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FINAL REPORT

Adaptation and Devastation: The Impact of the Conflict on Trade and Markets in Darfur

Findings of a Scoping Study

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EXECUTIVE SUMMARY

Trade is the lifeblood of the economy of the three states which comprise the Darfur region and one of the main ways in which different livelihood groups interact. Normal trading patterns have been severely disrupted by five years of devastating conflict. A growing body of knowledge of how livelihoods have been affected by the conflict has fed into livelihoods programming. Missing from much of the analysis is a clear understanding of how trade and markets have been impacted.

A component of Tufts University's Darfur livelihoods research program, this scoping study begins to fill that gap while establishing a foundation for future more in-depth market investigations. Information about trade in Darfur's main agricultural and natural resource products was primarily obtained from interviews with traders in the region's three main urban centers: Al Fashir, Al Geneina, and Nyala in November 2007. This study set out to:

- raise awareness, improve understanding and ongoing analysis of markets and trade in Darfur's key agricultural/ natural resource commodities in the context of the ongoing conflict
- inform and influence livelihoods programming and related policy change initiatives, including strengthening market monitoring

The extent of Darfur's trading networks and the entrepreneurialism of its traders are legendary. For a thousand years camel caravans followed the Dar al Arbain—the "Forty Days' Road"—linking Al Fashir with Assiut in Egypt. Darfur has long been a key source of some of Sudan's major exports: livestock, groundnuts, and gum arabic¹. Yet the full potential of Darfur's production and trading capacity has never been realized due to decades of

¹ Gum arabic is derived from acacia trees. It is a complex polysaccharide that has food, pharmaceutical and technical applications

chronic under-investment. Darfur's very poor transport infrastructure is a stark reminder of this. Isolation and lack of roads have driven up transport costs and negatively impacted trade in its main commodities.

The entrepreneurialism and adaptability of Darfur's traders have been put to the ultimate test by the current conflict. Supplies have been disrupted and market infrastructure damaged, especially the primary market network. Many rural markets have been abandoned and movements become more restricted due to the risk of banditry. Transaction and transport costs have rocketed, sometimes four-fold. As the economy has contracted, the response by the governments of the three states of Darfur has been to impose ever higher taxes on a smaller number of traders in order to shore up revenues. Taxes on Darfur's main commodities have more than doubled compared with pre-conflict levels, creating a strong incentive to trade illegally. In addition there are numerous 'informal' taxes in the form of protection payments to militias and checkpoint fees, especially when passing between territory held by rebel groups and the Government of Sudan (GoS). The combined effect is a crippling policy environment in which to do business. Informal credit arrangements between traders was an essential lubricant to trade pre-conflict, not least in the absence of affordable and accessible formal credit arrangements. These have mostly broken down as trade has become ever more ethnically determined. Yet trade is still the main way in which different ethnic groups interact, sometimes doing deals between warring groups where there is mutual interest in ensuring the safe passage of goods.

Not surprisingly many traders have gone bankrupt in the last few years. It is estimated that 20-30 percent of urban traders went out of business early in the conflict. The impact of the conflict is readily apparent in the market in Al Geneina. Once the hub for a thriving trade from West Darfur into Chad in commodities such as groundnuts and sesame, the flow of trade has now reversed. Today there are many Chadian traders bringing goods into Al Geneina market, ranging from sugar and tea to *atroon* (potassium salts for livestock that used to be plentifully available from North Darfur), and buying up food aid commodities from internally displaced persons (IDPs). Political affiliation now plays a role in terms of access to trade. This has forced some urban traders out of business, while members of political/rebel movements are given preferential treatment to move commodities through areas controlled by their faction.

Darfur's traditional market network has been seriously disturbed by conflict. Once thriving secondary markets such as Mellit have declined significantly and new markets such as Kulkul have developed in nearby

rebel-held territory. One of the most striking features is the emergence of significant new markets in the biggest IDP camps near Darfur's state capitals. These are usually beyond the reach of government and have become *de facto* tax havens, part of the shadow or parallel economy. They have attracted urban traders and especially urban consumers who can benefit from lower prices for items such as meat and charcoal. Trade within the camps is usually controlled by the camp sheikhs and most business is now dominated by IDPs. The unregulated markets in IDP camps also provide a convenient outlet for stolen goods, including livestock and spare parts removed from stolen vehicles.

Trade in locally produced grain has all but collapsed since the start of the conflict as farmers became displaced and because of the difficulties of transporting grain from traditional surplus-producing areas to the major markets. Inadvertently, the massive humanitarian food aid operation to the three Darfur states has shored up the cereal market. This study indicates that the significance of relief grain in urban cereal markets may be even greater than previously estimated. It has kept traders in business and has lowered and stabilized prices throughout the crisis at a time when purchasing power has been at an all-time low. It has thus benefited those who are not recipients of food aid, including the urban poor. Food aid grain on the market has also been a valuable source of fodder for livestock—horses, donkeys and dairy cattle—at a time when grazing outside the main towns has been very risky.

Trade in Darfur's main cash crops is a salutary illustration of what could have happened to the cereal market in the absence of food aid. Trade in each of Darfur's main cash crops—*tombak* (chewing tobacco), groundnuts, gum arabic, and oranges—has been badly affected by the conflict. It is reported that up to half of small-scale *tombak* traders have gone out of business in North Darfur. In Nyala it is estimated that an even higher proportion of the main groundnut traders have gone out of business and there are now few functioning groundnut oil processing plants. The collapse of the gum arabic trade has negative implications not only for Darfur's economy but also for the environment as acacia trees which were once used to produce this valuable export commodity are felled to make way for crop cultivation and/ or to fuel brick kilns. The story of how the orange trade has adapted to the conflict in Darfur demonstrates the remarkable resilience of both farmers and traders. Early in the conflict most of the trade routes to Jebel Marra—a range of volcanic peaks in the center of the region—were cut off and trade ceased. But these have since re-opened and trade has resumed, albeit across a number of 'front-lines' from rebel-controlled areas of production into government-controlled urban markets. The transaction costs are high as there is double taxation and numerous

protection payments to be made. But the orange trade is also an interesting example of protection deals being done between warring ethnic groups who have a shared interest in keeping the trade flowing.

A common pattern for each of these cash crops is the prohibitive taxation regime they are subjected to, at a time when turnover has fallen substantially for individual traders and profit margins are squeezed. The overall impact is serious destruction of Darfur's market infrastructure, with long-term consequences for recovery when peace is eventually restored.

The livestock trade has also contracted since the conflict began with large numbers of *gallaga* (small-scale traders operating within Darfur) and *sebaba* (middlemen) going out of business. The ethnic concentration of traders has intensified. Traditionally livestock have been transported on the hoof over large distances to markets such as Omdurman and to Egypt. Many of these routes have become longer and more circuitous since the conflict began as traders find the safest territory to move through. While before the conflict it took 40–45 days to move livestock from Al Geneina to Omdurman, it now takes four to five months. Herds are moved in smaller numbers to reduce risk while the number of herders required to protect them has usually increased. Transport costs have thus been pushed up. Approximately one-third of the cost of transporting cattle between Nyala and Al Fashir is now taken up by levies and other payments to pass through checkpoints. The livestock trade between some markets has stopped completely and elsewhere it is at a trickle compared with pre-conflict levels. The Nyala abattoir closed in 2004 but re-opened in 2006 and has a valuable contract supplying the African Union. However, this rare opportunity to support the livestock trade could be more effective if UN financial procedures were changed to allow livestock traders to be paid more regularly.

The study provides alarming evidence of changes in the timber trade in each of Darfur's state capitals. Demand for timber has soared, mainly due to the construction boom fuelled by the presence of the international community, and the building of shelter, fencing, and latrines in IDP camps. The supply of hardwood, building poles, and bamboo to these urban markets has increased dramatically. This is particularly marked in Al Geneina where there has also been a large increase in the number of sawmills. Management of forest resources by government has broken down. Many of those bringing timber to the market are not those who planted the trees and there is evidence of a war economy developing in the timber trade.

Although a number of humanitarian agencies (as well as government departments) are involved in market monitoring in each of the

three Darfur states, this is usually to inform their own programming in a particular geographic area. Much of the data collection relates to prices of the main agricultural and livestock commodities. Agencies commonly reported capacity limitations in carrying out market analysis, lacking both analytical skills and adequate resources. What is missing is the contextual and qualitative information that exposes and explores how trade dynamics are changing. This could provide information about shifting conflict dynamics and much-needed tracking of how Darfur's economy is being impacted by the conflict.

This study proposes a number of follow-up activities related to livelihoods programming and strengthening market monitoring. Recommendations range from more regular and rigorous monitoring of how humanitarian assistance is affecting marketing of key commodities; ways of processing and/ or drying perishable goods like oranges which are subject to high losses because of slow and unreliable transportation and exploring how traders could be better supported with affordable credit. The study identifies areas that deserve further attention to deepen and broaden analysis of trade. Some of these should be the focus of the planned second phase of this market study, which could also include capacity-building activities in market monitoring in each of the three states of Darfur.

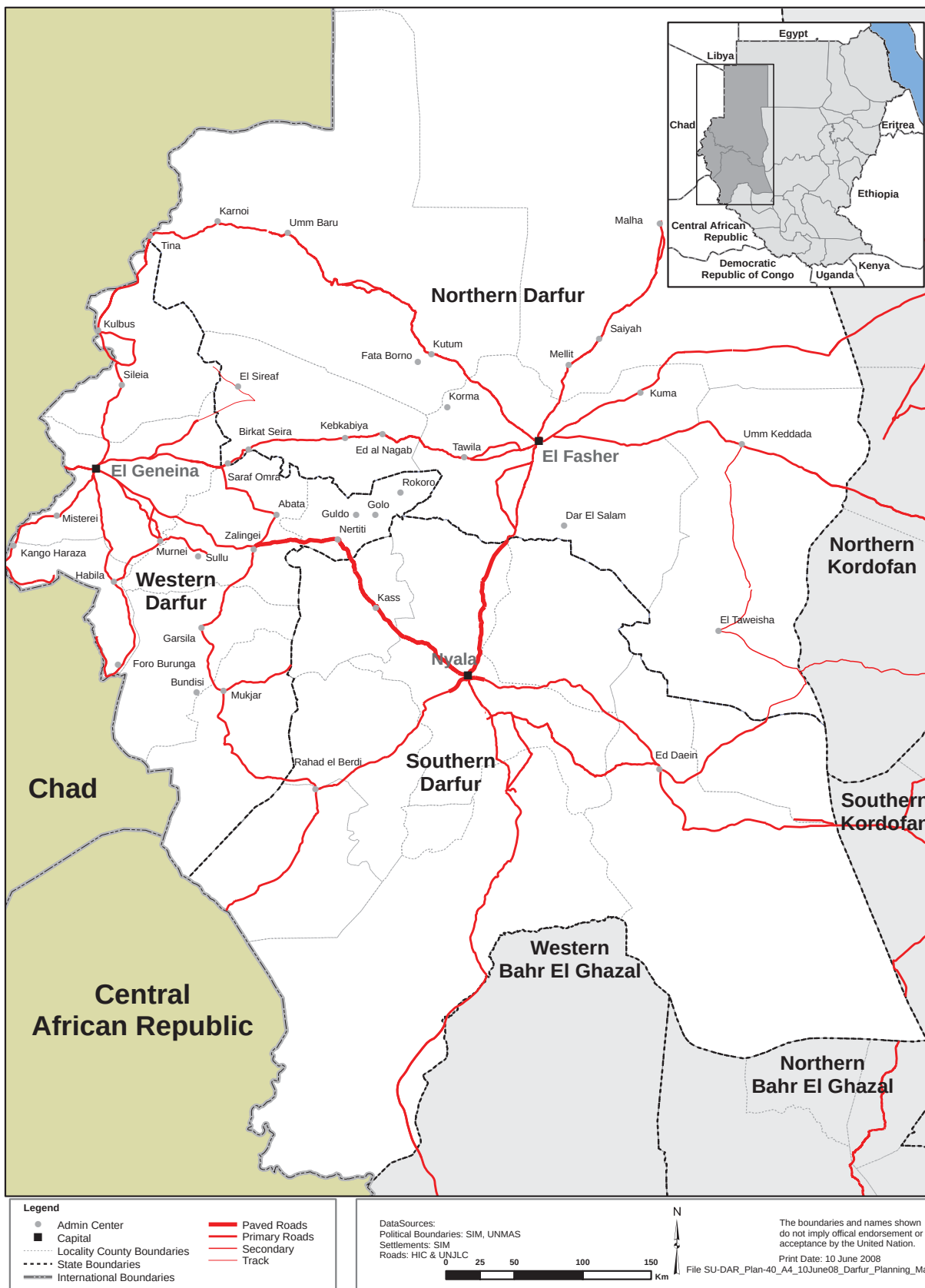
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Cover photograph: Ummdafaso grain market, Al Fashir

