Resilience in protracted crises: exploring coping mechanisms and resilience of households, communities and local institutions

Household resilience to food insecurity in the Sudan
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Introduction

This paper focuses on coping mechanisms and the resilience of households, communities and local institutions in the Sudan. It is based on studies carried out on the topic and on the field experience of the authors. These include the recent analysis of household resilience to food insecurity (FAO, 2012) and past and ongoing efforts to develop recommendations for actions to mitigate the risks of protracted crises for local livelihoods. The data reported in the paper are relevant to the Republic of The Sudan and its 17 states. The paper concludes that, in protracted crises, public and external resources for addressing food insecurity and vulnerability will continue to be insufficient and hence that it is important to work with the existing structures and mobilize their resources rather than building poorly funded parallel systems.

Underlying causes of the protracted crisis in the Sudan

FAO (2010a) classified the Sudan as being in protracted crisis. The country has experienced civil conflicts since 1955, shortly before independence, and the Sudanese people are still suffering from violence and damage to their economic and social capital. Moreover, due to the persistent armed conflict, the administrative capacity of key economic institutions has been severely diminished; the ability of the authorities to provide basic services is limited; financial and economic imbalances are unsustainable; and the regulatory and institutional environment for private-sector activity is undermined. Thus, human development is currently challenged by many important factors among which are the unfavourable environment created by the continuing environmental degradation, the civil conflicts and the persistent brain drain, and the inability of government policies and strategies to address the root causes of the environmental degradation and the conflicts, to improve the effectiveness of decentralization and to allocate scarce resources equitably across regions.

Drought has become more frequent and more severe in the Sudan in recent years (Figure 1), and drought-affected areas are projected to increase.

Figure 1. Extent of drought in the Sudan, 1920–1994 (% of the country affected).

Source: ICARDA/AEPRC. 2009. Poverty assessment in Sudan
Drought is the single most common cause of severe food shortages in the Sudan. Drought is a feature of all states in the Sudan, but has a greater impact on rainfed areas, which perpetuates regional disparities between irrigated and rainfed areas.

**Long-standing economic and regional disparities**

The civil conflicts in the Sudan are attributed to the considerable inequality between favoured and less-favoured areas. Favoured areas include the capital, Khartoum, and the irrigated areas, which receive the largest share of public investments. The less-favoured areas are mainly rainfed areas relying on agriculture and pastoralism, which receive much less public investment and suffer from political exclusion and social and cultural deprivation. Over the last decade the Sudan has enjoyed one of the highest economic growth rates in sub-Saharan Africa, with per capita GDP increasing from about US$800 a decade ago to US$1500 in 2010. However, the benefits have been highly unequally distributed: while the national average poverty rate was estimated to be 46.5 percent in 2011, poverty rates in Kordofan and Darfur regions were estimated at 58.7 and 62.7 percent, respectively (CBS, 2010). These two regions are the main rainfed agriculture and pastoralist areas in the Sudan.

**Manifestation of the protracted crisis**

The protracted crisis situation in the Sudan is manifested in low Human Development Index (HDI), high incidence of poverty and high levels of food insecurity.

**Low Human Development Index**

The Sudan was ranked 169th out of 187 countries and territories in 2011 in terms of HDI,(UNDP, 2011) despite its HDI having increased from 0.264 to 0.408 between 1980 and 2011. Life expectancy at birth increased by 12.1 years, mean years of schooling increased by 2.2 years, expected years of schooling increased by 0.8 years, and per capita gross national income increased by about 87 percent between 1980 and 2011.

The four states with the highest HDI are Gezira, River Nile, Khartoum and North Darfur, while those with the lowest HDI are Blue Nile, Red Sea, Kassala and South Kordofan (Table 1). The five states with the highest HDI have not experienced armed conflicts while the five states with the lowest HDI have suffered from violent conflicts. This suggests that conflict in the Sudan contributes to underdevelopment and unequal regional development.

