

1. SITUATION ANALYSIS

1.1 BACKGROUND

Several parts of the Sudan have been devastated by decades of conflict, which have resulted in the destruction of physical and human resources, and erosion of institutions and social capital. The various outbreaks of violence, including ongoing instability in the Darfur region, have forced millions of people to flee their homes and left millions of others facing extreme poverty. The impact of conflict has been exacerbated by recurrent hazards, including droughts, floods, and outbreaks of animal diseases, which worsen the food security situation throughout the Sudan.

The signing of the Comprehensive Peace Agreement (CPA) in 2005 signalled the end of the protracted conflict in Southern Sudan. The Agreement provides for six years of joint rule before a referendum in 2011 to determine whether the region will continue as an autonomous part of the Sudan or form an independent sovereign state. The CPA also includes special provisions for Abyei, Southern Kordofan and Blue Nile states (also referred to as the Transitional Areas or Three Areas). The Abyei area has remained volatile since the signing of the CPA and the delay in implementing the Abyei Protocol led to a crisis in May 2008, with the destruction of property, loss of life and displacement of people. There has been some improvement in the situation following the signing of the Abyei Road Map and formation of the Abyei Area Administration. However, this has an insufficient budget for providing services to local communities.

In October 2006, the Eastern Sudan Peace Agreement was signed following a series of talks between the Government and insurgents from the Eastern Front. This has led to a continued improvement in the situation. Although the implementation of the Agreement was slow to take off, momentum in the Disarmament, Demobilization and Reintegration (DDR) process for 3 500 ex-combatants has built steadily in Kassala, Gedaref and Red Sea states since the second half of 2008. Within the context of the Agreement, the United Nations (UN) and its partners have generally reoriented their programmes towards recovery and development, while remaining ready to respond to humanitarian needs, such as those caused by floods.

The situation in the three Darfur states remains a large-scale humanitarian emergency as the conflict is yet to be resolved. The result of this is ongoing disruption of the economic and social arenas, and a heavy toll in terms of loss of life.

Role of agriculture

The agriculture sector plays an important role in the Sudan's growth, industrialization, exports and environment, and contributes more than 39 percent to GDP. Agricultural activities and livestock rearing are the main sources of livelihood for an estimated 60 to 80 percent of the population. Agriculture in the Sudan comprises both subsistence farming and commercial production for local consumption and export. Traditionally, agropastoralism not only represents the primary production system, but also involves the majority of the Sudanese population. Approximately one-third of the total area of the Sudan is

suitable for agriculture, yet only about 21 percent of arable land is cultivated. Despite its predominant position in the overall economy of the Sudan, agricultural productivity is variable and output remains far below potential performance.

Sorghum, millet and wheat are the major staple foods produced and are primarily consumed domestically. Crop cultivation is divided between a modern, market-oriented sector comprising mechanized, large-scale irrigated and rainfed farming (mainly in central Sudan), and small-scale farming following traditional practices, which is carried out in parts of the country where rainfall or other water sources allow for cultivation.

Total cereal production in the country accounts for about 65 percent of annual grain requirements, the balance being mainly imported wheat. Owing to the importance of these food grains in the population's diets, their price levels are crucial for determining people's access to food. This is especially critical given the already high and increasing poverty levels, especially in rural areas. Since the second half of 2009, the prices of staple foods have seen a continued upward trend compared with the longer-term average. This often further limits access to food by vulnerable groups, who may depend on markets to meet most or all of their food needs. This situation is likely to continue deteriorating until the next harvest between October and December 2010.

Animal production is an important livelihood activity throughout the Sudan, with the country boasting the largest herd in Africa. Livestock (and their associated products) are key capital assets, mitigating the impact of drought and crop failure. They are also important social capital for pastoralists. In the Sudan, livestock production contributes an average of 20.5 percent of the total value of national exports, more than 28 percent of agricultural exports and over 18 percent of GDP (federal Ministry of Animal Resources and Fisheries [MARF]).

About 29 percent of the Sudan's land area is covered by forests and the contribution of the subsector to livelihoods and the national economy should not be underestimated. Forest resources account for 71 percent of energy consumption, more than 30 percent of livestock feed, and 15 percent of possible livelihood opportunities in rural areas. Forests also provide indirect benefits, including environmental and watershed protection, and soil conservation and enhancement. People that derive their livelihoods from the subsector include traditional gatherers of firewood and producers of charcoal (the main source of fuel for homes and some industries in urban areas). There is also a modern timber and sawmilling industry, which is state owned. However, the country's forests are being rapidly depleted – for building materials, firewood, charcoal, and burning bricks – particularly in areas around internally displaced person (IDP) camps and urban centres.

