowledge between generations (FAO, 2001; UNICEF/UNAIDS, 2003). Moreover, HIV/AIDS is increasingly a factor in protracted and complex emergencies in all regions (Goreux 2001; ICG, 2004), especially where high-value resources, including coltan, diamonds and timber, or banditry results in a concentration of young male workers in environments where their masculinity, a relative asset in their familial context, can become a liability (Campbell, 2004; ICRC, 2004).

The food emergency in southern Africa in 2002–03 clearly illustrates how human activity and a natural hazard (a regional propensity to drought) can interact to precipitate a protracted food security crisis. In 1992–93, a drought linked to El Niño negatively affected agricultural production but there was no major regional crisis. Ten years later, a similar drought was blamed for triggering famine. By this time, formal institutions in several countries in the region had been eroded, sometimes entirely. This was due to a range of human factors, including conflict, HIV/AIDS and inappropriate natural resource management or depredation (FAO, SOFI, 2002, 2003).

The attenuation of state structures and formal institutions does not always undermine the inherent resilience of social relations and can be conducive to short-term food security. For instance, in Somalia, in 1990, when the government only controlled the capital, Mogadishu, and a few other major cities, lack of institutions, non-responsive policies and an inability to enforce policy gave rise to state alienation and de-legitimisation (Harvey, 1998). It has been argued, though, that the absence of a formal, central government was more beneficial in economic terms than the repressive institutions and improper policies of the government (Mubarak, 1997). Certainly, informal and/or private *hawilaad* (meaning 'transfer' in Arabic), remittance and informal or illegal networks in conflict or crisis-prone areas strengthen the short-term access of vulnerable communities to food and other basic services.[12]

## Protracted crises and the international response

During the 1990s, while the number of crises in which the human variable predominated was mounting, and their scale was becoming broader, the international community was moving from development-oriented assistance to emergency response. Overseas Development Assistance (ODA) followed a steady upward path between the 1970s and the beginning of the 1990s. After 1990, it either stagnated or started to decrease. In real terms, the reversal in ODA occurred much earlier.

Over the past decade, however, the volume of aid available has not risen to levels required to respond adequately to crises, even in the short term. Emergency assistance often is not even enough to cover strictly humanitarian needs.

The unprecedented global public response to appeals for the victims of the tsunami of 26 December 2004, a rapid-onset disaster, is in sharp contrast to the 'compassion fatigue' (Moeller, 1999) that can be inferred from frequently disappointing reactions to similar appeals for food emergencies arising from political crisis and war. The notion of a media driven policy of humanitarian intervention—the so-called CNN response—is controversial (Robinson, 2002; Cate, 2002). Yet, it is clear that donor governments do respond at some levels to pressure from their domestic (voting) constituencies. It is also apparent that the narrative of aid as endlessly being poured into a 'black hole' of passivity, conflict, terrorism, corruption and ethnic (ahistorical) strife is a powerful one that needs to be addressed (Minear et al., 1996; Clark, 2004; Carruthers, 1999; Macrae et al., 2004).

Moreover, while the financial response to emergencies and ODA for addressing the crisis over the long term have not been adequate, policy formulation and analysis have become increasingly sophisticated. In *Beyond the Continuum,* Macrae et al. (2004) chart the evolution of international aid and development policy in the context of a changing aid environment and shifting perceptions of vulnerability vis-à-vis the political economy of conflict. Their report shows how the discussion moved from the simplistic relief–development continuum, to a growing convergence between the conceptual and operational frameworks of humanitarian and development actors.

The acknowledgement that neither a rapid-onset crisis, like an earthquake, nor chronic violence, such as poverty, is experienced as a single, discrete and uniform event by all those affected (Wisner et al., 2004; Webb and Rogers, 2003) has led to recognition of the importance of understanding risk and corresponding resilience and vulnerability (Christoplos et al., 2004).