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Darfur, Sudan



Map provided courtesy of the UN Office for the Coordination of Humanitarian Affairs. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

I. INTRODUCTION



BACKGROUND

Trade is the lifeblood of the economy of Darfur², and market transactions are an essential part of household livelihoods. Trade is one of the main ways in which different livelihood groups interact with each other, especially farmers and pastoralists. But normal trading patterns have been seriously affected by five years of devastating conflict between the Government of Sudan (GoS) and rebel opposition movements. When the rebellion flared up in 2003 the government launched a major counter-insurgency. This early period of the conflict was characterised by violent and severe attacks at village level causing the displacement of millions of people. Very quickly, markets and trade collapsed in many rural areas. In other areas where there has been less displacement the market is still functioning but has had to adapt to a hostile environment of insecurity, banditry, reduced production, and rising transaction and transport costs fuelled by high taxes and protection payments. These have directly impacted the livelihoods of produc-

² Throughout this report 'Darfur' refers to the wider region incorporating the three states of North Darfur, West Darfur, and South Darfur.

ers, traders, and consumers. Meanwhile new markets have sprung up in urban areas and in camps where there are large concentrations of IDPs, distorting traditional trading patterns.

There is a growing body of knowledge and understanding of how livelihoods have been affected by the conflict in Darfur. But missing from much of that analysis is a clear understanding of how markets and trade in Darfur's main agricultural/ natural resource commodities have been affected. There have been some earlier forays into exploring how markets have adapted. A 2005 report from the Feinstein International Center, *Livelihoods under Siege*, contained an extensive exploration of livestock marketing³; CARE carried out a study on markets and food security in 2004⁴, and a World Food Programme (WFP) livelihoods study in 2006 explored the impact of food aid on the grain trade as well as briefly investigating changes in trade in livestock and cash crops.⁵ All these studies have shown how normal trade patterns and relations have been severely disrupted by the conflict. One of the features of trade in a conflict environment is how it is constantly adapting, in response to (and to some extent influencing) security and shifting conflict dynamics.

In each of the three Darfur states there is some ongoing market monitoring, but this has tended to be quite limited, mainly focused on price data collection in the main traditional markets. What is missing is more qualitative and contextual analyses that track changing trade routes, shifts in the importance of different commodities, the changing profile of traders, and implications for different livelihood groups. This gap emerged clearly in a series of workshops on livelihoods programming held in Darfur in July 2007.⁶ A better understanding of how markets and trade have been affected by the conflict, and are evolving in a situation of lawlessness and shifting alliances, has important implications for short-term strategic planning and livelihoods programming to respond to the current humanitarian crisis. For example, how can markets best be supported in turn to support livelihoods, recognizing that this is an important form of interaction between different livelihood groups; and what are some of the market consequences of

3 Young, H., A. M. Osman, et al. (2005). *Darfur - Livelihoods under Siege*, Medford, Feinstein International Famine Center, Tufts University.

4 El-Dukheri, I., Dammous, H., and Khojali, A.M., (2004) *Rationale for a Possible Market Support Program in Darfur, Sudan. A Brief Look at Markets and Food Security*. Commissioned by USAID and implemented by CARE, August-September 2004.

5 Buchanan Smith, M. and S. Jaspars (2006). *Conflict, Camps and Coercion: The Ongoing livelihoods Crisis in Darfur. Final report to WFP Sudan*.

6 See *Sharpening the Strategic Focus of Livelihoods Programming in the Darfur Region. A Report of Four Livelihoods Workshops in the Darfur region*, by Young et al., 2007.

how humanitarian assistance is being provided, such as food aid in the absence of a functioning local grain market? A better understanding of current trading patterns and routes is also essential for longer-term planning for Darfur's future, in terms of how market infrastructure can be maintained and eventually contribute to recovery of Darfur's economy and of livelihoods.

This market study is part of the Darfur livelihoods research program of Tufts University. The overall purpose of the study is to:

- raise awareness, improve understanding and ongoing analysis of markets and trade in Darfur's key agricultural/ natural resource commodities in the context of the ongoing conflict
- inform and influence livelihoods programming and related policy change initiatives, including strengthening market monitoring.

This report presents the findings of the first preliminary scoping phase of this market study. It focused on trade in Darfur's main commodities in its three main urban centers—Al Fashir, Al Geneina, and Nyala—capturing some of the key shifts in trade patterns and identifying some of the main policies and institutions affecting trade in those commodities. (As a scoping exercise, these trends should be taken as indicative. More in-depth investigations are needed to confirm all of these trends). As part of this exercise we have carried out a brief review of the type of market monitoring and analysis that is currently being done in each of the three Darfur states. The findings will feed into and inform a second and more in-depth phase of the marketing study, covering a wider network of secondary and primary markets.

After a description of the methodology, section 2 presents some background on how trade and markets operated before the conflict. Section 3 provides an overview of how trade has been impacted by the conflict, in terms of market networks, trader profiles, the policy context, and the movement of goods within Darfur. The following sections 4 to 7 explore trade in each of Darfur's main commodities: cereals, livestock; the main cash crops—*tombak*, groundnuts, gum arabic and oranges; and finally timber. Section 8 reviews the current state of market monitoring in Darfur, in terms of data collected and apparent gaps. The final section presents the conclusions from this first phase of the market study. It also proposes follow-up to deepen the analysis of current trading in Darfur and to assess the impact on livelihoods.

METHODOLOGY

This study takes as its reference point the livelihoods conceptual framework⁷ to violent and complex humanitarian emergencies. In terms of the ‘PIPs’ (policies, institutions, and processes) in this framework, the market is one of the most important institutions influencing livelihood strategies and outcomes as well as use of assets. For example, if the market for gum arabic, an important cash crop in Darfur, collapses, this will affect how a rural farming household uses their gum arabic trees, part of its natural asset base. The trees may be cut down and/or used for firewood if they are no longer of agricultural value, and the household may be forced to find alternative livelihood strategies to replace the lost source of income from gum arabic. This may, for example, cause members of the household to migrate to urban centers in Darfur or to Khartoum to find work. This example also illustrates how the market—an ‘institution’ in the livelihoods framework—is affected by policies such as taxation regimes and forestry regulations, and processes such as violence, insecurity, and banditry. As explained in section 6.3 below, high taxes and insecurity have both contributed substantially to the collapse of the gum arabic trade in Darfur.

The study uses some aspects of commodity chain analysis. This pays attention to power relations, governance structures, and exchange relationships within trading networks, from primary production through to consumption. The key question in conflict environments is: who controls the trade in particular commodities at different levels and how has that changed during the conflict? This is the part of commodity chain analysis that this study engages with most, for example in exploring trader profiles. As an Overseas Development Institute study into political economy analysis concluded: “the direct investigation of commodity chains in situations of conflict and political crisis is likely to be highly sensitive, and so conventional research methods appropriate for peaceful situations will not be suitable” (Collinson, 2002: 24).

The first step in carrying out this scoping exercise has been a review of the relevant literature, specifically on Darfur but also on trade and markets in conflict environments more generally. See Box 1. There is now a burgeoning literature on what is often called ‘war economies’ (described below). This literature has provided some important pointers of issues to explore and common patterns to anticipate such as exploitative trade patterns closely related to conflict and power dynamics. It also demonstrates clearly the interaction between politics and

7 As adapted by Tufts University: see Lautze and Raven Roberts, 2006 and Annex 1.

economics.⁸ By reviewing the available documentation on livelihoods and markets in Darfur, we have attempted to build on what is already known and thus take the analysis and understanding of trade and markets a step further in order to inform livelihoods programming.

The fieldwork for this study focussed on the capitals of the three Darfur states—Al Fashir in North Darfur, Al Geneina in West Darfur, and Nyala in South Darfur—three of the most important urban markets. Key informant interviews were held with traders in each of these markets who deal in cereals, livestock, *tombak*, groundnuts, gum arabic, and oranges—the commodities which are the backbone of Darfur's economy. We also explored trade in timber because of growing concerns about the increase in demand for timber in Darfur's main towns and anecdotal reports of illegal and unregulated trading which may be destroying some of Darfur's fragile natural resource base.

The market in Darfur has always been quite specialized with most traders dealing in just one major commodity. Interviews were occasionally conducted with traders individually, but more often with two to four traders together which provoked some interesting discussions. A focus group discussion was held with IDP leaders from Direij camp near Nyala to make some preliminary investigations into trade and markets inside the camps. See Annex 2 for the numbers of traders interviewed. Most of the interviewing was carried out by the two principal researchers for this study, with some translation assistance and input from others. Both researchers have been involved in market studies in Darfur since the 1980s. See Annex 3 for the researchers' backgrounds. Existing relationships with traders were crucial to the success of the interviews, encouraging them to talk openly, sometimes on sensitive topics. What clearly emerged was the value of high-quality and carefully planned interviewing for this kind of study, rather than a large-scale survey requiring many enumerators.⁹

In each of the three state capitals meetings were held with agencies and with some government officers involved in market data collection

8 The interaction between economic and political agendas is sometimes called the 'greed' versus 'grievance' debate, greed referring to economic and commercial agendas and grievance referring to political agendas and patterns of power (see for example Collier and Hoeffler, 2002; and Cliffe and Luckham, 2000). This interaction was well-documented in the long-running civil war in South Sudan (see, for example, Keen, 1994; and Deng, 1999).

9 The ODI study on political economy analysis, based on four case studies in four different countries, similarly found that informal interviews with traders, which were principally qualitative, were particularly valuable for documenting how markets and livelihoods had changed over time (Collinson et al, 2003).

to find out the range of ongoing market data collection and analysis, to identify gaps, and to help orientate this study to build on existing knowledge and to complement existing market monitoring.