**Table 1. Human Development Index in the Sudan, 2012.**

<table>
<thead>
<tr>
<th>State</th>
<th>Adult Literacy Rate</th>
<th>Primary Education Enrolment Rate</th>
<th>Secondary Education Enrolment Rate</th>
<th>Life Expectancy at Birth</th>
<th>Per Capita Income (PPP)*</th>
<th>Longevity Index</th>
<th>Educational Attainment Index</th>
<th>Income Index</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khartoum</td>
<td>85.6</td>
<td>89.3</td>
<td>73.3</td>
<td>65.9</td>
<td>4083</td>
<td>0.682</td>
<td>0.842</td>
<td>0.62</td>
<td>0.714</td>
</tr>
<tr>
<td>Gezira</td>
<td>81.7</td>
<td>84.4</td>
<td>70.7</td>
<td>65.5</td>
<td>3983</td>
<td>0.675</td>
<td>0.803</td>
<td>0.615</td>
<td>0.698</td>
</tr>
<tr>
<td>Northern</td>
<td>70.2</td>
<td>61.9</td>
<td>35.9</td>
<td>63.3</td>
<td>3432</td>
<td>0.638</td>
<td>0.631</td>
<td>0.591</td>
<td>0.620</td>
</tr>
<tr>
<td>River Nile</td>
<td>76.5</td>
<td>71.3</td>
<td>40.1</td>
<td>61</td>
<td>2858</td>
<td>0.6</td>
<td>0.696</td>
<td>0.56</td>
<td>0.619</td>
</tr>
<tr>
<td>White Nile</td>
<td>66.6</td>
<td>70.9</td>
<td>60.1</td>
<td>61</td>
<td>2858</td>
<td>0.6</td>
<td>0.662</td>
<td>0.56</td>
<td>0.607</td>
</tr>
<tr>
<td>Sinnar</td>
<td>74</td>
<td>76.6</td>
<td>52.7</td>
<td>59</td>
<td>2358</td>
<td>0.567</td>
<td>0.709</td>
<td>0.528</td>
<td>0.601</td>
</tr>
<tr>
<td>North Kordofan</td>
<td>66.5</td>
<td>67.9</td>
<td>46.6</td>
<td>59.8</td>
<td>2557</td>
<td>0.58</td>
<td>0.634</td>
<td>0.541</td>
<td>0.585</td>
</tr>
</tbody>
</table>

1 Poverty rate here refers to the percentage of households falling beneath the national poverty line.
<table>
<thead>
<tr>
<th>State</th>
<th>Population</th>
<th>Food</th>
<th>Non-Food</th>
<th>Durable Goods</th>
<th>Housing</th>
<th>Energy</th>
<th>Food Security</th>
<th>Poverty</th>
<th>Poverty Gap</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kassala</td>
<td>70.1</td>
<td>60</td>
<td>38.6</td>
<td>58.7</td>
<td>2283</td>
<td>0.562</td>
<td>0.632</td>
<td>0.522</td>
<td>0.572</td>
<td></td>
</tr>
<tr>
<td>Red Sea</td>
<td>71.5</td>
<td>53.5</td>
<td>27.1</td>
<td>59</td>
<td>2358</td>
<td>0.567</td>
<td>0.611</td>
<td>0.528</td>
<td>0.569</td>
<td></td>
</tr>
<tr>
<td>Gadarif</td>
<td>60.5</td>
<td>55.6</td>
<td>36.3</td>
<td>59.8</td>
<td>2557</td>
<td>0.58</td>
<td>0.557</td>
<td>0.541</td>
<td>0.559</td>
<td></td>
</tr>
<tr>
<td>North Darfur</td>
<td>60</td>
<td>70.1</td>
<td>58.5</td>
<td>57.6</td>
<td>2008</td>
<td>0.543</td>
<td>0.614</td>
<td>0.501</td>
<td>0.553</td>
<td></td>
</tr>
<tr>
<td>South Kordofan</td>
<td>63.3</td>
<td>49</td>
<td>30.5</td>
<td>57.9</td>
<td>2082</td>
<td>0.548</td>
<td>0.555</td>
<td>0.507</td>
<td>0.537</td>
<td></td>
</tr>
<tr>
<td>South Darfur</td>
<td>59.1</td>
<td>63.4</td>
<td>37.8</td>
<td>57.6</td>
<td>2008</td>
<td>0.543</td>
<td>0.563</td>
<td>0.501</td>
<td>0.536</td>
<td></td>
</tr>
<tr>
<td>Blue Nile</td>
<td>62.9</td>
<td>50.5</td>
<td>44.3</td>
<td>57.2</td>
<td>1908</td>
<td>0.537</td>
<td>0.577</td>
<td>0.492</td>
<td>0.535</td>
<td></td>
</tr>
<tr>
<td>West Darfur</td>
<td>57.2</td>
<td>63.2</td>
<td>42</td>
<td>57</td>
<td>1858</td>
<td>0.533</td>
<td>0.557</td>
<td>0.488</td>
<td>0.526</td>
<td></td>
</tr>
</tbody>
</table>

Source: UNDP (2012)

**High incidence of poverty**

A similar trend was found in the recently completed poverty analysis based on CBS (2010) data for food, non-food, durable goods, housing and energy consumption. This indicated that the Sudan has an overall poverty level of 46.5 percent with a poverty gap ratio including both poor and non-poor of 16.2 percent and a severity of 7.8 percent. Rural poverty was highest in Red Sea State, followed by North Darfur. Poverty rate was more than twice as high in rural areas as in urban areas (58 percent vs 27 percent).