The perception of vulnerability differs across disciplines (Alwang et al., 2001; Wisner, 2005) and is often seen as structurally unrelated to risk (Løvendal and Knowles, 2005), with consequent short- and long-term mitigation options. It is becoming clear, though, that vulnerability, or the space of vulnerability (Watts and Bohle, 1993), is the dynamic social production of resilience, or the capacity to manage, adapt to, cope with, or recover from risks to livelihoods. These variables reflect social relations over time and are themselves social relations, linked to group hierarchies and resistances of the society in which they circulate. In other words, they are not only a product, but also producers, with the capacity to alter the forces that brought them into being.

This requires, as Collinson (2003) explains, a new set of questions and a philosophical and cultural shift in practices and outlooks. Organisations involved in crises must move on from the 'what' of short-term needs assessments to the 'why' and 'how' of vulnerability and resilience, taking into account operational experience, a growing body of research on the non-linear complexity of hunger and vulnerability to food insecurity and respect for community resilience. Paradoxically, the 'non-headlining' nature of agricultural development in an emergency context, which is usually represented in the media by large volumes of relief aid or mass displacement of people, can support this role, while also militating against high-profile advocacy activities.

## FAO's evolving role in food emergencies

Johnecheck (2005) provides an excellent overview of theories of, and mechanisms for, monitoring and assessing food security as well as other variables, such as development and social progress. Escobar (1985) and Christoplos et al. (2004) have also traced the emergence of a 'development–underdevelopment' narrative, from its emergence in the late 1940s and 1950s, when it was considered equivalent to gross domestic product (GDP) and modernisation. The food crisis of the 1960s forced one of many re-evaluations of such paradigms, and led to a more active role for the international community with respect to interventions with relief stocks of food.

The World Food Programme (WFP), which was established in 1961, initially on an experimental basis, as a joint programme of FAO and the United Nations (UN), was given a mandate to establish adequate procedures for global food needs and emergencies. These included creating food reserves, assisting with pre-school and school feeding and implementing projects that involved the multilateral use of food to facilitate economic and social development. In 1975, the United Nations/FAO Intergovernmental Committee of the World Food Programme was reconstituted as the Committee on Food Aid Policies and Programmes. It was granted an additional mandate to advance and coordinate short- and longer-term food aid policies recommended by the World Food Conference. In 1994, WFP became autonomous. Its Executive Board became operational in 1995.