BOX I

TRADE AND CONFLICT: WAR, SHADOW, AND COPING ECONOMIES

A lot has now been written about the economic dimensions of conflict, much of which relates directly to markets and trade (See, for example, Le Billon (2000), Collier (1999), and Collier and Hoefler (1998)). 'War economies' is frequently used to describe the illicit trade in (and often extraction of) resources ranging from coltan to diamonds to opium, usually by the military, militias, or 'conflict entrepreneurs' operating in organized networks. They, in turn fund the war effort and livelihoods that become dependent on perpetuation of the conflict (this definition is based on Collinson (2003) and Lautze and Raven-Roberts (2006)). Collinson (2002) makes a useful distinction between war economies, shadow economies, and the coping economy. The shadow economy could also be called the parallel economy. It differs from the war economy in that it is not directly fuelling the conflict, but it is operating on the margins of the conflict where there is little regulation. The coping economy is how the majority of the population is engaging in the market, even in a conflict situation, for example selling agricultural produce, petty trading in food commodities, or through daily laboring. Although it is useful to distinguish between these different types of economy, in practice they are interconnected. The same actors—whether traders or farmers—may be engaged in more than one type of economy. Farmers, for example, may sell commodities to militias engaging in trade to fund the conflict. Duffield (2000) adds the transborder dimension, referring to large-scale and usually illegal transnational trading operations in, for example, arms or natural resources. These are most likely to be part of the war economy or the shadow economy.

This paper focuses mainly on the shadow and coping economies in Darfur. Although there clearly is a flourishing war economy in Darfur, not least in humanitarian assets such as four-wheel drive vehicles, this requires more in-depth research and exploration than has been possible in this initial scoping exercise, although it does indicate where war economies may be developing, for example with regard to timber.

The study team collaborated with two related initiatives: work by the United Nations Industrial Development Organization (UNIDO) to support private sector development in Darfur, and economic profiling led by UN-HABITAT to identify areas of existing and potential economic opportunity. It is hoped that the findings presented here can feed into both of those recently started initiatives, and that a second phase of this marketing study can benefit from their work. Close contact has also been maintained with the United Nations Environment Programme (UNEP) which is coordinating work to develop alternative building technologies and energy so as to reduce the demand for bricks, timber and firewood. The role of the Darfur Regional Coordination Office of the UN Office for the Coordination of Humanitarian Affairs (RCO/ OCHA) in facilitating this study and in making connections with other related initiatives has been invaluable.

Due to resource constraints the fieldwork for this scoping study was carried out with limited time. Therefore some issues have been identified that require further investigation. It has not always been possible to identify different ethnic groups involved in trading, for example different Arab groups involved in livestock trading. It should be possible to address some of these limitations in a more expanded second phase.

II. A BRIEF HISTORY OF TRADE AND MARKETS, THE LIFEBLOOD OF DARFUR'S ECONOMY

Darfur has long been a trading economy, between pastoralists and farmers, north and south, rural and urban. But the significance of Darfur's trade goes well beyond its borders. Since the nineteenth century Darfur has been a key source of some of Sudan's major exports: livestock, groundnuts and gum arabic: "(an) illustration of how the remote west of Sudan has been integrated into the world economy for a long time" (Morton, 1985: 40). Darfur's other main export, albeit mainly to other parts of Sudan, is *tombak* (or chewing tobacco). Introduced into Darfur in the 1820s this has become an important cash crop for North Darfur.

Darfur has a three-tier market network:

1. Village and rural assembly markets—*primary markets*—usually weekly, where farmers and pastoralists bring their produce to sell to small traders and agents of larger traders, and where they purchase basic commodities such as tea and sugar
2. Intermediate town markets - *secondary markets*—often held twice per week, where small traders trade with larger traders
3. Major town markets—*urban markets*—which operate on a daily basis, are also the point of export for many of Darfur's agricultural commodities and livestock.

Yet the full potential of Darfur's production and trading capacity was far from being realized. The area has suffered from chronic under-investment for decades. One of the most visible reminders is its very limited transport infrastructure. It has only 588 km of poorly-maintained asphalt and gravel roads, out of a total Sudanese road network of around 3,000 km of roads—seven and twelve percent respectively of the asphalted and gravel roads in the country (El-Dukheri et al., 2004). Improved road infrastructure has long been identified as one of the single biggest potential contributors to strengthening Darfur's economy (see Swift and Gray, 1989), but no investment has been forthcoming. Railway transportation fares little better. Completion of the railway from the Nile valley to Nyala in 1960 was an important boost to trade but its efficiency has slowly declined since. This is evident from the falling annual tonnage carried by rail over the last decade (El-Dukheri, 2004). The consequence of this lack of investment is very

high transport costs. It costs twice as much to transport a ton of goods on Darfur's dirt roads than on asphalt roads in central Sudan (ibid.). This directly impacts the competitiveness of Darfur's exported commodities and results in the high prices Darfuris must pay for products brought from central Sudan. Another major constraint has been the lack of financial capital available to traders.

Despite these obstacles, the entrepreneurialism of the Darfuris has long been recognized in the rest of Sudan. In some commodities, most notably *tombak*, Darfuri traders have dominated the market throughout the country. In other cash crops, such as groundnuts and gum arabic, and in livestock Darfur traders mostly operate as agents for large-scale traders in Khartoum and Omdurman. However, a significant number of Darfuri traders directly managed Darfur's import/ export trade with Libya and its livestock trade with Egypt (Young et al., 2005).

In terms of small-scale manufacturing, the record in South Darfur is quite impressive in view of the limited support available to entrepreneurs. A 2003 industrial survey showed that South Darfur hosted more than 4,000 small manufacturing establishments, second only to Khartoum (World Bank, 2007). Groundnut processing has been one of Darfur's most important industries, yet few enterprises work to full capacity.

Darfur's producers and traders have had to learn remarkable resilience and adaptability to fluctuating market conditions, especially since the 1970s. Trade in Darfur's three main exports—livestock, groundnuts, and gum arabic—all experienced a slump in the 1970s. There was some rallying of the market in groundnuts in the 1980s, supported by government intervention to stabilize prices, but this was withdrawn in the late 1980s/ early 1990s. The way in which producers respond rapidly to market signals is demonstrated well in South Darfur where cultivators of *goz* (sandy soils) have regularly switched between groundnuts as a cash crop and cereals in response to prevailing prices (Buchanan-Smith, 1988).

Considering the poor transport infrastructure, Darfur's markets are surprisingly well-integrated. Yet in the decades preceding the outbreak of the current conflict, the well-recognized marginalization of Darfur within Sudan took its toll as the economy failed to function near its full capacity.

III. AN OVERVIEW OF THE IMPACT OF THE CONFLICT ON MARKETS AND TRADE

3.1 THE CURRENT STATE OF MARKET NETWORKS

OVERVIEW

The adaptability of traders has been put to the ultimate test since the widespread eruption of violence and conflict in Darfur in the last few years and disruption of normal trading patterns. Although the market has continued to function, as it nearly always does in a conflict environment, many traders are operating under great pressure and are constantly having to adapt to changing patterns of insecurity and market conditions. (Thus, some of the analysis presented here can only serve as a snapshot. Just as the conflict dynamics are constantly changing in Darfur, so too are trade dynamics).

Some of the main ways in which trade and the market have been disrupted (and documented in previous studies) are:

Disruption to supply

1. displacement of producers has affected the supply of all agricultural commodities; large concentrations of IDPs and associated environmental degradation around towns have reduced productive capacity

Damage to market infrastructure

2. displacement of traders, especially from smaller rural markets
3. closure of many small rural markets

Impact of insecurity

4. insecure and restricted movement through many rural areas, particularly from GoS to rebel-held territory and vice versa
5. increasing risks of banditry and looting, especially on the roads but also in some smaller markets

Formal and informal policies

6. frequent checkpoints, random payments, and some additional ‘protection’ payments
7. ‘double’ taxation if passing through GoS and rebel-held territory
8. GoS restrictions on transporting goods into and out of rebel-held areas
9. GoS closure of the border with Libya in 2003. (This closed off a vital trade route for Darfur, for the export of livestock, the flow of migrant workers out of Darfur and remittances back in, and the supply of some manufactured goods from Libya).¹⁰

As a result of all of the above, prices rose sharply for many commodities early on in the conflict, by an estimated 60 percent in the first half of 2004 (El-Dukheri et al., 2004), just as purchasing power for much of Darfur’s population was collapsing. This trend has continued—prices keep rising to cover increasing transaction costs while the purchasing power of most civilians is at its lowest ebb.

The primary market network has been most devastated by the conflict. Many rural markets no longer function, either because the nearby village has been destroyed and abandoned or because mobility of goods is severely restricted. Most of the secondary markets are still functioning, but some markets that were thriving before the conflict—for example Mellit that was a trading hub with Libya, and Zalingei that was a major market for agricultural produce—have severely declined. Meanwhile, other markets have emerged, usually in rebel-held areas where security and mobility are more assured, for example Kulkul in Mellit locality. The main urban markets have grown substantially, in Al Fashir, Al Geneina, and Nyala. This is not the case for all commodities (as explained below), but the overall level of market activity has significantly increased. This is the consequence of a hugely inflated population living in and around these towns, many of whom are IDPs, and the unprecedented scale of the international humanitarian and peace-keeping presence.

10 Despite the border closure, trade with Libya has resumed, but illegally with associated risks and high costs.

EMERGING MARKETS IN IDP CAMPS

Since the conflict began, particularly striking is the emergence of significant markets in some IDP camps. This is not surprising given the size of the camps—many are small towns with more than 70,000 IDPs, all of whom are highly dependent on the market for almost all their food and other basic commodities. What is notable is that most of these markets are operating beyond the control of government and ‘normal’ regulations. In many IDP camps government officers have no access. This is most extreme in the case of Kalma camp, Darfur’s biggest IDP camp with an estimated population of 92,000. The market in Kalma camp stretches for over a kilometre. Markets in IDP camps are a classic case of the shadow economy where significant trade is happening beyond the control and reach of government. The IDP camp markets appear to be operating under varying regimes. In some of them the camp sheikhs¹¹ are managing the market. In Zamzam outside Al Fashir and in Tawila and Shangil Tobai camps, the Sudan Liberation Army SLA—one of the four major Darfur rebel groups—controls the market and imposes its own taxes (El Fateh, 2007).

In effect, many IDP camps have become tax havens and no longer only simply serve IDPs. Some traders serving the urban population prefer to bring their goods to the IDP camps to avoid paying taxes on entering towns. Truck drivers trading in charcoal, for instance, choose to offload in Zamzam market to avoid paying Forestry National Corporation taxes. IDPs from the camp, especially women, then transport the charcoal into Al Fashir by donkey. Whereas there used to be one shop selling charcoal in Zamzam before the conflict, there are now more than 25 (El Fateh, 2007). The case of livestock is particularly interesting. In Abu Shouk camp, which has the biggest IDP camp market in North Darfur also serving Al Fashir, and in Kalma camp which plays the same role in relation to Nyala, livestock traders are bringing their animals for slaughter to the camps rather than to the towns to avoid taxation. Particularly in Kalma camp there are reports that some of the livestock are stolen and that the IDP camp market provides an easy outlet—an issue that deserves further investigation. As a result, in both Abu Shouk and Kalma camps the price of meat is markedly lower than in Al Fashir and Nyala towns. Many of the town people thus travel to the camps for cheap supplies. There are also reports that some of the IDP camp markets are being used to market other stolen commodities, such as spare parts from stolen vehicles. This is a clear example of the shadow or parallel economy interacting with the war economy.

11 The camp sheikhs are leaders elected or appointed amongst the IDPs, and are often different from the sheikhs that were village leaders before displacement.

Whilst being unregulated, IDP camp markets are also insecure, especially at night. The market in Abu Shouk camp has been destroyed by fire on at least one occasion, with arson being suspected (El Fateh, 2007).