The draft Poverty Reduction Strategy Paper for the Sudan lists seven factors as the main causes of rising poverty in the country: (1) inefficient development plans, leading to slow growth, high rates of inflation, capital flight and brain drain; (2) erosion of land and other natural resources due to natural and human-induced factors such as drought, desertification and water contamination; (3) reduced public expenditure on basic social services and removal of food subsidies; (4) net outflow of capital due to falling inflows and mounting penalties for late repayment of earlier loans; (5) political and economic blockade since the 1990s; (6) unfavourable changes in the terms of trade and (7) continued civil war in some parts of the country.

**Deteriorating food security**

FAO estimated that one in three Sudanese suffered from food deprivation in 2009, based on the CBS (2009) data (FAO 2010). The prevalence of undernourishment was 31 percent and 34 percent for urban and rural populations, respectively. The percentage of undernourished, underweight, stunted and wasted people, the under-five mortality rate and Global Hunger Index are all higher in the Sudan than the average for developing countries not in protracted crisis (Table 2). This is severely undermining the possibility for development of future generations of Sudanese people.
Table 2. Comparison of food security indicators between the Sudan and countries that are not in protracted crisis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>The Sudan</th>
<th>Other developing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage undernourished</td>
<td>22.0</td>
<td>18.8</td>
</tr>
<tr>
<td>Percentage underweight</td>
<td>27.0</td>
<td>17.9</td>
</tr>
<tr>
<td>Percentage stunted</td>
<td>10.9</td>
<td>7.8</td>
</tr>
<tr>
<td>Percentage wasted</td>
<td>19.6</td>
<td>16.5</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>37.9</td>
<td>35.1</td>
</tr>
<tr>
<td>Global Hunger Index</td>
<td>21.0</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Source: Adapted from FAO (2010b).

It is estimated that 4.7 million people in the Sudan are food insecure in 2012 due to increased conflict in some parts of South Kordofan and reduced access to food as a result of gradual depletion of household food stocks and atypically high prices across most key markets (USAID, 2012). Food insecurity is of greatest concern in conflict-affected areas of South Kordofan, where 200,000–250,000 people now face food insecurity at crisis or emergency levels. Food insecurity is expected to deteriorate between April and September 2012 as households exhaust coping strategies. It is assumed that current restrictions on humanitarian access, trade flows and population movements will continue. The current situation is similar to that in the 1990s when civil conflict in South Kordofan led to a 10 year blockade of rebel-held areas and caused a severe increase in food insecurity and deterioration in local livelihoods.

High dependency on international assistance

The Sudan’s development continues to be hampered by conflict, persistent drought and economic and political inequalities. This undermines traditional livelihoods and displaces people from their homes. As a result, the Sudan is the world’s leading recipient of the food assistance from the World Food Programme (WFP) and ranks second only to Somalia in terms of the share of humanitarian aid to total overseas development assistance (62 percent for the Sudan and 64 percent for Somalia).

Coping mechanisms and resilience of urban and rural populations in the Sudan

In 2011, FAO carried out a study on the resilience of Sudanese households to food insecurity2 based on data from CBS (2010). Household resilience to food insecurity was determined using eight factors: (1) income and food access (IFA); (2) access to basic services; (3) agricultural production assets; (4) non-agricultural assets; (5) agricultural practice and technologies; (6) social safety net; (7) stability; and (8) adaptive capacity.

This study also shows lowest resilience in the regions most affected by conflict and drought, particularly Kordofan and Darfur (Table 3). The prevalence of food deprivation reached 44 percent in Red Sea, 30 percent in Kassala, 40 percent in North Kordofan, 27 percent in South Kordofan, 41 percent in Northern Darfur, 20 percent in Western Darfur and 32 percent in Southern Darfur, compared with the national average of 31 percent.

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2 The study was carried out with support from the Food Security for Action programme funded by the European Union and from the International Fund for Agricultural Development (IFAD).
Table 3. Average regional household resilience scores in the Sudan, 2009.