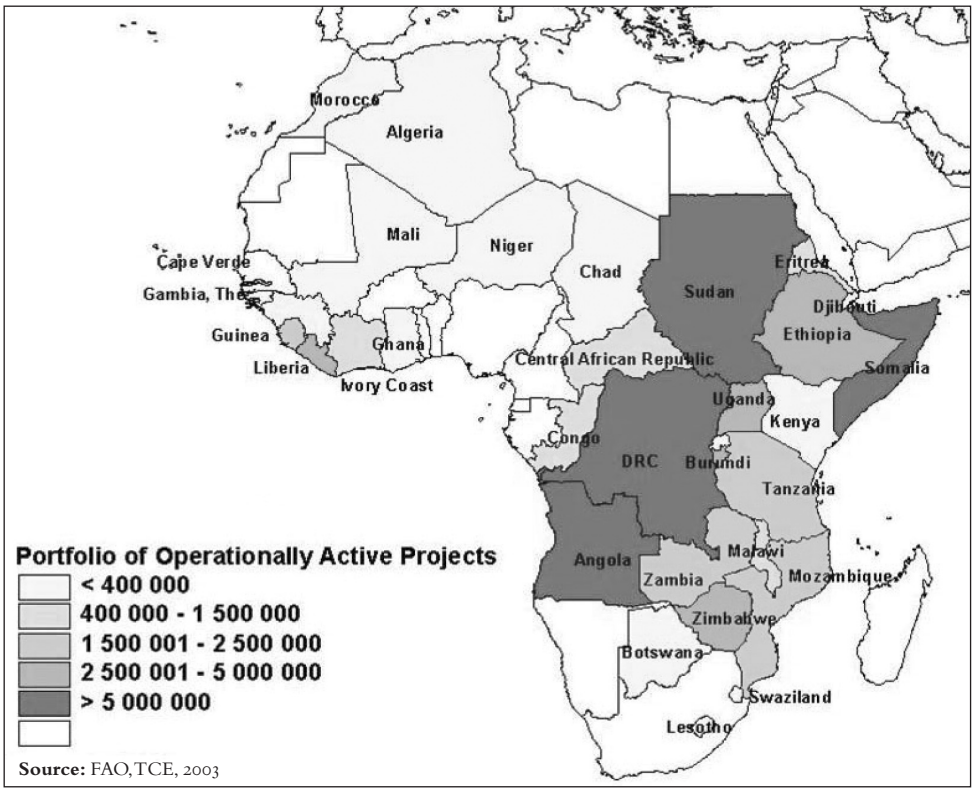
FAO's Office for Sahelian Relief Operations (OSRO) was set up in May 1973 to instigate short-term emergency relief operations in six countries of the Sahel-Soudanian region most seriously affected by drought. OSRO was expanded in 1975 to respond to requests for emergency assistance from any part of the world and was renamed the Office for Special Relief Operations. In 1991, it was transferred to the Field Operation Division as Special Relief Operation Service (TCOR), maintaining its mandate as FAO's focal point for emergency interventions in the agriculture and related sectors and its close relationship with other UN bodies.

In March 2002, it was upgraded to a Division for Emergency Operations and Rehabilitation (TCE) in the Technical Cooperation Department, which became effective in March 2002.

In the early 1970s, FAO established the Global Information and Early Warning System for Food and Agriculture (GIEWS) to observe food supply and demand. The Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES) was created in 1994 to monitor emerging threats from pests and epidemics. The information collected by these systems enables governments and international bodies to take action early in order to prevent emergencies from developing (FAO, TCE, 1997). From the 1990s, FAO's role began to expand from analysis to direct relief operations aimed at restoring the assets and production levels of the affected communities as soon as possible after the onset of a disaster.

FAO established its first emergency coordinating unit in the field in Rwanda in 1994 (FAO, TCE, 2003). FAO has been increasingly involved in crisis situations, mainly in Africa (see map), but also in Kosovo, Iraq, Afghanistan, and, more recently, Indonesia,

**Figure 1** FAO emergency interventions in Africa, 1994–2003




following the tsunami. The value of contributions for emergency interventions in Africa has grown from USD 4 million before 1994 to more than USD 100 million in 2004 (the bulk of the most recent funding being earmarked for locust control operations in West Africa). This mirrors global trends in emergency aid compared to ODA (Macrae et al., 2004; Dollar and Levin, 2004; German and Randel, 2002, 2003).

The emphasis on human rather than unconditional state security/sovereignty provides a more neutral framework within which the UN can approach the aid–security linkage and encourage a focus on 'poorly performing' countries, whose economic indicators are consistently low and whose formal institutions are missing or deteriorated (Macrae et al., 2004).