TABLE 3.1. PRICE COMPARISONS BETWEEN KALMA CAMP
AND NYALA TOWN¹²

Item	Kalma camp	Nyala town
Charcoal (sack)	SDG 15-16	SDG 20
Meat (kg)	SDG 6-7	SDG 5-7

3.2 HOW TRADERS HAVE FARED

As this scoping exercise was carried out in Darfur's three main urban markets, most of this section focuses on traders operating in those markets, tracking what has happened to them and how they have stayed in business. Rates of bankruptcy among traders were very high early in the conflict, especially amongst traders in cash crops. The trade and migration team of the Darfur Joint Assessment Mission (DJAM)¹³—an initiative launched after the signing of the Darfur Peace Agreement in May 2006—estimated that 20–30 percent of urban traders had gone bankrupt. Our fieldwork corroborates these findings: in Al Geneina, for example, traders estimate that at least 30 percent of small to medium scale cereal traders have gone out of business and are now living as IDPs and/or refugees. As noted in section 6.2 below, groundnut traders were badly hit at the beginning of the conflict and a number of the biggest traders went bankrupt. Yet the extent to which the business community has suffered in the current conflict has tended to be overlooked in the international community's assessments.

Some traders have switched commodities in order to stay in business, usually between food commodities. A female cereal trader interviewed in Al Fashir, for example, had recently left the cereal market and shifted into dairy and poultry production. Some of the larger traders, usually of non-Darfurian origin, who were able to move have left the area completely. As noted by the DJAM team, urban traders emphasize the important role of the presence of the international community, with very high purchasing power, in maintaining a buoyant urban economy and keeping them in business.

12 At the time of writing, US \$ 1 = 2.0060 SDG (Sudanese pounds)

13 www.unsudanig.org/darfurjam

In Al Geneina, the impact of the conflict on traders is stark. There used to be a flourishing trade from West Darfur into Chad in commodities such as groundnuts, okra, and sesame. This has reversed and there are now many Chadian traders doing business in Al Geneina market, bringing in commodities such as flour, sugar, and tea and buying up food aid commodities from IDPs, especially oil. *Atroon* (potassium salts given to camels and sheep) is another example. Pre-conflict it was freely mined in Beer al Atroon in North Darfur. Since the conflict began there has been no access to Al Atroon. An inferior quality of salt—*jundaka* or *derairy*—is now being brought to Al Geneina market from Chad in quite large quantities by Chadian traders.

As the markets in IDP camps grew, a number of town traders shifted part of their business out to the camps, especially traders in food commodities and cereals in the early years of the conflict. But there appears to have been a shift in the profile of traders in the IDP camps as the IDPs themselves started to engage in trading. In Abu Shouk and Zamzam camps, for instance, cereal traders from Al Fashir have been pushed out over the last year as IDPs themselves have taken control of the trade in food aid commodities. In Direij camp near Nyala town, the majority of traders supplying the camp and buying up food aid are from Nyala, but all trade within the camp is controlled by IDPs. This may be a fairly common pattern in other IDP camp markets and is an area for further investigation. In Abu Shouk camp, an estimated 70 percent of the shop owners are IDPs while in Zamzam 90 percent of the traders are IDPs (El Fateh, 2007). Close trading relations have clearly developed between IDP and town traders.

Trade in Darfur has always been ethnically determined at a certain level. Farmers, for example, have always tended to sell their produce to small traders of the same ethnic origin operating between primary and secondary markets. This pattern has simply intensified during the conflict as this report demonstrates. Darfur's market infrastructure has always been poorly supported by provision of credit and capital. Trading on the basis of trust was an essential ingredient of the market system, between traders and between traders and farmers for crops such as *tombak*. But the breakdown of trust was an early casualty of the conflict as Darfur's social fabric was ripped apart along ethnic faultlines. Falling back onto trading with one's own ethnic group was a natural response.

Yet despite this pronounced trend, trade is still one of the main ways in which different ethnic groups interact. For example, there are reports of Arab groups selling livestock to Fur IDPs in Kalma camp. (Further investigation is needed to explore which Arab groups are

trading in Kalma camp). Different ethnic groups that are apparently at war with one another are having to make deals to ensure the safe passage of traded goods.

Another feature of the changing profile of traders since the conflict began is to do with political influence. Some large and previously influential traders operating in urban markets have been pushed out of business if they do not have the 'correct' political affiliation, making way for those who do. Others have downgraded to trade on a smaller and less high profile scale. Similarly, recognized members of rebel groups are given preferential treatment as they travel with their commodities through rebel-held territory, for instance not having to pay fees at checkpoints. There is evidence of this as some members of the SLA engage in trade between Dar Es Salaam and Al Fashir.¹⁴ This may be an example of a war economy developing.

Men have always tended to dominate the wholesale and cash crop trade in Darfur while women traders usually operate on a smaller scale, retailing food commodities. This pattern does not appear to have changed since the conflict began. The livelihoods assessment in the Al Fashir IDP camps confirms that the medium and large scale traders in the camp are men and that women dominate petty trade (El Fateh, 2007). But in no way should this diminish the significance of female traders in Darfur. They are an essential part of the trading network, providing a valuable, if precarious, source of income for many IDP households.

3.3 THE POLICY ENVIRONMENT—HINDERING TRADE

In terms of formal policies, this scoping exercise has made some preliminary investigations into the taxation regime that traders face and the availability of credit. The findings on both paint a bleak picture. The 'informal' policies that traders face refer to informal taxes, fees paid at checkpoints, and protection payments. Combined, these create a crippling policy environment in which to conduct business.

FORMAL TAXATION

At federal government level, there have been some important legal and fiscal changes to promote foreign and domestic investment and economic growth. The World Bank (2007) identifies a number of

¹⁴ Agencies in Al Fashir indicated that most traders using the Nyala to Al Fashir route are supporters of the faction of the SLA headed by Minni Minnawi and are also given preferential access.

‘pro-investment policies’: the Investment Encouragement Act of 1999, amended in 2003; the ‘one-stop-shop’ of the Ministry of Investment; and the reduction in corporate tax rate to ten percent. But their report demonstrates how this is undermined:

by the incomplete process of decentralization (initiated in 1992) through which public services such as education, health, infrastructure and agricultural management were delegated to state and local authorities, but without revenue or administrative capacity to execute the mandates.... According to the 2003 Local Government Act, revenue sources assigned to state and local authorities are the taxes on economic activities in the region. The result is a proliferation of various taxes on productive enterprises.

(World Bank, 2007: 252)

As Darfur’s economy has drastically declined since the conflict began, the number of taxable enterprises has similarly fallen. In an attempt to shore up revenues, the state governments’ response has been to impose ever higher taxes on a smaller number of firms and traders. Data collected during this scoping study indicates a very heavy taxation burden on traders who are already struggling to survive economically. An absurd number of taxes are applied to some commodities: the tax on groundnuts in Nyala, for example, which amounts to SDG 4.20 per *guntar* (a measure of approximately 45 kg.) appears to be made up of 14 different taxes. Table 3.2 below illustrates how taxes have risen. At a minimum they have doubled, but some have risen by 400 percent.

TABLE 3.2 A COMPARISON OF TAXATION RATES BEFORE THE CONFLICT
AND IN 2007, ON SELECTED COMMODITIES

Commodity and town	Taxation rate pre-conflict	Taxation rate—Nov 2007
Cereals—Al Geneina	SDG 3/ sack	SDG 10/ sack
Tombak—Al Fashir	SDG 10-11/ guntar	SDG 19/ guntar
Oranges—Al Fashir	SDG 50-100/ truck	SDG 350/ truck (or SDG 600/ truck if destined for Omdurman)
Groundnuts—Nyala	SDG 1/ guntar	SDG 4.20/ guntar
Gum arabic—Nyala	SDG 12/ guntar (an additional tax of 10% was paid by the Gum Arabic Company)	SDG 25/ guntar, plus the 10% tax

The impact is to create a strong incentive to traders to smuggle, to trade illegally and to engage in the shadow or parallel economy. The growing importance of the markets in the IDP camps is evidence of this.

INFORMAL TAXATION

‘Informal’ taxation directly associated with the conflict is just as crippling. Table 3.3 provides an example of payments that had to be made to transport a truck of oranges from Jebel Marra to Al Geneina in November 2007:

TABLE 3.3 FORMAL AND INFORMAL PAYMENTS TO TRADE ORANGES
BETWEEN JEBEL MARRA AND AL GENEINA

SDG 70/ truck	protection payment for militia escort Golo to Nyertete
SDG 50/ truck	protection payment for militia escort Nyertete to Zalingei
SDG 50/ truck	protection payment for militia escort Zalingei to Mornei
SDG 50/ truck	protection payment for militia escort Mornei to Al Geneina
SDG 150/ truck	tax collected by SLA in Jebel Marra
SDG 40/ truck	tax paid to government in Zalingei
SDG 30/ truck	<i>zakat</i> tax paid to government in Al Geneina
SDG 200/ truck	fee paid to <i>borsa</i> (taxation point) in Al Geneina
SDG 300/ truck	tax collected by tax department in Al Geneina
TOTAL SDG 940/truck	

An orange trader transporting oranges from Jebel Marra to Al Fashir reported a total of seven checkpoints along the route. Payments on a return journey (fourteen payments in all, at both GoS and SLA checkpoints) were reported to be SDG 2,300 per truck. Not only are these orange traders having to pay vastly increased taxes, checkpoint fees and protection payments, they are also prevented by government from taking any commodities into SLA-held Jebel Marra. In the past they would have travelled with sugar, flour, soap, and other commodities. Now they have to travel into Jebel Marra empty.

CREDIT

The availability of credit through formal institutions has long been a constraint to traders in Darfur and has become even scarcer due to the conflict. Not only have many bank branches closed in Darfur's main market towns, but the cost of finance is high.¹⁵ None of the urban traders interviewed for this study would consider approaching formal

¹⁵ The World Bank document (2007) reports that it can be as high as two percent per month (24 percent). However, informal financing, now in short supply in Darfur, offers loans at even higher rates, up to 200 percent in some cases.

institutions for credit in the current high-risk environment. The terms are regarded as prohibitive, and the risk of losing collateral, usually property, too great if they default.

Traders extending credit to one another was an essential lubricant to the way markets functioned before the conflict. This usually meant deferring cash payments between traders until all of the commodity had been sold. Thus, cash flow would not constrain levels of business. This too collapsed when the conflict began. The risks of offering credit when looting and commandeering of trucks were major threats were too great. Cash payments had to be made up-front and cash flow became a major constraint (Buchanan-Smith and Jaspars, 2006). However, there is evidence of some re-establishment of these informal credit arrangements between traders, for example between a groundnut trader bringing groundnuts from primary markets in Dar Es Salaam to urban traders in Al Fashir. The Dar Es Salaam trader did not have to be paid immediately until the groundnuts had been sold in the Al Fashir market. But this is probably happening on a relatively small scale, on more secure trading routes, and where there is trust between traders of the same ethnic origin.

Overall, the impact of the conflict has been to shatter trader confidence in government institutions. For instance, officials manning government taxation points and *borsa* in the main towns are often deeply distrusted by traders. The World Bank report notes the longer-term impact this could have, with implications for Darfur's eventual recovery.

3.4 BLOCKED ROUTES, HIGH TRANSPORT COSTS AND THE IMPORTANCE OF TELEPHONE COMMUNICATION

One of the ways in which traders have had to be most flexible is in adapting to constantly changing transportation routes as a result of shifting conflict dynamics and patterns of insecurity. Trade routes through North Darfur were particularly badly affected in the early years of the conflict. The route from Al Fashir to Jebel Marra, for example, was closed completely in 2004-05. Some fruit and vegetable traders had to shift their businesses into trade in other commodities, for example sugar. But the route eventually re-opened and the orange trade was re-established.