<table>
<thead>
<tr>
<th>Region</th>
<th>Mean</th>
<th>St. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kordofan</td>
<td>-0.29</td>
<td>0.58</td>
</tr>
<tr>
<td>Darfur</td>
<td>-0.29</td>
<td>0.70</td>
</tr>
<tr>
<td>Eastern</td>
<td>-0.06</td>
<td>0.76</td>
</tr>
<tr>
<td>Central</td>
<td>-0.03</td>
<td>0.65</td>
</tr>
<tr>
<td>Northern</td>
<td>0.16</td>
<td>0.71</td>
</tr>
<tr>
<td>Khartoum</td>
<td>0.59</td>
<td>1.14</td>
</tr>
</tbody>
</table>

Source: FAO (2012).

At the national level, urban households were more resilient to food insecurity than rural households (Figure 2).

Figure 2. Factors influencing resilience to food insecurity in urban and rural households in the Sudan, 2009.

Resilience scores did not differ markedly between male- and female-headed households (Figure 3). Female-headed households had more access to income and food and less access to basic social services. This is explained by the fact that women tended to allocate a greater proportion of their available income to food consumption than did men: the average per capita monthly total expenditure and per capita per day calorie consumption of female-headed households were greater than those of male-headed households despite the fact that the average monthly income of female-headed households (83.1 SDG) was less than that of male-headed households (98.4SDG). Given their lower income and proportionally greater expenditure on food, female-headed households had less income available to pay for basic services such as education, health and electricity.

Figure 3. Factors influencing resilience to food insecurity as affected by sex of the household head in the Sudan, 2009.

IFA = income and food access; AA = agricultural production assets; NAA = non-agricultural assets; APT = agricultural practice and technologies; ABS = access to basic services; SSN = social safety net; S = stability; AC = adaptive capacity. Source: FAO (2012).
The study concluded that the resilience to food insecurity is largely influenced by income and food access (with factor loading of 0.725), followed by access to basic services (0.648), non-agricultural assets or durables (0.538) and social safety net (0.013), and that this applies across all regions in the Sudan.

The importance of income in determining resilience to food insecurity may be explained by the fact that approximately 86 percent households in the Sudan purchase most of their food rather than producing it for themselves (FAO, 2010b). Households in the highest income quintile also purchased a larger proportion of their food than did the lowest income quintile (86.2 percent cf 68.1 percent). The assessment concluded that own production is a more important means of access to food in rural areas and for the poorest households.

**Examples of household coping mechanisms**

Based on the resilience analysis above, pastoralist households, which are characterized by low access to basic social services and low ownership of non-agricultural assets, are likely to be more vulnerable to food insecurity relative to farming groups. A survey in Kordofan region carried out by Western Sudan Resources Management Programme, funded by the International Fund for Agricultural Development (IFAD), showed that pastoralist households represent 24 percent of the population and their herds account for 52 percent of the livestock in the Kordofan region and 30 percent of the national herd. The increased frequency of drought, the expansion of agriculture and the restrictions imposed by conflict on movement of people and their herds have resulted in a number of changes in pastoralists’ production systems.

- Livestock migration now starts earlier in the season.
- Small ruminant flocks now cover shorter distances, while camel herders have expanded their migration southward into the traditional zones of cattle herders.
- Herd composition has changed with a greater proportion of multipurpose camels and small ruminants for which market demand is high, such as hamari sheep.
- Supply of fresh milk has fallen but production of ghee has been maintained.
- Forage and mineral supplementation has been introduced to offset reduction in pasture productivity.
- Pastoralists are generating additional income from non-pastoralism activities such as the collection of wild fruits, gold mining and even smuggling, the latter becoming a lucrative business with the breakdown in the rule of law and the disruption of formal trade during the conflict.
The increased cost of wage labour is shifting the burden of tending animals to women and children, resulting in a further reduction in the size and mobility of the herd. Pastoralists are increasingly settling and diversifying into farming. The changes in migration routes, use of the different agro-ecological zones and changing interdependencies between settled and nomadic households are fuelling conflicts in the absence of well-functioning conflict resolution mechanisms and in the face of political and ethnic polarization.