Competition over land and natural resources has long been a source of tension between various groups in the Sudan, and remains a central issue for both rural and urban communities. Before 1970, unregistered land belonged to the state, which held ownership in trust for the people, who had customary rights to it. In 1970, the Unregistered Land Act declared that all waste, forest, and unregistered lands were government land. Before the act's passage, the Government had avoided

interfering with individual customary rights to unregistered land, and in the late 1980s, it again adhered to this policy. The area of land used for pasture and subsistence cultivation was communally owned under customary land laws that varied somewhat according to location but followed a broadly similar pattern. In agricultural communities, the right to cultivate an area of unused land became vested in the individual who cleared it for use. The rights to such land could be passed on to heirs, but ordinarily the land could not be sold or otherwise disposed of.

The Sudan has a coastline of 720 km². The useable area of the continental shelf is about 9 800 km², of which 800 km² is suitable for trawling. The rest is used for traditional fishing. Marine fisheries resources include commercial finfish, ornamental fish, pearl oysters, trochus and other gastropods. Sudanese fisheries are artisan and conventional. Although freshwater aquaculture is not developed, the Sudan has considerable potential in terms of land, water, warm weather and fish species that are suitable for aquaculture.

Fishing was traditionally a largely subsistence activity. A number of small operators also used the country's major reservoirs in the more populated central region and the rivers to catch fish for sale locally and in nearby urban centres. However, the few modern fishing ventures – mainly on Lake Nubia and along the Red Sea – were small. Freshwater fisheries resources include the River Nile and its tributaries, natural and artificial pools of water (hafirs), irrigation canals and temporary streams. Within this area, these resources are concentrated in dam reservoirs and the Sudd region. Some 115 species and 29 genera of fish are present in the dams and reservoirs, and the available stock is estimated at 140 000 tonnes annually.

1.2 REGIONAL SITUATION

North Sudan comprises 15 states within four regions: Northern region, Greater Darfur region, the Transitional Areas and Eastern Sudan. See Figure 1 for an overview of the food security situation in the North.

The Greater Darfur region

The Darfur region continues to be affected by insecurity and instability, with ongoing conflict between various armed groups constraining livelihood options. The region has a population of about 8 million, one-third of which is internally displaced, with a further 250 000 people living in camps in neighbouring Chad. An additional two million residents continue to be affected by outbreaks of violence and inter-ethnic clashes.

While the number of IDPs residing in urban centres or practicing seasonal crop cultivation appears to have increased, those living in camps and resident households face significant constraints to their livelihoods due to the ongoing insecurity. Current livelihood strategies, which are mainly based on the consumption of natural resources (cutting trees for firewood, construction, charcoal and brickmaking) are not sustainable. As a result, many households are food insecure, malnutrition levels are high, food production levels are low and relatively undiversified, and access to veterinary services is poor.

North Darfur state: The main livelihood activities in the state are agriculture (crop) or livestock production. Food insecurity is generally linked to displacement; inadequate agricultural inputs; prolonged dry spells; uneven rainfall distribution; frequent clashes between armed groups, which prevent farmers from accessing their land and hinder livestock movement for grazing; uncontrolled crop pests; and insufficient agricultural extension services.

West Darfur state: Again, most people rely on crop production or livestock rearing for their livelihoods, and food insecurity is related to inadequate agricultural inputs; insufficient agricultural extension and appropriate technology transfer services; uneven rainfall distribution; a high dependence on traditional, rainfed systems to produce the main staple foods; recurrent conflict, particularly along the border with Chad; uncontrolled crop pests; and conflict between farmers and pastoralists over migratory routes and access to limited grazing lands.

South Darfur state: Crop and livestock production are the central livelihood strategies in the state. Food insecurity is generally caused by a combination of inadequate agricultural inputs; frequent displacement as a result of inter-ethnic conflict; late and uneven distribution of rainfall; uncontrolled crop pests; and insufficient agricultural extension services.

The Transitional Areas

The Transitional Areas (Abyei, Blue Nile and Southern Kordofan) are characterized by general underdevelopment, poverty and an influx of returnees, who have overstretched the already limited capacities of infrastructure and services in the communities to which they return, making them vulnerable to natural and human-induced shocks.

Following the signing of the CPA, the security situation in the Transitional Areas has improved, leading to the return of populations displaced during the conflict. However, the recovery and re-establishment of livelihoods have been hampered by persistent instability and political tension. The reintegration of demobilized and demilitarized ex-combatants, women and children associated with armed groups continues to be a priority for the Food Security and Livelihoods (FSL) Cluster.

Abyei: The main livelihood strategies involve crop production and livestock rearing. In the dry season, the collection of firewood, burning of charcoal, and collection of thatching grass and wild fruits serve as key coping mechanisms. Food insecurity is predominantly linked to prolonged dry spells and displacement resulting from recurrent conflicts over unresolved border disputes and the use of natural resources by farmers and pastoralists (the Dinka and Miseria tribes, respectively).