More recently, as the conflict intensified in South Darfur in 2007 some major trade routes became blocked, including the road from Tullus to Buram due to the Fellata/ Habaniya conflict, and the road from Gareida to Buram due to fighting between the Masalit and Minni Minnawi's SLA faction. Between August and October 2006, and again between July and September 2007 the main trading route between Nyala and central Sudan was blocked between Adila and Ed Daien. This was attributed to Miseriya militias who had grievances against the government. The impact on Nyala town was severe. Starved of fuel this caused electricity and water shortages in the town. Expensive convoy arrangements now exist to protect trade between central Sudan and Nyala and between central Sudan and Al Fashir, with truckers bearing the costs.

Looting and banditry are constant threats on most routes. The fact that 23 WFP-contracted trucks were stolen in Darfur in the first 23 days of 2008 is a sharp reminder of this continuing threat.¹⁶ For some traders, a single act of looting can put them out of business altogether.

The impact of all of this, including the cost of protection payments and checkpoint fees, is hugely inflated transport costs.¹⁷ Transport costs on selected routes are presented in Table 3.4, both over long and short distances. Those collecting the checkpoint fees and making a livelihood out of providing protection are the ones who gain most from the current situation. Meanwhile the profit margins earned by traders are severely squeezed and consumers have to pay very high prices. (Cement prices in Darfur, for example, are 75 percent higher than in Khartoum—World Bank, 2007).

16 Source: WFP News Release, 23/1/08

17 Inflation during the period of the Darfur conflict has been around nine percent pa in Sudan. Taking this into account, as well as increasing fuel prices, transport costs have still risen substantially.

TABLE 3.4 COMPARISON OF TRANSPORTATION COSTS—
PRE-CONFLICT AND 2007

Transport route	Pre-conflict transport costs	Transport costs in Nov 2007
Al Geneina to Fora Boranga	SDG 1,000 per truck	SDG 5,000 per truck
Nyala to Omdurman	SDG 2,000 per truck (of 25 t)	SDG 4,000 per truck (of 25 t)
Omdurman to Nyala	SDG 8,000 per truck (of 25t)	SDG 12,000 per truck (of 25t)
Tabit to Al Fashir for tom-bak	SDG 4/ guntar (comprised of: SDG 2—transport SDG 1—tax SDG 1—loading and unloading)	SDG 17/ guntar (comprised of: SDG 10—transport SDG 5—SLA check-point SDG 2—SLA tax)

Most urban traders interviewed for this study no longer venture outside towns. Although they used to regularly visit the traders and markets that supplied them, it is simply too dangerous to do so now. Their saving grace is the mobile phone network. This enables urban traders to keep in contact with their suppliers in other towns and in secondary markets, wherever there is network coverage. This is essential to the flow of market information. Such is the level of insecurity that some larger traders who can afford it are supplying their truck drivers with satellite phones to keep in contact and track their progress—despite the fact that it is illegal for them to carry satphones.

Few traders now carry cash over any distance for fear of looting. Instead, they will send commodities out to rural markets, such as tea, sugar, and salt, to be exchanged for cereals and cash crops.

IV. CEREAL MARKETS AND FOOD AID

THE IMPACT OF CONFLICT ON TRADE IN LOCALLY PRODUCED CEREALS

Pre-conflict, Darfur was self-sufficient in cereal production in most years. Only in years of widespread drought were cereals imported from central Sudan. *Goz* areas around Al Fashir were important sources of supply for North Darfur, and especially for Al Fashir town. Buram, Tullus and Ed Daien were important sources of supply in South Darfur and for Nyala market, especially as groundnut production dropped in the 1990s. Other areas of supply included *goz* areas of production on the border between North and South Darfur such as Shearia. Al Geneina market was supplied from the south of West Darfur, for example Fora Boranga and Habila, from the east, e.g., Kereinik, and from the north Sirba and Sileia.

As a result of the conflict the trade in locally produced grain has all but collapsed in Darfur as so many farmers became displaced in 2003/ 04 and because of the growing difficulties of transporting grain from traditional surplus-producing areas to the major markets, resulting in high price differentials between areas in quite close proximity (Buchanan-Smith and Jaspars, 2006). Many of the most important pre-conflict trade routes for cereals in South Darfur are no longer functioning as production has fallen and insecurity has escalated. Examples include from Buram, Tullus and Intekaina to Ed Daien, and from Tullus to Nyala. Daily flows of locally produced cereals into Al Fashir market were estimated by cereal traders to have declined by over 80 percent (ibid.). One female trader interviewed in Al Fashir in November 2007 described how she had barely 200 sacks of locally produced millet compared with 2,000 sacks of food aid sorghum. In Nyala the amount of locally produced cereals entering the market has fallen by an estimated 50-60 percent according to traders interviewed. Villages in West Darfur that used to supply Al Geneina now provide an estimated ten percent of locally produced cereals according to grain traders with the remainder coming from Chad.

The 2007/ 08 harvest has been poor. Not only has the area cultivated contracted drastically and the number of producers fallen, but the rains were inadequate towards the end of the season and there have

been heavy infestations of locusts in North Darfur and *Quelea quelea* a pest species of weaverbird bird¹⁸ in South Darfur. There are no agricultural services to address these problems.¹⁹

The way that cereal traders buy locally produced grain has also changed. Few, if any, travel outside urban markets, whereas most used to visit the main areas of supply. Instead they now depend upon traders and farmers bringing grain into the market, usually in small quantities. Around Al Fashir only small vehicles such as Landrovers can move freely without fear of being hijacked or looted. These ply between some traditional sources of supply such as Tawila and Dar Es Salaam, and Al Fashir market. According to one cereal trader in Al Fashir, this has halved her profit margins. Before the conflict, in years of a poor or failed harvest in North Darfur, Al Fashir market was usually dependent on supplies from South Darfur (Buchanan-Smith, 1988). Such long distance transportation of grain is now highly unlikely.

TRADE IN FOOD AID KEEPS THE CEREAL MARKET ALIVE

The collapse in the trade of local grain has been replaced by trading substantial quantities of relief grain. Most grain traders quickly switched their business to relief grain when WFP's food distributions began as local production dried up. However, the findings from this scoping exercise indicate that the significance of relief grain in urban cereal markets may be even greater than previously thought (see Buchanan-Smith and Jaspars, 2006). Cereal traders in Nyala estimated that relief grain being traded in the market is three times the amount of locally produced cereals, and similar estimates were given for Al Fashir market. In Ummdafaso market in the centre of Al Fashir, traders estimated that on average they are each buying around 500–600 sacks of food aid sorghum per month. One of the reasons why it is easy to underestimate the significance of relief cereals is because much of it is being traded outside the official market. It is stored in small quantities in private houses to avoid drawing attention to the trade and to avoid taxes. In Al Geneina we were told that some food aid transactions happen at night, to avoid interference and control by government. It is likely that food aid represents a large proportion of traders' stocks, which may influence how they estimate the significance of the trade in food aid, but that the turnover in locally produced millet is higher than for food aid sorghum. This requires further investigation.

18 http://birds.suite101.com/blog.cfm/quelea_bird_african_bird_pest

19 A post-harvest assessment carried out in South Darfur by FAO, state and federal governments and other actors, released by the South Darfur Government in March 2008, confirms an unusually poor harvest in the state.

One of the main reasons why so much food aid is sold by IDPs and other food aid beneficiaries is because it is an income transfer as well as meeting consumption needs. In 2006 IDPs reported selling one-quarter to one-third of their relief rations to raise cash for other needs (Buchanan-Smith and Jaspars, 2006).²⁰ Work by WFP indicates that indebtedness—usually associated with food purchase—is by far the most important reason why households sell food aid. IDPs are both sellers and purchasers of food aid, following the typical pattern of selling when prices are low at the time of distribution to raise income, and having to buy grain back again when their rations run out just before the next distribution when prices have risen.

All of the cereal traders interviewed as part of this scoping exercise were very positive about the impact of food aid in keeping the cereal market alive and keeping them in business, echoing feedback from cereal traders during the 2006 WFP livelihoods study. But despite this, a number of cereal traders have gone out of business. In Umm Dafaso market in Al Fashir, around 12 out of a total of 25–30 traders either have gone bankrupt or shifted to trading in other commodities (although the number of petty traders trading in grain in Al Fashir market has almost certainly increased). As mentioned in section 3.2 above, around 30 percent of pre-conflict small-scale traders in Al Geneina's cereal market went out of business and became IDPs or refugees. In contrast, the number of cereal traders in Nyala is said to have increased substantially, not least because many small-scale traders moved from rural areas into the town and have remained engaged in the market.

Beneficial multiplier effects of the trade in food aid is evident in urban markets: providing employment for porters who load and unload the food aid, to owners and operators of donkey and horse carts who transport it, and to flour millers. Vitally important, the provision of food aid has stabilized cereal prices at a time when incomes are severely stretched. One cereal trader noted that “without food aid there would be starvation” while another observed that “if it hadn't been for food aid, more traders would have gone bankrupt”.

DEMAND FOR CEREALS—HUMAN AND LIVESTOCK

One of the most important sources of demand for food aid cereals is the urban population for their own consumption, especially those who are not recipients of food aid. These include the urban poor and salaried households such as civil servants who are all struggling to cope

20 The relative contribution of food aid as a source of livelihood was frequently reported by interviewees to range from 40–80 percent (based on proportional piling exercises).

with the increased cost of living. Many people have switched their consumption from millet, their preferred cereal, to food aid sorghum because of the price. In Al Geneina in November 2007, food aid sorghum cost SDG 40 for 100kg (two 50kg sacks) while a 90 kg sack of millet cost SDG 90.

Another important source of demand in urban markets is food aid sorghum for livestock, especially dairy cattle and poultry. In both Nyala and Al Fashir towns there are now thriving dairy industries serving the swollen urban population. Traders in Nyala reckoned that the number of cattle in the town may have tripled since the conflict began. In Al Fashir the dairy industry is a new phenomenon: it is estimated there may be around 2,000 cattle producing around 12,000 litres per day (compared with average production of around 4,000 litres per day pre-conflict). Because of the insecurity in surrounding areas, dairy production is now practised on an intensive zero-grazing basis.

In Nyala demand for millet is high to feed the large number of working horses and donkeys. The number of horses in Nyala has risen by at least 20 percent since the conflict began and may now be in the region of 3,000. The number of donkeys is even higher, probably around 4,000. Where horses and donkeys are being used as a major source of income generation (horses pulling carts, for example, and donkeys used as mobile shops to sell fruit and vegetables, and for selling water), their owners will pay the higher cost of millet to give the animals greater strength. (In contrast, animals are more likely to be fed sorghum food aid if they are just being used by the household, for example to carry water).

FOOD AID FLOWS OUT OF DARFUR

The 2006 livelihoods study drew attention to outflows of food aid cereals being traded between Darfur and central Sudan, a highly unusual phenomenon, because of the price differential that existed between wheat (especially) but also sorghum in Darfur's main urban markets and markets in central Sudan (Buchanan-Smith and Jaspars, 2006). For this scoping exercise a grain trader interviewed in Al Fashir told us how she had been regularly buying around 1,000 sacks of food aid wheat in Abu Shouk camp each month during 2006, and selling it onto traders who took it to Khartoum (as well as food aid oil and lentils).

There is evidence that this is still continuing, but on a smaller scale now that the food aid has switched from wheat to sorghum. Traders

report that there are now five or six trucks carrying food aid sorghum to central Sudan from Al Fashir once a month. In April 2006 there were said to be between seven and ten every week. Although we were told that this trade had officially been stopped by the government since the month of Ramadan in 2007, it is still continuing unofficially. Much of the food aid is smuggled to avoid taxes. One of the reasons why this trade continues, despite quite small price differentials between Darfur and Khartoum, is because of relatively low transport costs as food aid trucks return to Khartoum empty. From Nyala some food aid sorghum is being exported to South Sudan, to Raja and Wau. There is also evidence of military involvement in cereal trading.