A survey of farming households in North Kordofan highlighted their vulnerability to food insecurity (ICARDA/AEPRC, 2009). The total income of these households was less than 50 percent of that of households in River Nile and Northern states and the value of the assets of households in North Kordofan are 25 percent–30 percent of that of the assets owned by households in Northern and River Nile states. Farming households in North Kordofan derive 29 percent of their income from agriculture, 20 percent from remittances and 51 percent from non-agricultural activities. Seasonal labour migration to urban areas and gold mining are increasingly competing with agriculture labour. This is increasing the workload of women. Clan- and ethnicity-based solidarity networks spanning urban and rural areas, in and outside the Sudan are important in mobilizing food and non-food assistance in North Kordofan.3

**Market behaviour in protracted crises**

Given the important role of food purchases in households’ access to food, it is also important to examine how markets cope with protracted crises. In Darfur, for example, access to markets for both buyers and sellers was severely restricted as a result of insecurity, limited mobility of people, border closures, restrictions on moving goods between government-held and rebel-held territories, the fuel embargo, frequent checkpoints, random taxation and protection-related payments (Feinstein International Center, 2006). This reduced trading between primary and secondary markets, with producers selling on local markets and at lower prices. The livestock trade routes changed and became longer, increasing the transaction costs. The closure of markets had also a knock-on effect on the availability of credit to farmers and the prices for cash crops fell. The scale and coverage of food aid coupled with the large demand for food and non-food items from camps for internally displaced people and an increasingly urbanized population led some traders to specialize in food aid commodities. The recent conflict in South Kordofan has further underscored the transformation of markets in conflict-affected areas: traders adapted to the recent conflict in South Kordofan by establishing the sumbok market, which has neither fixed location nor fixed time. Trading can take place from the back of a lorry or in a village, using cash and barter. Times are set a short notice using mobile telephones.

**Conclusion**

The studies reviewed highlight the need for actions to increase resilience to food insecurity to be geared to supporting household income, food access and accumulation of non-agricultural assets. Such interventions should also be complemented by support for: (i) functional markets, given the share of purchased food in household total food consumption; (ii) kin/clan/ethnic-based social networks; and (iii) mechanisms for crisis preparedness and anticipating and managing conflict over land and water resources.

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3 A similar situation has been found in South Kordofan. Since the resumption in 2011 of the armed conflict in South Kordofan, extended families and clans have been mobilizing financial and material support for their kin, and this was all the more important given the ban on external assistance and absence of government support.
The next section presents examples of such complementary interventions drawn from relief and development interventions implemented over the past decade in the Sudan generally and in the region of Kordofan specifically.

**Local actors’ and government actions to support crisis response and food security**

Various national and international non-governmental organizations (NGOs), UN organizations and government institutions have been implementing programmes in the Sudan aimed at mitigating household food insecurity and bridging the food gap. Many of these programmes provide food and non-food emergency assistance, thus increasing households’ income and access to food. These programmes save lives but have not reduced vulnerability or the risk exposure of the households. This is because the programmes have not addressed the root causes of the crises and have addressed the complementary aspects of household resilience to only a limited extent. This section presents examples of such complementary aspects that have been addressed, including: market interventions to stabilize the prices of food crops and to facilitate trade in foodstuffs; support to local institutions to extend assistance to their members; and risk assessment and conflict resolution mechanisms.

**Strategic reserve support for price stabilization**

Grain reserves or buffer stocks, whether at village or national level, can reduce fluctuation in food production and supply and hence stabilize food availability and reduce seasonal fluctuation in food prices. The Sudan adopted a centralized approach to grain reserves and established the Strategic Reserve Authority (now Strategic Reserve Corporation, SRC) in September 2000. The SRC is an autonomous body answerable directly to the Minister of Finance and National Economy. The main objectives of the SRC are to: build cereal reserves and make available the required finance in collaboration with the relevant institutions; take the necessary precautions to bridge food gaps; be responsible for storage facilities, and replacement and distribution of reserves; and manage selling stocks on local markets in cases of shortages and on export markets in cases of surplus (Ahmed et al., 2012). However, an assessment of the SRC in 2012 found its performance to be unsatisfactory (Ahmed et al., 2012). Key recommendations to improve its performance include the following:

- SRC should be administratively and financially autonomous, with qualified staff.
- Clear grain procurement, distribution and reserve replenishment policies are needed.
- An effective information system is needed to monitor stocks, domestic production and domestic and international food prices.
- Coordination needs to be strengthened with other related government institutions and domestic and international organizations working on grain purchase, food aid and food security.