Blue Nile and Southern Kordofan: Livelihoods are mainly based on crop and livestock production, with food insecurity predominantly caused by dry spells, floods, and the presence of large numbers of returnees and refugees.

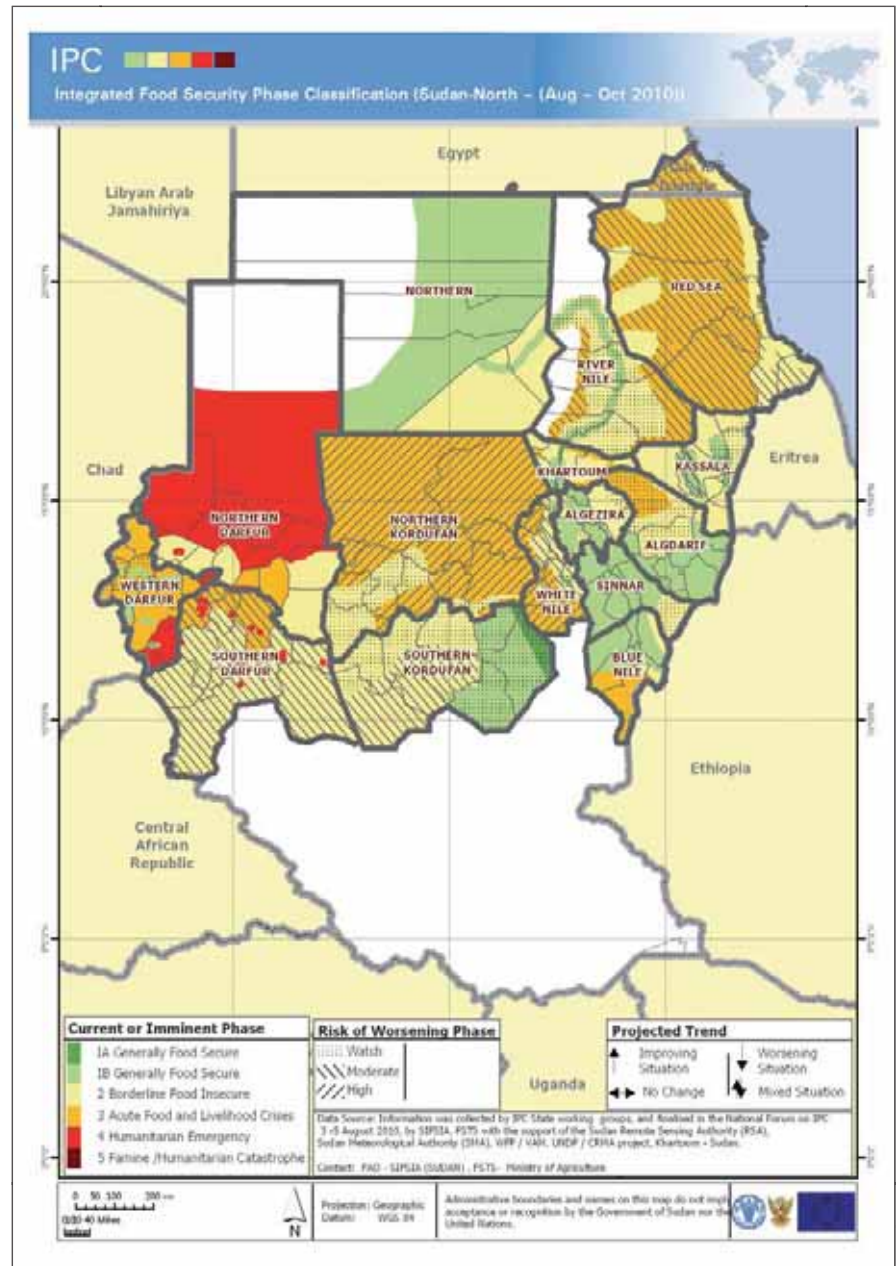
Eastern Sudan

The Eastern region (Gedaref, Kassala and Red Sea states) also faces the ongoing impact of two decades of political and social turmoil. Key factors underlying the chronic vulnerability in the region include low rainfall and agricultural production; reduced livestock production and productivity; limited economic opportunities; and the presence of large numbers of refugees, IDPs, and returnees, who have little or no assets.

The region continues to host large numbers of refugees from Eritrea and Ethiopia, as well as a significant number of IDPs who cannot return to their places of origin owing to the presence of mines and unexploded ordnance. Ongoing efforts to disarm and demobilize ex-combatants have increased the need for support to their reintegration and re-establishment of their livelihoods.