PRICES AND MARKET INTEGRATION

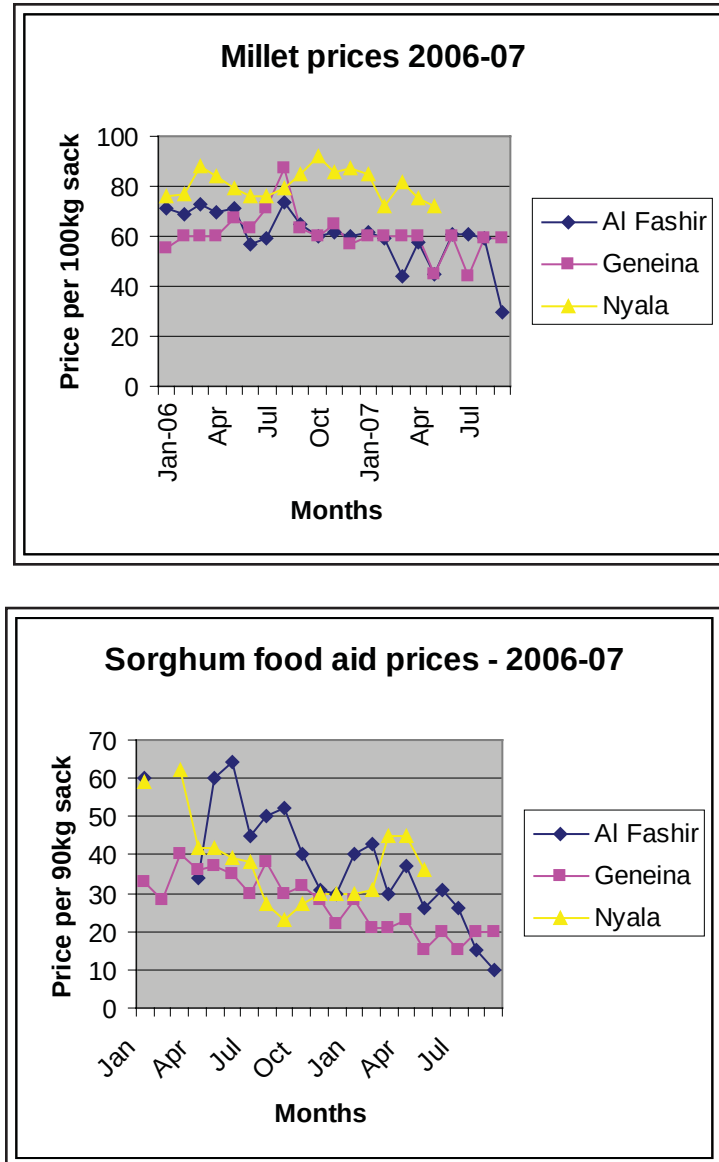
As the 2006 study noted, the cereal market is now very much influenced by the timing and levels of food aid distributions. Thus, prices will typically fluctuate each month. In Al Fashir (during the period of field work) they were reported to be around SDG 15-18/ 50 kg sack of sorghum just after distribution, rising by around 30 percent during the month, to SDG 20-22/ sack.

Before the conflict, the cereal market in Darfur was quite strongly integrated between major markets (Buchanan-Smith, 1988). This has changed during the conflict years, mainly because of insecurity and high transport costs, but also because of lack of purchasing power in rural areas. Market integration is now strong on a much more localized basis, but trade in cereals over larger distances is unusual.

The difference in millet price between Al Fashir and Nyala was striking in November 2007—SDG 110/ sack in Nyala compared with SDG 35-40/ sack in Al Fashir. Figure 1 demonstrates that this has been a common pattern over the last couple of years. However, even before the conflict, grain prices in Nyala were often higher than in Al Fashir, as a result of high demand and purchasing power (Buchanan-Smith, 1988).²¹

21 During the famine of the mid 1980s, grain prices were higher in Nyala than Al Fashir (de Waal, 1989)

FIGURE I MILLET AND SORGHUM FOOD AID PRICES: AL FASHIR, AL
GENEINA, AND NYALA MARKETS



Source: WFP/VAM

V. THE LIVESTOCK MARKET

LIVESTOCK TRADE—AN OVERVIEW

Over one-fifth of Sudan's livestock resources are reared in Darfur. West and South Darfur are ranked as Sudan's second and third most important livestock producing areas after Blue Nile.²² North Darfur accounts for an estimated 12 percent of national camel production and South Darfur is the leading cattle production area in Sudan (World Bank, 2007). Since the 1970s sheep have become an increasingly important component of Darfur's livestock trade with the rest of Sudan and beyond (Morton, 1985). This is partly export-driven—some types of sheep from Darfur are particularly sought after in Saudi markets—and partly a consequence of livestock owners switching their holdings to sheep in response to the drought of the mid-1980s and subsequently. The way that Darfur's livestock trade used to operate pre-conflict has been well-documented (e.g. see Young et al., 2005). Key features include:

- a highly broker-dominated system engaging a number of agents and small-scale traders that are part of the market chain between producer and the main big traders
- livestock transported on the hoof over large distances, especially from Darfur to Omdurman, but also from Darfur direct to Egypt (camels) and to Libya (camels and sheep, sometimes by truck).

The livestock component of Darfur's economy was immediately impacted by the outbreak of conflict in 2003. This was a period of heavy and uncontrolled looting. Those who became displaced with their livestock sold them quickly, either before they died and/ or to avoid looting and attacks. As a result, livestock prices in the main urban markets fell dramatically. Livestock traders were at high risk of losing their capital through looting, especially when they moved animals on the hoof between markets. Some traders incurred very large losses early on in the conflict.²³ Whilst some traders went bankrupt, others decided to stop trading because of the insecurity.

22 Based on estimates from the Ministry of Animal Resources and Fisheries, quoted in World Bank, 2007.

23 Young et al. (2005) document the case of 3,500 camels seized in September 2003 as they were being transported from Darfur to Libya. Traders operating on a smaller scale recounted losses of 10–40 cattle at a time as they moved between markets within

LIVESTOCK TRADE ROUTES AND RISING TRANSPORT COSTS

Those who continued trading livestock were quick to adapt their trade routes in an attempt to find the most secure routes, as indicated in Table 5.1, between Al Geneina and Omdurman. Traders (mainly Arab groups) have had to use a long circuitous route through West and South Darfur, passing through as much Arab-controlled territory as possible to reduce the risk of attack, more than doubling the time it took pre-conflict to reach Omdurman. Indeed, tracing how livestock trading routes have changed during the conflict provides insight into changing conflict dynamics and how trade can influence those dynamics if it is of mutual interest to warring groups to seek agreement on safe passage. This requires more in-depth study and would be insightful to monitor on an ongoing basis.

TABLE 5.1 THE LIVESTOCK TRADE ROUTE BETWEEN AL GENEINA AND OMDURMAN

Destination	Pre-conflict	2003 to 2007
Al Geneina to Omdurman	Al Geneina -> Kebkabiya -> Al Fashir -> Umm Keddada -> Um Gozein -> Foja (Kordofan) -> Omdurman Time: 40-45 days in dry season	Al Geneina -> Zalingei -> Idd El Fursan -> Buram -> Ed Daïen -> En Nahud -> Forja -> Omdurman Time: 4 to 5 months

Another way in which traders reduce risk is by reducing the number of animals moving as one herd between markets. Pre-conflict one trader sent five herds of 50-60 cattle together, on the hoof, between Al Geneina and Omdurman twice a year: once in the dry season and once in the rainy season (taking longer in the rainy season, around 50-55 days as the livestock were allowed to graze en route). Since the conflict began, the same trader moves only one herd at a time, and only once per year.

Both of these strategies—using long circuitous trading routes, and transporting fewer animals at a time—substantially increase the transport costs per head. This is exacerbated by protection payments and formal and informal taxes. Al Geneina livestock traders reported that

Darfur (Buchanan-Smith and Jaspars, 2006).

BOX 2 COSTS OF TRANSPORTING CATTLE FROM NYALA
 TO AL FASHIR—2007

Transporting livestock on the hoof:

Nyala ->Umkardos -> Labado -> Muhajaria ->Abudungal -> Dar Es
 Salaam -> Al Fashir

Time: 13 days

Number of cattle herded: 45-55 per journey

2 shepherds	SDG 1,000
Lead shepherd per herd	SDG 400
Levies & taxes	SDG 700
Food & watering etc en route	SDG 450
Check point (govt, soldiers)	SDG 200
Check point (SLA)	SDG 200

Total per herd ***SDG 2,950***

Cost per head ***SDG 59***

Transporting livestock by truck (30 tons)

Nyala -> Dumma -> Manawashi -> Shangil Tobai ->Tabit -> Abu
 Zeraiga -> Al Fashir

Time: 2 days

Number of cattle transported: 23 per journey

Average rent of truck	SDG 1350
Government levies (for 23 head)	SDG 322
Traffic police fees, Nyala	SDG 50
Nyala town checkpoint	SDG 100
Dumma checkpoint (military)	SDG 50
Underaisai checkpoint (military)	SDG 50
Abu Hamra checkpoint (SLA)	SDG 75
Shengil Tobai checkpoint (SLA)	SDG 50
Abu Zureiga checkpoint (SLA)	SDG 50

Total per journey ***SDG 2,097***

Cost per head ***SDG 91***

transport costs per head to Omdurman had increased fivefold when using the circuitous route through South Darfur compared with pre-conflict costs. This is consistent with data collected from livestock traders in Nyala in April 2006. The latter reported that the cost of moving cattle on the hoof from Nyala to Omdurman had increased four and a half times since the conflict began: animals are now transported in smaller numbers, more animal drivers are required, and soldiers are hired for protection.

In the past, the livestock trade within Darfur was almost as important as its export trade.²⁴ For example, there has been a thriving trade in cattle between Nyala and Al Fashir, involving around 80 *gallaga*²⁵, each of whom made 40 to 45 trips per year from North to South Darfur. Livestock traders in Al Fashir estimate that around 60 percent of these *gallaga* have left the livestock market, either because of bankruptcy if the animals were stolen and they lost their capital, or because trading is now too high-risk. Box 2 shows the current costs of transporting cattle between Nyala and Al Fashir, on the hoof and by road. Over a third of the costs of transporting cattle by truck or on the hoof between Nyala and Al Fashir are levies and payments to pass through checkpoints.

Some livestock traders have shown remarkable creativity in adapting to the highly insecure environment in Darfur. In 2005, for example, when it became almost impossible to transport cattle from Nyala to Al Fashir, even by truck, meat was carried by bus from Fashir to Nyala. In Al Geneina a livestock trader was air-freighting sheep to Khartoum between 2002 and 2006, flying commodities such as sugar and eggs into Al Geneina and flying sheep out, chartering as many as 12 flights per month (ie transporting around 1,800 sheep per month). The price of sheep in West Darfur has now increased to the point where this is no longer profitable.

Sheep trading seems to have been particularly badly affected by the conflict. Exporting sheep from Al Geneina to Omdurman has now stopped completely as the animals could not endure the longer route through South Darfur and air-freighting is no longer competitive. Traders in Nyala estimate that sheep trading has more than halved, especially transporting them to Omdurman as herds are more vulnerable to banditry and to being stolen than cattle.

The combined effect of all of this has been a sharp decline in livestock marketing and profitability. Trade between some areas has stopped completely and elsewhere it is a trickle compared with pre-conflict

24 Morton (1985) describes how, in 1980/81 more than 31,000 cattle were sold in Nyala market alone, while Sudan exported a total of around 18,000 cattle in 1981.