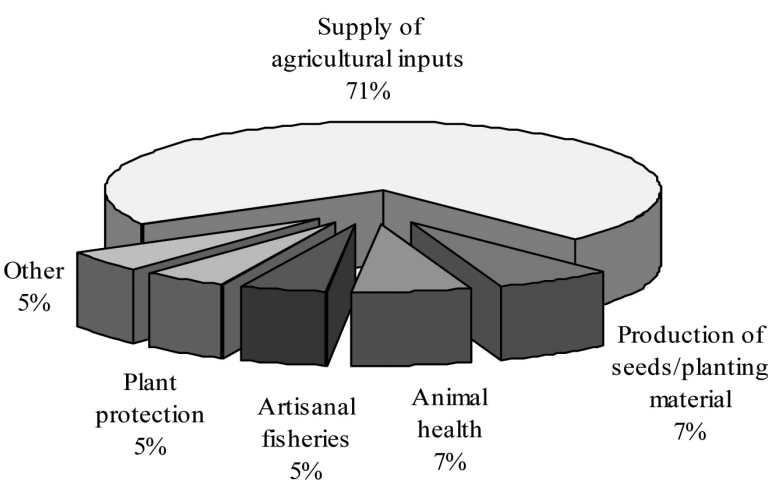
FAO is uniquely well positioned to assume this role in supporting agricultural sector rehabilitation in protracted crisis contexts. Institution-building and support to government remain crucial elements of the FAO agenda, but the organisation also acknowledges the validity of a humanitarian mandate to work with local communities and non-government actors when government structures are absent or in a state of extreme attenuation. It often assumes, therefore, a mediating and coordinating role between state and non-state actors, donors and implementing agencies and communities and advocators. FAO acts as a low-key coordination and technical forum in a

usually highly volatile and politicised environment, while maintaining status through the coordination of disbursements of high volumes of inputs and overseeing from a technical standpoint project proposals.

For example, technical agricultural issues 'made headlines' in Afghanistan in 2002 when the then Transitional Government drew up a code of conduct on imports of seed aid in emergencies, following rumours that agencies were importing Genetically Modified Organism (GMO) seeds and the failure of harvests because of the distribution of inappropriate seed types. The unsubstantiated GMO story was the predominant editorial angle rather than the proven suffering of hundreds of Afghan farmers who had wasted precious time and money. Meanwhile, the success of the National Seed Multiplication Programme was ignored. The programme had expanded and prospered despite looting and intimidation by the Taliban, meaning that Afghanistan emerged from 20 years of war and drought with a surplus of quality wheat seeds—rendering the import of seed aid largely redundant anyway. FAO was able to provide technical advice on the code of conduct, monitor seed importation proposals and provide factual information to the media to try to ensure that unsubstantiated rumours were not presented as facts.[13]

FAO's coordinating and oversight role in agricultural sector rehabilitation in protracted crisis is not only a function of its mandate as a UN specialised agency—a mandate that implies accountability over the long term. Unlike many humanitarian agencies and non-governmental organisations (NGOs), FAO has a core group of long-term technical experts in all fields of agricultural development, from animal health and pest control to commodity chain analysis and operational logistics. Many employees are former civil servants with a wealth of non-quantifiable knowledge of, and familiarity with, the nuances of local and national politics and bureaucracies. This expertise is

**Figure 2** Types of emergency interventions in Africa, 1994–2003




**Source:** FAO, TCE, 2003

not reliant on project funding and can support sustained and longitudinal studies of the political economy of a crisis. These studies can inform project-based livelihoods assessments in the field as part of a twin-track research agenda that complements the asynchronous delivery of inputs and technical advice.[14]

Traditional approaches to addressing acute crises began with relief inputs (for example, seeds and tools and food aid) and progressed to development assistance, on the assumption that developing countries are on an improvement path, with disasters representing a temporary disruption of a linear development process. As Christoplos et al. (2004) note: 'the problem with all "re" words (reconstruction, recovery, revitalisation, among others) is an implicit assumption of a re-turn to a former, supposedly stable and desirable state of affairs'. FAO has concentrated its relief efforts on the traditional 'seeds and tools' approach (see figure 2). However, there has been significant advancement with regard to concept, strategy and action related to the management of protracted crises. Now the focus is on the long term and on rebuilding resilience, even as immediate needs are met. The next section discusses the emerging framework for managing crises in a twin-track mode.