**Expanding linkages between farmers and markets**

Since 2010, WFP has used its commodity purchasing power to engage small-scale farmers in a sustainable programme of tendering and selling their crops. The Linking Farmers to Market programme focused on redressing hunger and food insecurity, and stressed that efforts to induce sustainable increases in smallholder incomes must combine supply-side interventions designed to raise farm productivity with measures that reduce market volatility and enhance farmers’ access to food and income. The programme consisted of
the following: working with established farmers’ organizations; credit financing from the Agricultural Bank of Sudan; food for agricultural work from WFP distributed to the participating farmers during the hunger period; a credit guarantee by WFP to the Agricultural Bank of Sudan; extension services to participating farmers provided by the State Ministries of Agriculture in the states participating in the launch of the programme.

In the first season, agricultural productivity increased by more than 20 percent and loan repayment reached 80 percent. The programme is undergoing fine tuning to ensure its sustainability and its replication at larger scale. These changes consist of the introduction of crop insurance, which contributes in increasing the ceiling of funding from 10 percent to 54 percent; the Agricultural Bank of Sudan developing its consumption loans products based on lessons learned from providing food aid to bridge the hunger period; and experimenting with different modalities to finance agricultural extension services. This initiative illustrated how food aid – conventionally associated with humanitarian intervention – can be used to develop market-based instruments (such as credit guarantees, credit products and insurance) to increase the supply of food and incomes.

Building the capacity of local institutions: the Nuba Rehabilitation, Relief and Development Organisation

The Nuba Rehabilitation, Relief and Development Organisation (NRRDO) is an indigenous NGO that was established towards the end of 1993 to address the humanitarian situation in the non-government-held areas of the Nuba Mountains, South Kordofan. It became operational in 1994. The organization acts as an implementing and coordinating body, mandated by the civil administration established in the non-government-held areas to solicit and manage humanitarian assistance to the war-affected areas of the Nuba Mountains. NRRDO’s prime objective is to represent the human rights and interests of the Nuba people. It also works to promote and facilitate self-reliance through relief, rehabilitation and development programmes and projects.

NRRDO played an important role in discouraging international organizations from delivering excessive quantities of food aid in the wake of the cease fire agreement in 2001 and advocating for local purchase of food and seeds (Pantuliano, 2005). It also collaborated in development programmes that helped smallholders adapt to new production technologies in the jebels, including watershed management, improved traditional farming, agroforestry and water harvesting. These techniques now form part of the technical package promoted by the public agricultural extension services and NGOs.

Since 2007, NRRDO has collaborated with the State Ministry of Agriculture to bring agricultural extension services to the former rebel areas. The ministry provided NRRDO with seeds and hand tools for distribution and provided training in mobilization and sensitization. NRRDO facilitated the operation of the public agricultural extension services in the communities in areas outside government control; assisted in sensitization and mobilization of smallholders; and distributed the starter packs of seeds and hand tools. In essence, NRRDO performed a liaison function. In retrospect, given the volatility of the peace situation in the region and the increasing frequency of drought, the collaboration between the ministry and NRRDO should have included building local agricultural advisory services and integration of risk forecast and management in the NGOs’ business model.

Kin-, clan- or ethnicity-based organizations that are represented in the main provincial towns, the capital and outside the country play an important role in protecting livelihoods and providing social services. Such organizations have been mostly used to support community participation in the rehabilitation and construction of social infrastructure in integrated rural development projects and community-driven development projects. No
serious consideration was given to their role in facilitating the buildup of financial and social capital to help their kin better cope with food insecurity. In retrospect, it is apparent that such organizations could help fill the institutional vacuum that is created in situations of insecurity and displacement where the traditional leadership tends to collapse.

**Disaster preparedness: the Sudan Crisis and Recovery Mapping and Analysis Project**

Relief and development agencies depend on up-to-date information on which to base their activities, including information on: the safety situation; community perceptions of risks; the location of basic services available to the civilian population; and the related activities of other national and international actors. Since 2008, the United Nations Development Programme (UNDP) in the Sudan has, through its Crisis and Recovery Mapping and Analysis Project, been developing a participatory mapping and analysis methodology to enhance crisis responsiveness and evidence-based strategic planning both within the UN system and in the national government. Actions have included the creation of a UN Information Management Working Group, promotion of the 4W concept (who, what, where and when) of recovery and development projects and programmes; developing a geographic information system for risk mapping with extensive baseline data; conducting situational analyses for some states; and providing general support with strategic planning. The programme has also expanded, in response to perceived need, into the field of capacity development for the Sudanese public sector in these areas and supporting in particular the strategic planning commissions established at state level. In retrospect, however, we note that sectoral ministries such as the ministries of agriculture and animal wealth made little use of the information for strategy and programme development.