25 A *gallagi* (singular) is a merchant in Darfur who trades livestock between Darfur's markets and also sends one or two herds, of cattle or sheep, to Omdurman per year.

levels. The number of livestock exported to central Sudan has fallen dramatically, and there is now more localized trading over short distances to supply Darfur's swollen urban areas with meat. (The price of meat in Al Geneina is now similar to the price of meat in Khartoum).

TRADER PROFILES

The large livestock merchants from elsewhere in Sudan—the *tajir mawashi*—pulled out of Darfur early in the conflict. Since then there appears to have been a large outflow of local Darfur livestock traders, especially smaller traders (*gallaga*), agents (*wakil*) and middlemen (*se-baba*).²⁶ Fairly consistently, traders estimated that around 50 percent of local Darfur traders had left the market.

There has also been an ethnic concentration of traders since the conflict began. The long-distance export trade has mostly been dominated by certain groups such as the Zayadia in North Darfur trading with Egypt and Libya, and the Zaghawa. Now other ethnic groups that used to work as agents or middlemen, such as the Fur and Masalit, have left the market in droves, either because they became displaced or because it is no longer profitable for them to operate. The ethnic concentration of livestock traders thus appears to have increased. For example, Zaghawa dominate livestock trading in the south-eastern part of North Darfur and in the northern part of South Darfur where they have preferential access through SLA-controlled territory. This ethnic concentration of traders deserves further investigation.

NYALA ABATTOIR

The Nyala abattoir stopped functioning in June 2004 when it could no longer honor a contract to supply meat on a weekly basis to Libya (Young et al., 2005). There had been problems of quality control. In 2006 Shiryani Ashamal Company from North Sudan bought shares in Nyala's abattoir, were given a loan by the federal government, and rehabilitated the abattoir, especially the cold chain system and its power supply. Since then it has been exporting once again, processing meat, and was supplying the African Union (AU) peacekeeping forces. This latter market has become highly significant. Since 2006 the abattoir was supplying the southern sector of the AU with 60 tonnes of meat per month, compared with exports to Khartoum of just 25 tonnes per month. This points to the potential marketing opportunity as forces from the United Nations and African Union Mission in Darfur (UN-

²⁶ The *wakil* are agents of larger traders and buy for them in primary markets. *Sebaba* are the middlemen who buy from the livestock owners, often selling onto the *wakil*.

AMID) are deployed. However, traders supplying the abattoir are paid on a monthly basis, reflecting the monthly pattern of AU payments. Only large traders can sustain such infrequent payments. It is worth exploring whether more frequent payments by UNAMID would enable the abattoir to engage with a larger number of livestock traders if they, too, could be paid on a more regular basis.

VI. DARFUR'S MAIN CASH CROPS

6.1 TOMBAK

Al Fashir has long been the main market for *tombak* and this has not changed since the conflict began. Most of Darfur's *tombak* is produced in North Darfur although there is some production in West and South Darfur also. There are two categories of *tombak* traders: the majority are small traders trading between areas of production and Al Fashir. The second category is a smaller number of large traders who trade between Al Fashir and Khartoum.

Tombak production has been badly affected by the conflict, and has fallen by an estimated 40 percent. Only about ten percent of *tombak* farmers are still living on or near their farms and all others are displaced. Nevertheless, some of the displaced are still returning to their farms, for example from IDP camps around Al Fashir or around Shengil To-bai. In many ways *tombak* is a conflict-resistant crop (Buchanan-Smith and Jaspars, 2006). It does not require daily cultivation but instead can be cultivated in chunks of time. Nor is it palatable to livestock so is not vulnerable to being grazed. But it is labor intensive and this is a constraint in the current conditions. Adults may return to farm with few belongings so they can move fast in the event of an attack or threat of insecurity, but their children will remain in the relative safety of the IDP camp. When the entire household is farming, one *mukhamas* of *tombak* can be cultivated. If only one or two adults are involved, they can barely cultivate 0.5 *mukhamas*. For this reason, credit provided by traders to farmers was an essential resource pre-conflict, enabling them to hire labor. But as the market system has been badly disrupted by the conflict, and as traders have gone out of business, these credit arrangements have broken down.

The number of small *tombak* traders operating in and around Al Fashir is estimated to have fallen by about 50 percent. Many have gone bankrupt, especially if their *tombak* stores were attacked. Huge losses were incurred by *tombak* traders when Tawila town was attacked and stores burnt early in the conflict. Others have left the business, no longer able to carry the high risks of trading in the current conflict environment. Some traders have been killed. Around 25 percent of the large *tombak* traders in Al Fashir have left the business. At least four large *tombak* traders left Darfur for eastern Sudan when the conflict erupted.

Although the quantity of *tombak* traded during the conflict years has fallen, this has barely impacted the price. In 2006 there were reports that

the price had actually fallen compared with pre-conflict levels. Now it seems to have stabilized around pre-conflict levels of SDG100/200 per *guntar*, depending on quality. As noted in 2006 (*ibid.*) this is partly because all the *tombak* stored in towns outside Al Fashir has been moved to the greater security of the Al Fashir stores, thus maintaining supply. Also, the departure of some of the large traders means that fewer are buying up *tombak* to export to Khartoum and beyond. Meanwhile, demand for *tombak* in Al Fashir town is said to be buoyant, because of the inflated population, and the large military presence.

The *tombak* traders who are still in business are struggling. Transport costs have increased by up to four times (see Table 3.4 above) and taxes in Al Fashir have almost doubled (see Table 3.2 above). The fact that the price of *tombak* has not risen is a clear indication of very tight profit margins at a time when turnover has fallen substantially. In the words of one trader: “we have been bankrupted”. The only part of their trade that has been minimally affected by the conflict is the cost of transport to Khartoum. This has remained at SDG 10 per *guntar* because they are able to use the empty food aid trucks returning to central Sudan. But there are additional taxes and protection payments to be made. As one trader commented, it is very difficult to avoid the high taxes in Al Fashir because the *tombak* destined for Khartoum has to be transported with military escorts to the border of Kordofan for safety. Avoiding the town in order to avoid taxes is simply too risky.

6.2 GROUNDNUTS

Groundnut production is most significant in South Darfur, but they are also grown in West and North Darfur. The opening of the railway to Nyala in 1960 provided an important boost to groundnut production and processing. This soon became the second most important crop after millet and groundnut processing was the second most important industry in Darfur after flour milling (Morton, 1985). Much of the groundnut production was exported, valued for its high oil content, and groundnut cake for cattle fodder was transported by rail to central Sudan and beyond. Groundnut production in Darfur fluctuated according to market conditions, flourishing in the 1980s with government price intervention but falling when this was withdrawn in the 1990s. Nyala, Ed Daien, and Buram are Darfur’s most important markets for groundnuts.

When the conflict started this valuable trade more or less collapsed. Production plummeted and prices soared in urban markets like Nyala. Meanwhile, in the markets closest to areas of production—Ed Daien

and Buram—prices fell and there was very little market activity (see Buchanan-Smith and Jaspars, 2006). The large groundnut traders have been hit hard. Most of them had contracts with large companies in Khartoum which they were no longer able to fulfil when the conflict broke out. As a trader in Nyala, interviewed for this study, recounted:

I had a contract in 2002 with a company to provide 3,000 tonnes of groundnuts at SDG 600/ tonne. When the conflict began, the price rose to SDG 900/ tonne, so I was losing SDG 300 per tonne. In one week I lost SDG 300,000.

In order to pay his debts, this trader plus a number of others had to decapitalize, selling vehicles, and/ or property. Those who were unable to pay off their debts went bankrupt. Whereas Nyala used to have around 50 big groundnut traders, those still in business estimate that the number has dropped to ten or less. Table 6.1 gives some indication of how the market has shrunk.

TABLE 6.1 THE DECLINE IN THE GROUNDNUT TRADE IN NYALA:
ONE TRADER'S EXPERIENCE

<i>Indicator</i>	<i>Pre-conflict</i>	<i>2007</i>
Main sources of supply	Gareida, Katila, Wad El Hajjam, Jur El Dina, Mahajaria, Labado, Yassin, Kass, Abu Ad Jura	Katila Abu Ad Jura (Other areas have become too insecure for cultivation)
Quantity of groundnuts purchased	3-4,000 <i>guntar</i> per day, over a six-month period from Nov to April	300-400 <i>guntar</i> per day over four-month period
Price of groundnuts	SDG 13-15/ <i>guntar</i>	SDG 45-60/ <i>guntar</i> (SDG 20-25/ <i>guntar</i> at the farm gate)

The story of squeezed profit margins is similar to the experience of *tombak* traders described above. Transport costs and taxes within Darfur have soared. In Nyala taxes paid to the government have increased more than four times—see Table 3.2 above. In North Darfur most traders are taxed both by the government and the SLA. The only trading route where transport costs have not escalated is the route from Nyala to Khartoum, mainly because of the opportunity to use empty

food aid trucks. However, the export trade has reduced to a trickle. Darfur's groundnut production can barely meet consumption needs within the three states, especially for groundnut oil. In the words of one trader "people would be in trouble" if there were not large quantities of food aid oil.

The decline in groundnut oil processing is striking. In Nyala there used to be around 22 processing plants, but now only two are operating. The story is similar in Al Geneina where there used to be a very large processing plant. It has closed down and one trader described how he now runs a small press inside his home, to avoid the heavy taxes that have been imposed on groundnut oil. Most is sold in Al Geneina market to local residents.

Groundnuts were one of Darfur's most important exports, with an untapped potential to substantially improve processing and add value. The conflict has decimated the marketing infrastructure for this important trade, with serious implications for its eventual recovery. Stores that used to be used for groundnuts in Nyala have mostly now been rented out to international agencies for storing food aid.

6.3 GUM ARABIC²⁷

Sudan is the world's largest producer of gum arabic, of exceptionally high quality. This has long been one of Sudan's most important agricultural exports.²⁸ Sudan used to dominate the international market, accounting for 80 percent of supplies until the early 1990s. However, this market share has now declined to below 50 percent as new producing countries—especially Chad and Nigeria—have grown in significance. The reason for Sudan's declining production and exports (at an average rate of 2.2 percent p.a. for the past forty years)—despite growing demand for gum arabic from the confectionery industry and for health and dietetic products—is attributed to the marketing arrangements for gum arabic within Sudan, as well as a lack of investment in research and other activities to boost production (Couteaudier, 2007).²⁹

27 Data and analysis of the trade and policy context for gum arabic are drawn from Couteaudier, 2007.

28 Gum arabic accounted for as much as 54 percent of the country's export earnings in 1903. Since then its relative importance has fallen, although it still accounted for 7.5 percent of exports in the early 1980s (Morton, 1985).

29 The USA is the main importer of gum arabic, accounting for approximately 30 percent of the total trade. Europe accounts for around ten percent. Emerging markets include India, South Korea, and China.

In 1969 the Gum Arabic Company (GAC) was granted an exclusive concession to export raw gum arabic from Sudan. The main objectives of this policy were to exercise market power in international markets, to guarantee production, protect producers with a floor price, and preserve the environment. Forty years later the impact has been very different. Producer prices are extremely low: between 1993 and 2005 producers only received 21 percent of the export price. In reality, the floor price made little difference as producers rarely access the auction markets directly. As a result, farmers have gradually shifted from acacia trees to crop cultivation with negative environmental consequences.³⁰ Although the Government of Sudan granted export licenses to a small number of gum processors between 2003 and 2004, which pushed up producer prices, policy decisions have tended to be ambiguous and contradictory.³¹ The government is committed to abolishing the export monopoly of the GAC. This is widely judged as the most effective way to boost gum arabic production in Sudan and is endorsed by the Joint Assessment Mission (JAM) framework³². However, this commitment has not been followed through.