## Rebuilding the resilience of food systems: the Twin Track Approach

Food and food emergencies are by their nature political (Sen, 1981; Watts, 1983; de Waal, 1997). And, as the technologies and taxonomies employed to define and manage famine become more sophisticated, and the link between starvation and crop failure becomes a thing of the past, food insecurity as a social and political construct is becoming clearer (Devereux, 2000; Duffield, 2001; Lautze et al., 2002). Classic examples of the incidence of political famine are Ireland in 1845–48 (Ó'Gráda, 1999), Ethiopia–Eritrea in the 1990s (Duffield and Prendergast, 1994) and Sudan (Elmekki, 1999).

Responses to protracted food emergencies, though, have not yet fully incorporated the above complexity into their operations. The relief mechanisms adopted by the international community are based on the assumption that one can have only two very distinct intervention contexts:

- the development context, where a fully accountable government is in place and where interventions are designed to support governmental policies aimed at sustainability; and
- the acute crisis context, where interventions seek to provide immediate relief, on the understanding that such operations are temporary and that developmental instruments will assume prominence again in the near future.

In such a polarised environment, protracted crises are viewed as a series of acute crises, even when interventions are also long-drawn-out. Lack of government and institutional breakdown does not allow any other kind of intervention than those that are expected to respond to immediate needs, are of temporary duration, and are targeted towards saving life.

In such a context, interventions to tackle food insecurity mean essentially the delivery of food aid in adequate quantities and in a timely manner in order to reduce hunger immediately. The effort that poor households put into meeting short-term food needs often rules out investment behaviour that would have a larger payoff in the longer term. Instead, they are seen to rely on short-run coping strategies, some of which may in themselves erode social capital due to direct competition for common resources or the fraying of socially prescribed behavioural norms (Webb and Rogers, 2003). Coping itself, however, places enormous stress—physiological and social/institutional—on already weakened bodies, and each time it becomes harder for them to regain or approximate the status quo ante, let alone improve on it (Aron, 2002).

Protracted crises reduce a society's resilience to variability. In the context of food systems, resilience can be interpreted as a measure of the ability of a system to remain stable or to adapt to a new situation without undergoing catastrophic changes in its basic functioning. The risk of decreasing functionalities and provision of services in specific food systems becomes high when the society has been heavily affected by a weakened or attenuated public sector and loss of market structures.

The major difference between a resilience analytical framework and early warning systems is that the former does not aim to predict crises, but rather to assess the current state of health of a system, and hence its capacity to withstand a shock, should one occur (Lau et al., 2003). The intervention strategies that will augment the resilience of a food system should be based on the following principles:

- strengthening diversity;
- rebuilding local institutions and traditional support networks;
- reinforcing local knowledge; and
- building on farmers' ability to adapt and reorganise.

The focus ought to be on reconstructing the capacity of communities to find rapid, flexible solutions to problems and to balance power among the various interest groups and stakeholders (Scheffer et al., 2000; Berkes and Folke, 2002).

The process to implement the four mentioned principles to rebuild the functions of food systems and to strengthen their resilience needs to be defined within a clear conceptual and operational framework, adaptable to the specificity of each context. We propose a framework to be used both for the analysis and to develop response mechanisms to fortify the resilience of food systems. The framework takes into consideration immediate and longer-term needs, defining different response mechanisms, strategies and policies depending on the context. The framework employed is the FAO Twin Track Approach adapted and adjusted to address protracted crises.

The first track addresses recovery measures for rural livelihoods. The second track provides immediate support to vulnerable groups. The two tracks are intended to be mutually reinforcing, and the positive interaction between them should generate incentives to follow a path toward recovery. The context of each protracted crisis is unique, although most share general characteristics: institutional dysfunction/collapse; large-scale displacement; and disruption and dysfunction of livelihoods or a substantial part