Kassala state: The majority of people's livelihoods are agricultural, pastoral and agropastoral. The main factor underlying food insecurity is drought, which negatively affects rainfed crop production and pastures in the state. Desertification and the large number of returnees and refugees also impact on food security.

Figure 1 - Integrated Food Security and Humanitarian Phase (IPC) map



1.3 KEY CHALLENGES

Many parts of the Sudan have suffered frequent periods of acute food insecurity, as well as chronic food insecurity, for decades. In the west (Darfur) and south, the causes are mainly related to conflict, but are also the result of natural disasters. In Northern and Eastern regions, the protracted crisis affecting many rural people results from chronic poverty, caused by long-term political and economic marginalization, environmental degradation and the increasing incidence of drought. The result has been a more or less permanent state of severe food insecurity with alarming declines in measures of human wellbeing, such as health and nutrition. An estimated 20 percent of the nearly 37 million people in the Sudan are chronically undernourished.

Over the past decade, despite considerable economic and agricultural potential, between 1.5 and 3 million people have required some form of food aid each year (Beyond relief: Food security in protracted crises, FAO 2008). Food insecurity remains essentially a rural phenomenon linked to the fragility of rural livelihoods. In North Sudan, agriculture is characterized by four categories of farming system: irrigated, semi-mechanized, rainfed traditional, and livestock. The highest levels of poverty and food insecurity are recorded among traditional, rainfed farmers and pastoralists (World Bank, 2003). In North Sudan, Darfur, Red Sea, southern parts of Southern Kordofan and parts of Blue Nile, Kassala and North Kordofan states face moderate to high levels of food insecurity due to poor harvests in 2009 and the ongoing conflict in Darfur.

What are protracted crises?

Protracted crises are defined as situations in which large sections of the population face acute threats to life and livelihoods over an extended period with the state and other governance institutions failing to provide adequate levels of protection or support.

Flores et al., 2005

For FAO, the impact of the Darfur crisis is a powerful demonstration of what happens to rural livelihoods in protracted crises. The initial years of the conflict were marked by the rapid destruction of livelihoods as millions of people became displaced when their villages were attacked or threatened. Pastoralists in North Darfur lost over half their livestock in the first three years of the conflict. As the crisis drew on, assets continued to be lost through a gradual process of erosion and livelihood options inevitably became fewer and more restricted. Many people became dependent on marginal subsistence activities. Rural people could not migrate for work or send remittances home, which had a serious impact on their livelihoods in the initial stages of the conflict. Furthermore, competition between pastoralists and farmers over the natural resource base in Darfur intensified as both groups become increasingly dependent on strategies such as collecting grass and firewood to replace pre-conflict livelihood strategies that were no longer possible.

The protracted crisis has meant that the Sudan is currently the largest operation globally, with the international community providing USD 1.3 billion in humanitarian assistance during 2009 (United Nations Office for the Coordination of Humanitarian Affairs [UNOHCA], July 2010). Insecurity has a serious impact on the delivery of this assistance and, in 2009, the expulsion

of 13 international and dissolution of three national Non-governmental Organizations (NGOs) from Darfur severely constrained the provision of support to populations in need.

Food insecurity-triggering factors

The current socio-economic, political and environmental situation in the Sudan has resulted in chronic food insecurity, increased poverty levels and high levels of vulnerability. The main underlying factors contributing to this vulnerability are: (i) insecurity; (ii) dwindling agricultural production; (iii) reduced livestock production and productivity; (iv) recurrent natural disasters, particularly floods and droughts; (v) land tenure/use issues and the effects of environmental degradation/desertification; (vi) limited economic opportunities; (vii) institutional factors/limited Government support; and (viii) the high number of IDPs.

Insecurity

Insecurity, associated with ongoing conflicts in North Sudan, has led to the displacement of millions of people, some of whom continue to reside in camps and depend on humanitarian assistance for their survival. Ongoing insecurity and instability in parts of the country, particularly in the Darfur region, have negatively affected humanitarian operations, local food production and people's coping mechanisms. The prolonged conflicts (between Southern and North Sudan, in Darfur, and with the Eastern Front) displaced rural farming communities and destroyed infrastructure, impacting on agricultural production. Insecurity related to clashes between nomadic and settled farming communities has led to the destruction of crops and vegetation, as well as the loss of human lives (and therefore the labour force).

Dwindling agricultural production

The main constraints facing the agriculture sector include: limited water resources, a fragile land base, declining soil fertility, climatic shocks, high levels of pest infestation, the use of poor quality seeds, unstable product prices, and conflicts over land and water resources. The unfavourable climatic conditions, and associated challenges for crop and livestock production, worsen food insecurity in most states, stretching the limits of communities' coping mechanisms. The current low levels of production are further worsening the food-security status of affected communities in North Sudan.