**Building local mechanisms to manage conflict over land and water**

The Western Sudan Resource Management Programme (WSRMP), a government programme financed by IFAD, was established to promote the development of a natural resources governance system spanning the North and South Kordofan states. The system is founded on the understanding that the management of natural resources is a shared responsibility between the government, tribal leadership and the local communities. The principles of a co-management model were formulated and validated in cooperation with the state ministries of agriculture and livestock, the tribal leadership, the farmers’ and pastoralists’ unions and the women’s union. Civil society took the lead in community mobilization and negotiation of the stock route width with the adjacent communities, and the technical departments led the demarcation of the routes. Delivery of services along the stock routes was planned in a participatory manner. Monitoring responsibilities were shared between civil society and technical departments. Water points along the stock routes were rehabilitated or constructed, provisions were made for delivery of livestock services, the range was seeded and trees planted. Range reserves were established to provide feedstock and for the multiplication of range seeds. Premises were built for the local courts where natural resources based conflicts are discussed and resolved. These courts are managed by tribal leaders and representatives of the women’s union, pastoralists’ union and farmers’ union as well as members of the local councils. Field reports indicate that the conflict incidents along the demarcated and serviced stock routes have decreased and that the demarcation was largely adhered to. The effectiveness of this system was put to the test in 2011, when South Kordofan was hit by drought and civil

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4 By tribal leadership, we refer to the native administration from the village sheikh up to the omdas and emirs.
conflict. The partners from the state government and civil society were able to map the main risks related to environmental degradation and potential conflicts related to natural resources, but were unable to agree on measures to mitigate the risks, namely issues related to land tenure and land use. The state ministries of agriculture and animal wealth were unable to take the leadership in responding to these risks due to the fragmentation of decision-making processes, shortage of financial resources and security concerns.

Conclusions

The examples presented highlight the wide variety of interventions that can be implemented in a protracted crisis situation and innovative ways of using food aid to improve household access to food and income in a more sustainable manner. They also raise a number of issues.

- Government institutions and markets evolve in new ways in a protracted crisis situation and this can create opportunities to support household resilience.
- Kin-, clan- or ethnicity-based organizations tend to be used by relief and development agencies and the government as intermediaries for service provision without systematically investing in building their capacity to better support their members' resilience to food insecurity.
- Government instruments for food security are seldom used in relief or development operations, as the government's impartiality is questioned at local/national/international levels, especially in situations of armed conflict.
- Available information on food insecurity and crisis preparedness is seldom used by sectoral ministries and technical departments for planning purposes.
- There is usually a leadership gap when urgent response is needed.

During protracted crises, the aim of international intervention should be on saving lives and ensuring that all interventions, whether governmental or non-governmental, are integrated in a common framework of action to support household resilience to food insecurity.

The next section presents such a common framework of action for food security.

Recommended actions

The common framework of action we recommend here draws heavily on the experience of the Nuba Mountains Programme Advancing Conflict Transformation (NMPACT). NMPACT's approach is unique in that UNDP, its coordinating agency, succeeded in setting up a cross-line, multi-agency and inclusive platform focused on capacity building, sustainable agriculture and market revitalization alongside conflict transformation and peacebuilding, thus addressing all the factors that promote household resilience to food insecurity (Pantuliano, 2005). The experience of the NMPACT shows that giving equal roles to the opposing parties is possible and can be constructive provided the coordinating agency exerts strong coordination, mediation and communication roles. With 4.7 million people suffering from crisis to emergency levels of food insecurity this year in the Sudan, we recommend that such a platform be replicated with one objective, that of building household resilience to food insecurity. Setting one objective helps to clarify what needs to be achieved and helps encourage at least a degree of alignment between the various agencies participating in the platform. This section presents in broad terms how such a platform would work to build household resilience to food insecurity.
Organization

Participants should include representatives of the government and opposition groups, local administrations in area controlled by the government and those not under government control, civil society organizations, tribal leadership, national and international NGOs and the UN system. These agencies will be responsible for the delivery of the interventions and there should be an agreed mechanism for evaluating whether these organizations are representative of their constituencies, their capacity to achieve the desired objectives and their performance. Coordination of the platform could fall to a multilateral agency of the UN system with strong coordination, mediation and communication skills. This coordinating role would be gradually handed over to the Food Security Council currently under development in the Sudan.5

Decision-making

The platform would have a policy-making body to orient collective decision-making. There would also be a mechanism for bringing together all parties to develop the intervention strategy of the platform. Again, this builds on the decision-making processes adopted in the NMPACT, where a policy-making structure existed and the partners’ forum was held periodically in neutral locations to develop and discuss intervention strategies. Decisions would be consensual and would adhere at all times to the principles of engagement stated below.