**Table 2** FAO Twin Track approach in protracted crises

| Twin Track Approach | Availability | Access and utilisation | Stability |
|---|---|---|---|
| **Rural development/ productivity enhancement** | Enhancing food supply to the most vulnerable | Re-establishing rural institutions | Diversifying agriculture and employment |
| | Improving rural food production, especially by small-scale farmers | Enhancing access to assets | Monitoring food security and vulnerability |
| | Investing in rural infrastructure | Ensuring access to land | Dealing with the structural causes of food insecurity |
| | Investing in rural markets | Reviving rural financial systems | Reintegrating refugees and displaced people |
| | Revitalisation of livestock sector | Strengthening the labour market | Developing risk analysis and management |
| | Resource rehabilitation and conservation | Mechanisms to ensure safe food | Reviving access to credit system and saving mechanisms |
| | Enhancing income and other entitlements to food | Social rehabilitation programmes | |
| **Direct and immediate access to food** | Food Aid | Transfers: Food/cash based | Re-establishing social safety nets |
| | Seed/input relief | Asset redistribution | Monitoring immediate vulnerability and intervention impact |
| | Restocking livestock capital | Social relief/rehabilitation programmes | Peace-building efforts |
| | Enabling market revival | Nutrition intervention programmes | |

of them. The Twin Track Approach provides a policy framework for addressing these common problems. Yet, in each crisis, the combination of responses adopted from the two tracks and the timing of implementation are context-specific and dependent on the risk analysis and management component.

## Immediate needs

Increasing risk of institutional or state incapacity is often evident well before the crisis emerges (de Soysa and Gleditsch, 1999; Le Billon, 2003; Messer et al., 2001). Nonetheless, in these contexts, the international community refrains from intervening unless humanitarian aid is needed, in contrast to development aid, in a context of acute, transient crisis, where intervention is temporary, exogenous, immediate and aimed at saving lives.

Eventually, other instruments designed to be implemented over the medium or long term will succeed the humanitarian response.

Urgent action to guarantee direct and immediate access to food is essential and should remain central to medium-term planning. Protracted crises are often characterised by malnutrition and under-nourishment. This means that nutrition programmes are essential for short- and long-term interventions. It is crucial, too, however, to ensure that inputs are coordinated, particularly where therapeutic feeding is required. In relation to Afghanistan, Dufour and Borrel (2005) report how a policy gap meant that members of the International Security Assistance Force (ISAF) and NGOs were arbitrarily delivering infant feeding formulas to women based on erroneous assumptions. In a context of inequitable and irregular access to safe drinking water and non-optimal weaning practices, this meant that some infants were at elevated risk of diarrhoea and malnutrition.

Food aid is essential both for availability (when production and import capacity is insufficient) and for access (with respect to those with non-existent or diminished entitlements to food). Even so, timing of distribution, as well as proper targeting of food aid, is crucial to ensuring that the intervention has a positive impact, avoiding having a bearing on local volatile markets and depressing local production. Adequate complementarities should be developed between the distribution of food aid and the means of producing food. Moreover, the appropriate mixture of responses to address immediate entitlement needs should be carefully calibrated. Often cash distribution is undervalued compared to food, even when the context would permit it and would ensure more efficient and effective outcomes. Cash distribution is often more efficient and aimed at fostering a local production capacity, where availability is not a limiting factor. There are reports of successful cash distribution schemes in the Democratic Republic of the Congo (DRC) and Somalia, where food is available either because of increased imports or local production.

Finally, the food basket should be adequately composed to meet the food needs of people, especially when the duration of a crisis allows for proper planning of the relief response. Supplying exogenous seed varieties for several years may contribute to the disruption of traditional food systems and also create structurally dysfunctional outcomes.

## Interventions over the long term

Interventions to support rural development and enhance productivity are crucial to stability and predictability. Nevertheless, intervention options may be very different depending on the characteristics of the crisis, the social institutions in place and the stability of peace processes, if any. Enhancement of food production/supply and livestock is normally one of the very first measures to be adopted. When a crisis is protracted, a society's productive capacity and traditional technical knowledge may substantially decrease, increasing the danger of relief dependency. A Track One intervention should therefore focus on rebuilding such capacities through restocking and protecting assets

and rebuilding knowledge and agricultural and livestock investments. The earlier these interventions occur, the lower the risk of losing knowledge and capacity.