Agricultural production is also affected by: (i) a lack of essential agricultural inputs and machinery owing to the disruption of markets and distribution channels, which have forced farmers to use low quality inputs, particularly seeds and tools, and resulted in significant production losses; and (ii) poor soil and environmental management, which have led to low productivity for all the factors of production. Other constraints to production include the disruption of the extension system and plant protection capacity, which limit the transfer of essential modern technologies to farmers, and the lack of control of crop pests and diseases, which lead to heavy pre- and post-harvest losses.

Crop production is major activity in the Sudan, and is based on both rainfed agriculture and irrigation for the mechanized farms. However, production is hindered by a number of problems, including drought. The 2009 Crop and Food Supply Assessment Mission (CSFAM) estimated the level of production in North Sudan to be 33 percent lower than the 2008 estimate, and 30 percent lower than the average estimate for the previous five years, due to poor rains in the main rainfed production areas and poor performance in the irrigated sector.

Most farmers in North Sudan plant local landrace varieties or unimproved seeds owing to the inaccessibility and cost of certified grades produced by the commercial subsector. This is a key factor in the low yields normally obtained by farmers.



Reduced livestock production and productivity

Livestock production is an important component of the local economy, providing food, employment, foreign exchange earnings, a source of wealth, and supply of inputs and services, such as draught power, manure and transport. The prevalence of diseases limits livestock productivity through morbidity and mortality, which results in the loss of meat, milk, eggs, wool, skin and hides, manure and animal traction (Tambi, E.N., Maina, O.W., Mukhebi, A.W., and Randolph, T.P.). Livestock rearing follows predominantly traditional methods and is carried out throughout the Sudan, with the exception of the extremely dry areas of the North and the tsetse fly-infested area in the far south. Given its importance in providing employment for large numbers of people, modernization proposals have been based on improving existing practices and marketing for export, rather than moving towards modern ranching, which requires fewer workers.

Overall, livestock rearing is the second livelihood activity and the country has over 138 million head of domestic, food-providing animals (including cattle, sheep, goats and camels). The nomadic range system forms the backbone of beef production in the Sudan. Cattle are regarded, not as a primary source of income, milk and meat, but as a source of social prestige that depends on quantity irrespective of quality. This leads to overstocking and overgrazing, with long journeys in search of pasture and water resulting in lower productivity and quality (tough meat), competition over resources, and tribal conflicts that create instability. Rainfall fluctuations can result in drought and the loss of livestock, or endemic diseases accompanied by heavy parasitic infestations that lower productivity and prevent livestock exports.

The livestock subsector faces numerous constraints, including a heavy disease burden, low productivity exacerbated by drought and insecurity, the lack of adequate marketing infrastructure, and poorly organized and informed livestock owners and traders.

In terms of animal health, considerable knowledge is unused by poorer farmers, either because it resides with professionals to whom they have little access, or because it is not presented in an easily understood format. The growth in training programmes for community animal health workers (CAHWs), who interact closely with rural livestock owners, has sought to address this weakness, but their role should be more grounded in the needs of the community and a more holistic approach should be used, moving beyond the original function of CAHWs.

Unfavourable climatic factors, deforestation and climate change

Natural disasters are recurrent in the Sudan and the droughts of 1983–84, 1997–98 and 2000–01 displaced large numbers of people and had a devastating effect on the agriculture sector. Drought and floods in some parts of the country result in the loss of agriculture and livestock assets, land degradation, food insecurity, shortages of animal fodder, and outbreaks of animal and plant pests and diseases. The Darfur region, Eastern Sudan, and Khartoum and Northern states continue to be affected by drought and floods.

Severe environmental issues – land degradation, deforestation, desertification and other effects of climate change – affect the Sudan, threatening sustainable peace and development (United Nations Development Programme [UNDP], 2010). Over 60 percent of the country is affected by deforestation and desertification, with much of Northern, Eastern and central Sudan having lost or rapidly losing existing forest resources. The combined effects of drought and desertification in the Sudan, as in other Sahelian countries, have led to severe food shortages and famine over the years. A key cause of this is deforestation and overgrazing, particularly near urban centres and settlements such as IDP and refugee camps.

Dwindling livelihood options have forced many people to resort to collecting and selling already scarce natural resources. Strategies such as brickmaking, charcoal burning and fuel wood collection are unsustainable and place considerable pressure on the environment. Competition over limited resources has resulted in conflict throughout the Sudan. According to the United Nations Environment Programme (UNEP)³, there are clear links between environmental problems and the ongoing conflict in the Darfur region, as well as with other historical and current conflicts in the Sudan.