Principles of engagement

The agencies participating in the platform would subscribe to a charter that would set out the principles of engagement. The lessons from NMPACT suggest that key principles include commitment to:

- the cross-line and inclusive nature of the platform;
- protection of human rights and sources of livelihoods;
- strengthening self-reliance, local capacities and opportunities for socioeconomic and cultural interdependence of affected communities and households;
- flexibility to allow responsiveness to changing conditions; and
- secure and unhindered access to all areas.

The participating agencies’ adherence to the principles of engagement should be reflected in the highest political and decision-making authority of each agency publicly signing and announcing its commitment to these principles.

Instruments for action

Three instruments are fundamental to efforts to enhance resilience to food insecurity:

1. An information and communication tool that can be used to analyse the risks, provide information on household food security, market prices and volumes traded of the main food commodities, and map the various humanitarian and development projects.

2. Buffer stocks of grain at community, state and national levels to facilitate household access to food in case of disruption in supply or price surge as a result of crises.

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5 Drawing on the lessons from NMPACT, the key characteristics of the coordinating agency is that it is multilateral, apolitical, has both humanitarian and development mandates and has political analysis capacity as well as field presence. Agencies with these characteristics include UNDP, UNICEF and FAO.

6 The Food Security Council is one of the outcomes of the EU funded and FAO implemented Food Security Information for Action programme.
3. A conflict resolution mechanism that can address conflict situations promptly. These instruments do not necessarily fall under the control of the platform and may be controlled and managed by different agencies participating in the platform. However, it is essential that the agencies owning these tools put them fully at the service of the platform objectives and interventions.

**Financing of projects and programmes**

Each participating agency should set a contribution in cash or in kind for the activities it will undertake within the platform. These contributions would be used to leverage additional external resources. Internal and external resources should be clearly accounted for and information on their disbursement regularly communicated to all members of the platform. Given the different contribution of each agency, external financing will be administered using a formula that would ensure equitable allocation of funds to the various households and communities affected by food insecurity. This assumes long-term commitment from bilateral and multilateral donors.

**Programmes**

The interventions supported by the platform should be aligned with the twin track approach laid out in the Rome principles and in the High Level Task Force’s Common Framework for Action, including direct and immediate food assistance and rural development and productivity enhancement. The resilience analysis conducted by FAO in the Sudan underlines that in addition to interventions focusing on agriculture to increase income and food access, action is needed to support trade in food; establish buffer stocks; build the capacity of local organizations and not restrict their role to a liaison function; and ensure that conflict resolution mechanisms are established and operational.

**Incentives to join and remain within the platform**

The experience of NMPACT shows that agencies were encouraged to join the platform because it provides access to up-to-date information on the security situation and situation and political analyses updates training, additional financing and better coverage of affected areas, reduces participants’ coordination costs, and provides a platform for long-term planning and evolving operations towards development.

The key understanding underlying this approach is that the protracted conflict situation is likely to continue in the Sudan but that it is important to alleviate its impact on food insecurity and vulnerability. Public and external resources for addressing this crisis will continue to be scarce and insufficient and hence it is important to work with the existing structures across the political divide and mobilize their resources rather than building poorly-funded parallel systems and stand-alone interventions.

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7 The government and opposition parties must bring to the platform the operations they have set up to alleviate food insecurity in the areas they control. For the government, these include the strategic reserve and the zakat. For the Sudanese People’s Liberation Movement’s this includes its system of collection and storage of grain and its redistribution during the hunger period.
Glossary

Cross-line: refers to an inclusive approach that brings together the warring parties to plan interventions that alleviate food insecurity and provide humanitarian and recovery assistance in conflict affected areas.

Food deprivation refers to the condition of people whose food consumption in terms of energy is below a minimum dietary energy.

Protracted crises have been defined as those environments in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time. The governance of these environments is usually very weak, with the state having a limited capacity to respond to, and mitigate, the threats to the population, or provide adequate levels of protection.

Resilience measures the household’s ability to maintain a certain level of well-being in spite of the disturbances/shocks that adversely affect their lives and livelihoods.

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