Production should be supported by actions focused on the rehabilitation and conservation of resources to augment opportunities for sustainable increases in production. Natural resources and wildlife are often negatively affected by a crisis, both because of actual fighting and because of the predatory forces unleashed by a breakdown in authority and the 'commoditisation' of the resources themselves. Warlords and other illegitimate power brokers are often linked to commercial networks outside the country or region of conflict and use the confusion caused by instability to mask the process of laundering their financial or political transactions (Global Witness, 2003, 2004).

Conservation is a sensitive issue, and the design and implementation of programmes must be participatory and based on community consensus (Neumann, 2001). This is difficult in a war zone or in societies where traditional negotiating structures or interlocutors are absent or attenuated (Anderson, 1999) and where bush meat and other wild game are either important sources of protein or cash or other assets. However, consideration of how 'specific resource environments (tropical forests or oil reserves) and environmental processes (deforestation, conservation, or resource amelioration) are constituted by, and in part constitute, the political economy of access to and control over resources' (Peluso and Watts, 2001, p. 5) is crucial in ecologically vulnerable areas, where the loss of access to natural capital could cause long-lasting damage to livelihoods.

Income capacity and entitlements must be improved quickly to increase social productive capacities, rural infrastructure and a belief in the rehabilitation process itself. Public works are a visible sign of a reassertion of social order and can provide meaningful work as well as income in cash or kind. Strengthening market capacities, improving local production mechanisms and mostly ensuring security and stability are key to enhancing income opportunities and prospects for acquiring food.

Institutions should be strengthened to ensure a smooth transition to local ownership once the international relief effort is over. Institution- and capacity-building should be included from the very beginning in any investment initiatives and the entire process should be transparent and based on consensus and equity of access. This approach requires thorough research of past and present interventions before any policy frameworks are developed. In late 2001, the large-scale intervention in Afghanistan was predicated on market-oriented policy frameworks. Planners soon realised, though, that massive capital investment was not only required, but also expected, for infrastructural repair and societal rehabilitation. Afghans who graduated from Kabul University's Faculty of Agriculture, and who became involved in planning agricultural policy after 2001, felt entitled to state-run extension and support services. So too did the farmers, despite their proven resilience in the face of drought and war. They had all grown up during the Cold War, when both the Soviet Union and the US invested heavily in extensive irrigation and extension projects, cultivating an expectation of centralised planning and resources for what had hitherto been an intensely local activity (Christoplos, 2004).

Land rights and justifiability are essential to, and some would argue the *sine qua non* of, long-term peace (Alden Wily, 2003). Sometimes the end of formal hostilities presents

an opportunity for vested interests to move in to 'uncontested' land (FAO, 2002), especially where written cadastral records have been destroyed or oral histories dispersed or intimidated into silence.

The return of refugees or the resettlement of displaced people or veteran fighters is another highly sensitive issue, particularly in a context of extreme brutality, where ethnic cleansing or maiming were characteristic of the violence (Daniel and Knudsen, 1995; Terry, 2002). The policy options here range from strengthening local customary rights to protecting returnees or internally displaced persons (IDPs) to a consensual land tenure approach based on equality of access and transparency.

It will be vital to monitor food security, vulnerability and the impact of the different responses, both in the short and long term. Information available is often very limited and controlled by a small elite. Yet it is crucial to ensure adequate support for institutional capacity and policy development and to guarantee transparency and accountability to different constituencies.

There are also policy domains that belong to both tracks. Markets have proven to be among the most resilient institutions, being able to recover quickly and to function in the absence of government. Nonetheless, the lack of rules, heavy transaction and transformation costs and the inefficiency of the overall economic system often prevent markets from functioning. Policy options during the reconstruction phase may include controlling transaction costs, strengthening infrastructure, ensuring access to markets and providing adequate security.