Land issues

In North Sudan, particularly in the western savannah where increasing human and livestock populations have placed pressure on the land, violations of customary laws and conflict between ethnic groups over land rights have been growing. Local government agencies have attempted to resolve these, although only on a case-by-case basis. Continued conflict and tension over land and other natural resources have led to conflicts in Darfur and other parts of North Sudan, resulting in displacement and insecurity that limit the access of affected populations to their land, and of humanitarian organizations to populations in need of assistance. Conflict, coupled with drought and floods, has contributed to the prevailing food insecurity situation in parts of North Sudan.

Limited economic opportunities

Lack of infrastructure has had a negative impact on food security, for example by limiting the marketing possibilities for moving food from surplus to food-deficit areas. Economic opportunities are also restricted by:

- **Limited economic assets:** Limited roads infrastructure, bridges, water sources, agricultural and livestock markets, and other farm assets have direct and indirect negative impacts on economic opportunities for the people of North Sudan. Basic infrastructure is crucial for accessing markets, collecting agricultural inputs, and selling surplus produce which are important for agricultural growth and the improvement of household economies.
- **Loss of opportunities:** Insecurity and risk of landmines restrict human movement, resulting in less investment and limited use of fertile agricultural land. In many locations, households are confined to limited land areas, cultivating only for subsistence, while large fertile fields remain uncultivated for years. Opportunities are also lost because of a lack of transparency and good

³ UNEP, 2007, Sudan post-conflict environmental assessment report.

governance, lack of or inadequate funds and micro-credit facilities, or dominance of traditional production systems with weak technical, managerial and financial capacities. In addition, the lack of appropriate adaptive research and technology transfer, resulting in adoption and use of outdated production technologies in the agriculture sector, needs to be resolved.

- **Disruption of trade routes and communication:** This is reflected in high transport costs, which inhibit trade and the distribution of food and production inputs. Poor market access and market infrastructure, as well as weak physical infrastructure (rural roads network) increase the cost and reduce the efficiency of agricultural recovery and development programmes.

Institutional issues

The Sudan has experienced conflicts for much of the time since its independence in 1956. While these often have religious, linguistic and ethnic overtones, at their core lies the issue of considerable inequality between the centre – dominated by Khartoum and the North, particularly the villages along the Nile – and a far larger periphery – including Southern and Eastern Sudan and Darfur. Weak or nonexistent public and informal institutions have played a role in the continuing food insecurity. In North Sudan, development efforts have not been a top priority in the allocation of Government resources, which has resulted in the neglect of the food security and livelihood sector throughout the country.

Despite a decentralized Government structure, resources allocated to public institutions diminish through the administrative lines. Although, in practice, this set-up is designed to provide Government institutions with a direct implementing role in the delivery of public services over the long term, the resources available to these institutions are limited.



Key constraints linked to the food security institutional set-up in North Sudan include: (i) the duplication of mandates and functions, and poor coordination; (ii) weak linkages between federal and state ministries; (iii) weak institutions that are not in a position to deliver expected services; and (iv) project-based external support, which creates an unsustainable, parallel information system and does not contribute to the creation of national systems. This is exacerbated by inappropriate policies – in place before the conflicts – that focus on large-scale mechanized agriculture and irrigation instead of developing the smallholder farming sector.

Other institutional challenges that affect food security include the Sudan's over-dependence on oil revenue, which is intrinsically temporary and unreliable; macroeconomic deterioration; fiscal volatility and laxity; and Government lapses. Food security prospects are also affected by the large and rapidly growing public sector, which is impeding the development of a robust private sector. The fundamental challenges to the country's prosperity are unlikely to be the above economic factors and are, rather, deep-seated political issues. All indications are that the Sudan needs to undertake considerable food security and related policy and institutional reforms in order to join the ranks of countries that have successfully managed non-renewable resource wealth.

High number of IDPs

The Sudan has a total population of about 39.2 million people, of whom 7.5 million are in Darfur and 8.3 million in Southern Sudan. Approximately 4.9 million people are internally displaced as a result of the country's various conflicts, making up the largest internally displaced population in the world. The food security and livelihoods of IDPs, returnees, nomads, refugees, and rural resident communities are continually undermined by the prolonged disruption and loss of economic activities, decreasing agricultural production, limited opportunities, and reduced livestock production. Overall, the country's population is young, with 47 percent below 17 years of age (Central Bureau of Statistics of Sudan, 2009).