Also needed is a better understanding of informal markets to create conducive programmes that target the poor. Additionally, it is particularly important to focus on traditional safety nets and customary insurance mechanisms so that adequate access and stability can be guaranteed.

Depending on the context, different combinations of safety nets should be adopted to tackle specific crisis/recovery processes. Policy measures, as well as tools used (food or cash) and the targeting mechanisms, should be defined according to the community's capacity to absorb and manage resources. The policy options range from direct transfers to public works programmes and credit mechanisms, such as micro-credit. Safety net instruments are essential to a sound recovery process and should be incorporated into medium-term plans from the outset. The safety nets should be composed of both food and non-food tools, including income support, guarantees of a minimum level of consumption and expanded participation in socially beneficial programmes, such as health, education, sanitation and nutritional improvement schemes.

## Conclusion

Protracted crises need to be acknowledged as complex, but not as unmanageable processes involving social and human interaction, institutions, policies, and knowledge systems across several dimensions of time and space. Analysis of each crisis in the context of the dynamics of resilience and vulnerability outlined above should enable interventions that support the resilience of endogenous food systems while addressing some of the main causal factors in the evolution of the crisis.

Enhancement of food systems affected by acute and recurrent shocks needs to occur within a clear and flexible policy framework based on the FAO Twin Track Approach adapted to the protracted crises. Furthermore, the implementation mechanisms should be based on the overall principles of flexibility, accountability and transparent management. Adequate funding, processed through appropriate and effective institutional mechanisms, should be guaranteed to ensure maximum efficiency in implementing the Twin Track Approach in responding to changing and multifaceted local, regional and national institutional processes.

Food system rehabilitation ought to be seen as an essential component of economic system revival, especially in those countries where agricultural and pastoral systems play a major role both in terms of global economic production or labour and the employment of a large section of the population.

The Twin Track Approach could also be considered in the context of recent programming tools developed by the UN system and international financial institutions (UNDG/World Bank, 2005). To ensure further development, it should build on information provided by local information systems and should inform and contribute to field research. Case studies should be developed to allow the framework to be utilised in current crises.

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## Endnotes

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[2] See http://www.fao.org/crisisandhunger.

[3] See FAO, SOFA, 2000; Peluso and Watts, 2001; Richards, 2001; de Waal, 1997.

[4] See Watts and Bohle, 1993; Abrahamsen, 2000.

[5] See Watts, 1983.

[6] See Ohlsson, 2000; Adebajo, 2002; Elmi Mohammed, 2001.

[7] See Klare, 2001; Collier and Hoeffler, 2000; Malone and Nitzschke, 2004; Global Witness, 2003, 2004; Lunde et al., 2003.

[8] See Reno, 2000, Le Billon, 2003; Mansfield, 2004; Giustozzi, 2003, 2004; Green and Ward, 2004.

[9] See USIP, 2001; UNSG, 2004; Harvey, 2004; ICG, 2004; Barnett, 2003.

[10] See Wisner et al., 2004; Wisner, 2003.

[11] See Collinson, 2003; Berdal and Malone, 2000.

[12] See Horst and van Hear, 2002; Maimbo, 2003; Bernal, 2004; Pain and Sutton, 2005; MacGaffey et al., 1991; Mwanasali, 2000; Donini et al., 2004.

[13] Personal communication with Anthony Fitzherbert, who was the senior agronomist for the FAO Afghanistan Programme in 2002 and 2003. Also, personal experience of Jacky Sutton, who was the Information Officer for the FAO Afghanistan Programme in 2002.

[14] Personal communication with Jean-Francois Gascon, who was the FAO Emergency Coordinator in Rwanda and currently heads the FAO Emergency Desk for Africa.

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