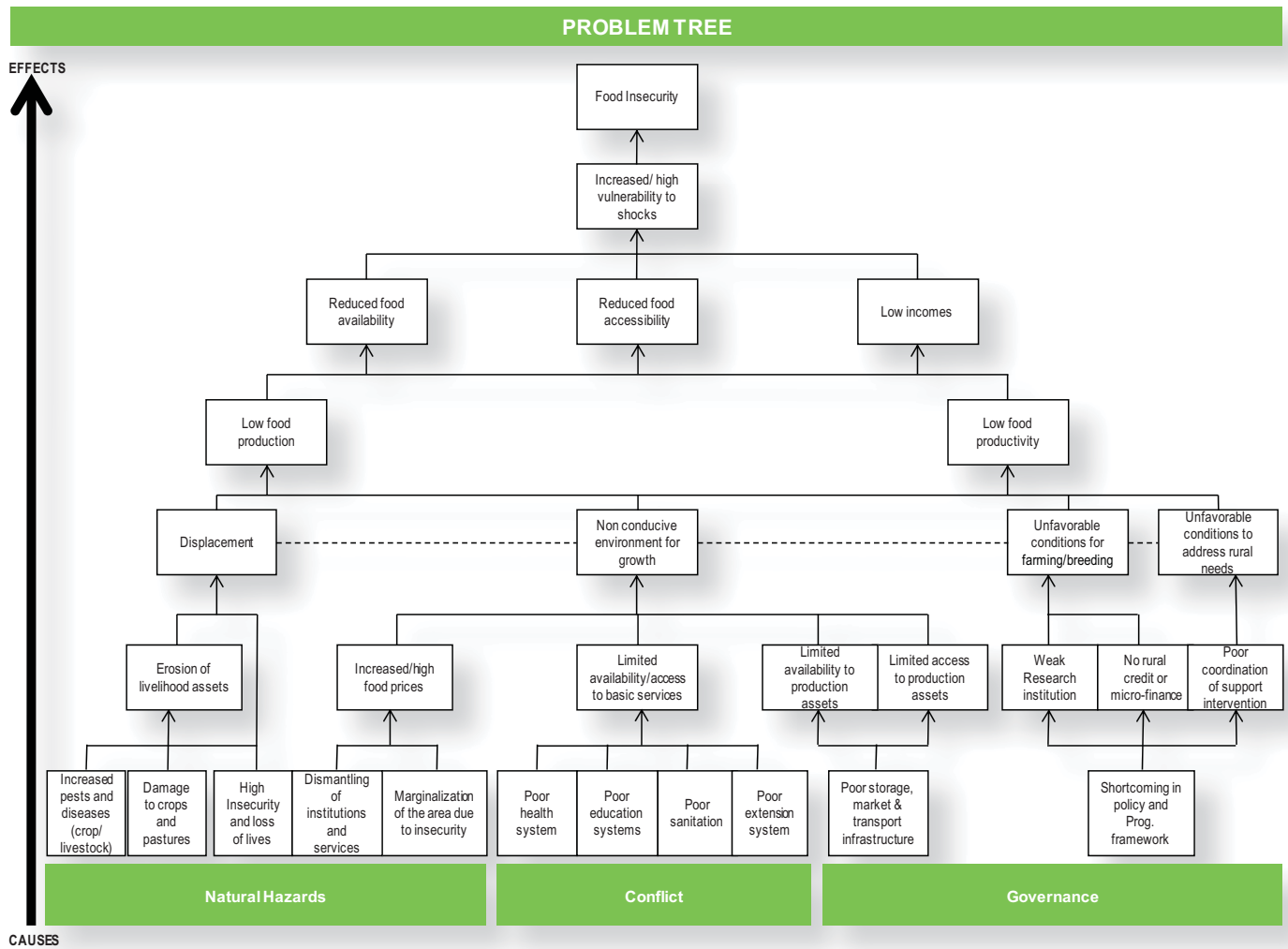
Cross-border issues

Insecurity in neighbouring countries has led to a large influx of refugees, placing further strain on available resources. In addition, border issues that affect the food security and agriculture sector include the spread of livestock and crop diseases due to unchecked/uncontrolled movement of livestock and planting materials to and from neighbouring countries. Most pastoralists normally cross borders to neighbouring countries seeking water and pasture for their livestock. This leads to the spread of diseases and pests across borders. However, in the case of border disputes and conflicts, nomads prefer not to cross borders, which leads to overgrazing owing to the concentration of animals, and shortages of water and pasture, igniting conflicts due to competition over resources. This may also cause the marginalization of border areas leading to problems in dealing with transboundary diseases.

1.4 FOOD SECURITY SCENARIO IN NORTH SUDAN

In 2010, the food security situation in the Darfur region, Red Sea and Southern Kordofan states, and the Transitional Areas is expected to worsen, driven by the impact of a poor harvest in 2009–2010, chronic food insecurity, continued conflict in Darfur, high food prices and reduced cash crop production. Unfavourable climatic conditions and associated challenges to crop and livestock production are likely to exacerbate the situation in most states, stretching communities' diminishing coping mechanisms beyond their limit. The current low levels of food production point to a deteriorating food-security status among affected communities in North Sudan, with the situation likely to further worsen as the season becomes drier and limited resources are used up. See Figure 2 for a food security-related situation analysis.

Figure 2 - Food security-related situation analysis



Natural disasters, drought and conflict

The occurrence of drought, floods and pests is expected to continue in some states, damaging the production and livelihoods of rural and urban people and increasing dependence on external assistance and negative coping strategies. It is expected that food production will diminish over the coming years owing to consecutive natural disasters and the impact of conflicts, leading to food shortages and food insecurity. This will require an increase in life- and livelihood-saving measures. The number of food-insecure people in need of assistance is likely to lead to heavy dependence on direct food aid.

In 2009, rainfall was generally poor, characterized by a late start, early finish, and less than average precipitation during the main part of the season. This resulted in a shortened season, with an uneven distribution of less rain than usual in all states of North Sudan.

Crop production

According to the 2009 CFSAM, the national expected cereal areas harvested will decrease for all three main cereal crops, culminating in a harvested area of 7.5 million hectares compared with 9.4 million hectares harvested in 2008. In particular, the low level of production (33 percent lower than last year's estimate and 30 percent lower than the average estimate for the previous five years) in 2009 is seriously impacting on the food-security situation in most parts of North Sudan as stocks are depleted before the harvest in October/November 2010.

Market prices

As harvested crops enter the market, prices are generally expected to decrease. However, current cereal prices are substantially (20 to 50 percent) higher compared with the same period last year in nearly all markets. If it continues, the increase in sorghum prices so early in the harvest season is a serious concern, as sorghum is a major staple food crop for the poor. Although high prices at harvest time are positive for farmers' incomes, they negatively affect the poorest farmers and livestock owners, who continue to depend on the market for cereal. Poor consumers will be seriously affected by extended periods of high prices, as long as the prices of all other consumable items continue to rise. Persistent, historical high prices require an immediate response and prices should be closely monitored.

In March 2010, the increase in livestock prices was greater than that of cereals, favouring pastoralists' terms of trade⁴.

Government policies

The Government is relying on aid agencies to support the population; although at the end of 2009, it implemented a cereal subsidy programme to lower or stabilize prices. However the programme has been affected by the lack of coordination with other actors.

Undernutrition

The Sudan has some of the highest prevalence rates of undernutrition. According to national estimates, 31 percent of children under five are underweight, 14 percent are wasted and 32.5 percent are stunted. These figures hide significant

⁴ Food security information for decision-making (www.foodsec.org) for Sudan, May 2010.

subnational and seasonal variations. The prevalence of moderately underweight children is estimated at 38.4 percent in Kassala, 39.6 percent in North Darfur and 19 percent in Red Sea state. In Eastern Sudan, wasting among children ranged from 19.7 to 30.8 percent in different localities. Localized surveys on micronutrient status report that night blindness caused by Vitamin A deficiency ranges from less than 1 to 4.8 percent. Undernutrition not only increases vulnerability to disease and death, it diminishes learning capacity and productivity, locking vulnerable households into a cycle of poverty and undermining sustainable livelihoods.

Malnutrition and micronutrient deficiencies among children are linked to a poor intake of nutritionally balanced diets, chronic household food insecurity, infectious diseases, and poor health services and sanitation. The Sudan Household Survey noted that poor community awareness and health care-seeking behaviours aggravate a situation characterized by extremely high rates of maternal and child mortality.

High prices for food commodities have left about 76 percent of the resource-limited rural population facing serious food insecurity and a threat to their very survival. Most farmers are producing below their subsistence requirements. Vulnerability and undernutrition among food-insecure populations are inextricably linked to a variety of social, political and economic factors, including limited opportunities and constraints to crop, livestock and fisheries production.

1.5 FUTURE PRIORITIES BASED ON THE SITUATION ANALYSIS

A combination of insecurity and instability, natural disasters, chronic poverty and general underdevelopment continues to leave many people across North Sudan vulnerable to food and livelihood insecurity. Considering the humanitarian needs of the targeted populations, the security situation and context analysis in North Sudan, FSL Cluster support needs to reach the most vulnerable including IDPs, returnees, DDR participants, and resident households facing poor food security and food production, limited livelihoods and economic activities. Given the factors that trigger food insecurity, FAO's emergency and rehabilitation programme needs to address the following key issues:

- i. dwindling agricultural production;
- ii. reduced livestock production and productivity;
- iii. the adverse effect of climate change and the conflicts created over the use of scarce natural resources and longer-term issues such as land access;
- iv. the economic factors that affect the overall livelihoods of the various groups, as well as the creation of alternative livelihood resources, for the overall population but also for the large number of IDPs;
- v. the need to strengthen institutions as local counterparts, and the main focus for the region in emerging from the protracted crisis; and
- vi. coordination of the international community and the assistance this provides.

In the next section, the above six areas will be examined, along with the various options to deal with these issues, taking into consideration the implications for planning and priorities set overall in order to outline a response analysis for the programme.