Darfur and Kordofan are the main areas of production. Before the conflict Darfur accounted for around 20 percent of Sudan's production of gum arabic. El Obeid is the main auction market. Until 2002 the GAC had a network of domestic agents buying from local producers.

The conflict has brought this trade to a halt in Darfur. The GAC suspended operations in North Darfur and closed its Al Fashir branch. In South Darfur the GAC is still functioning but the trade has more or less collapsed.³³ The experience of one trader in Nyala is summarized in Table 6.2. The price of gum arabic in Nyala has crashed to a quarter of its pre-conflict level.³⁴ As with other cash crops, gum arabic is subject to extremely high taxes and transport costs within Darfur. In 2007 the tax imposed in Nyala rose to 50 percent of the price which had fallen dramatically. The implications of this collapse in the market plus

30 Reduced acacia cover exposes the soil to wind and water erosion. The nitrogen-fixing properties of acacia, which improve soil fertility, are lost.

31 For example, a presidential decree to withdraw the concession from GAC was passed in 2003, but Parliament refused to endorse it.

32 The JAM followed the signing of the CPA. Carried out by the World Bank and the UN, it had the full participation and endorsement of the Government of Sudan and the Sudan People's Liberation Movement. Covering eight thematic areas, it set the framework for post-conflict recovery and development.

33 There are reports of gum arabic being smuggled by donkey from areas such as Rahed el Birdi and Idd El Fursan to the Central African Republic and Chad, but probably on quite a small scale. This deserves further investigation.

34 The reasons for this were not entirely clear to the authors, apart from the hostile trading environment as a result of the conflict. Further investigation is needed.

the displacement of thousands of farmers is that Darfur's gum arabic resource is no longer being managed. In areas where farming continues the trees are being cleared for crop production; elsewhere they are being cut for charcoal and to fuel the brick kilns (especially *acacia seyal* which burns for longer, but not the high quality *acacia milifora*). This has long-term consequences as it takes five to seven years before a tree can produce gum arabic. As noted above, cutting down acacia trees also has negative environmental consequences.

TABLE 6.2 THE DECLINE IN THE GUM ARABIC TRADE IN SOUTH DARFUR:
ONE TRADER'S EXPERIENCE

<i>Indicator</i>	<i>Pre-conflict</i>	<i>2007</i>
Main sources of supply	<i>N Darfur:</i> Sani Karow El Lait area Katal <i>South Darfur</i> Shearíá & Hassan Jadiid Idd el Fursan Boram, Kass	Production has now more or less collapsed in all of these areas
Quantity purchased	1,000 <i>guntar</i> / day over 7 month period	50–100 <i>guntar</i> / day over seven-month period
Price per <i>guntar</i>	SDG 22	SDG 40 in 2005 SDG 50 in 2007

6.4 ORANGES

The story of how the orange trade in Darfur has adapted to, and survived the conflict demonstrates the remarkable resilience of farmers and traders in very difficult conditions. Oranges are grown in Jebel Marra, famous for the quality of its produce. The main markets are the urban centers of Darfur—Al Fashir, Al Geneina, Nyala and other secondary markets such as Boram and Ed Daïen. Oranges are also transported and sold in Omdurman. An orange trader interviewed for this study in Al Fashir described how pre-conflict 50 percent of his trade was to Omdurman and 50 percent to Al Fashir.

Most of Jebel Marra has been SLA-controlled since the beginning of the conflict. It has also been the scene of intense fighting. Production was badly affected in 2004/05 when farmers left their homes to gather in more secure villages and market centers. When the SLA took control of much of the area in 2005 many farmers returned to their farms and production has to some extent recovered, but less so in the south and south-east of Jebel Marra where insecurity and displacement has been highest and where many of the fruit trees have apparently been chopped down by militias. In 2006, traders in Al Fashir estimated that production of fruit and vegetables in Jebel Marra had more or less halved (Buchanan-Smith and Jaspars, 2006).

Early in the conflict some markets in the Jebel Marra area closed completely, for example Rokiro and Gollo. In 2004–05 the road between Jebel Marra and Al Fashir closed so traders had to switch their business to other commodities. Fruit was imported into Al Fashir from central Sudan (in turn imported from countries such as South Africa and Lebanon). But when the road re-opened the orange trade with Jebel Marra recovered partly because the taste of local oranges is preferred to imported oranges and are presumably cheaper. Shortly after the signing of the Darfur Peace Agreement (DPA) there was a major clash near Dirbat, one of the primary markets for oranges, between the SLA and government troops and government-backed militias. The route to Dirbat was deliberately blocked by local people to try and stop further incursions. However, another market opened—Toowasalal—and farmers adapted by bringing their produce by donkey to this new market, although it took 4–5 hours. (Shortly after Ramadan in 2007 Dirbat market re-opened).

Orange traders have had to adapt to trading across a number of 'front-lines', moving from rebel-controlled areas of production into government-controlled urban markets. One of the consequences is very high transport and transaction costs, fuelled by double taxation and protection payments. Insecurity is another consequence.³⁵ The orange trade between Jebel Marra and Al Geneina is an interesting example of the kinds of protection arrangements that are emerging in the Darfur conflict between warring groups. Trucks (run by Fur traders) are escorted from Jebel Marra by the 'Border Military Force' (most likely drawn from Arab groups), and this appears to be allowed by the SLA so that trade can continue. The trucks travel in convoy, each protected by a couple of armed militiamen, incurring additional

35 An orange trader interviewed in Al Fashir recounted how his truck was hijacked in 2004/05 and he lost the load although the truck was returned to him.

costs for the trader (see table 3.3 above) but usually guaranteeing a safe passage. It appears that this system has been in place for some time, possibly since 2004.

One of the hazards of trading since the conflict began is the time it now takes the trucks to travel from Jebel Marra to their destination. As described by traders in Nyala this means that the produce may have started to rot by the time it reaches the market (although it is also interesting to note that some of the poorest quality oranges are sold in the IDP camps where purchasing power is weakest so the low prices are particularly attractive). Another problem of escorted convoys as the mode of transportation is that large quantities of produce arrive in the market on the same day, forcing the price down. This suggests that there are potentially important benefits, to both farmers and traders, of finding ways to process the fruit (e.g. canning it) especially if this means that the partially rotten fruit could be used.

Once again, traders' margins are being squeezed. Not only do they have to bear these high transport and transaction costs, but the government does not allow them to bring any goods into Jebel Marra so they are forced, as noted above, to make the journey one way with empty trucks.³⁶ Whereas orange traders used to supply a number of secondary markets in each of the Darfur states, most now focus only on one market (Al Fashir, Al Geneina, or Nyala). This has inevitably forced some traders out of business. Those still trading oranges never travel to the areas of production as they used to before the conflict. To compensate, and to make contact with farmers and traders in Jebel Marra, mobile phones have become essential.

The orange trade in Darfur has always been dominated by Fur traders buying from Fur farmers. This has become more pronounced in the last few years. Traders of most other ethnic origins would no longer be welcome in the Jebel Marra area. Merchants of other ethnicities used to be involved in trading between Nyala and central Sudan but almost all have left since the conflict began.

In summary, the orange trade in Darfur has continued, but on a reduced scale and has become much more unreliable in terms of quality and frequency. The problem for farmers is market access. The problems for traders are the very high transaction costs and risks associated with trading in this perishable commodity. The export trade to central Sudan has more or less stopped.

36 There is evidence, however, that some traders may find ways around this, for example by deviating from the destination they indicate on the manifest.

VII. TIMBER TRADING

Data gathered during this scoping study on the timber trade in Darfur's three main urban markets is startling. Darfur has been self-sufficient in building timber in the past, and used to supply building poles to central Sudan (eucalyptus and *soru*) and some hardwood (including mahogany) for furniture-making in Khartoum. Farmers managed the trees on their land and there were also community based forests, for example of eucalyptus. The timber trade was subject to some regulation through the Forestry National Corporation. This semi-managed production and trade appears to have broken down in many places since the conflict began.

The amount of timber being traded through Darfur's main urban markets has increased substantially. Table 7.1 shows how two large timber traders have increased their sales of *gimbeel* (*cordia African*) by around 900 percent. Sales of bamboo have soared in both Al Geneina and Nyala; timber traders in Nyala estimate they now sell at least five times more bamboo than they did pre-conflict.³⁷ Pre-conflict bamboo was hardly ever sold in Al Fashir but is now traded in large quantities. This is almost entirely due to the construction boom in Darfur's state capitals fuelled by the influx of international agencies, the building of shelter, fencing and latrines in IDP camps and the fact that many urban residents see construction as the most secure form of investment in a conflict environment. Al Geneina traders interviewed are each selling an estimated 4,000 to 5,000 building poles p.a., mainly to international agencies for IDP shelters and latrines. Nyala timber traders also commented on the vastly increased demand for bamboo and eucalyptus from international agencies, again for building. Demand for timber from international organizations has persisted in the last few years as they continue repairing and constructing latrines and more shelters. Timber traders in Al Fashir estimate that the annual demand for firewood for brick kilns has increased five- to six-fold since the conflict began in 2003.

The number of timber traders has greatly expanded. The longer-established timber traders in Al Geneina estimate that there are now around 200 traders dealing in timber in the town, but there are many more small traders operating in the IDP camps. A timber trader in Al

³⁷ The *kurnok* (a *rakuba* – hut – with a sloping roof, made of latticed bamboo walls covered with mats) has started to be constructed in Darfur in the last couple of years. Costing around SDG 150-200 each, the structure is highly mobile, can be built in the market and then transported to where it is needed, thus suiting the needs of IDPs and others.

Fashir estimates that the number of traders has increased from around 70–80 just before the conflict to 200–250 today. Increased trade does not mean that all traders have experienced the big increase in sales reported by the large-scale traders in Al Geneina. In an environment in which it is difficult to find a livelihood, the timber trade has become a competitive business.

The staggering growth in the number of sawmills is another indicator of rapidly growing demand. In Al Geneina the number of sawmills has at least doubled. In the Kass area the JAM team was told that the number had increased from 4 to 23.³⁸

Data collected during this scoping study suggest that the most exploitative timber harvesting is happening in West Darfur, reflected in the big increase in the amount of *gimbeel*, a hardwood, that is being traded. (See Table 7.1 below). Timber merchants report that those bringing timber to the market in Al Geneina (especially *gimbeel* and palm) are often those that have access to rural areas but who are not the original farmers. The wood is brought to the market by lorries and small vehicles. In contrast, before the conflict farmers would manage the *gimbeel* grown on their farms, for example felling one tree every few years. (It takes six/eight years for *gimbeel* to reach maturity). As the Forestry National Corporation no longer has access to many rural areas there is no way of controlling this worrying increase in the felling of trees. There appears to be a significant trade in timber from Al Geneina market to Nyala and eastern Sudan, for building poles and also hardwood for furniture. This requires further investigation.

In South Darfur as a result of breakdown of state management of forest resources traders report that poor quality eucalyptus is being brought to the market which cannot be exported to Khartoum as before. There are also reports of the military and militias felling trees for profit in South Darfur. This, too, deserves further investigation.

Table 7.1 shows how the price of timber in Al Geneina market has risen during the conflict years. The picture in Nyala market is similar: prices have mostly doubled.

38 As reported in TearFund, 2007

TABLE 7.1 THE BOOMING TRADE IN TIMBER IN AL GENEINA MARKET:
THE EXPERIENCE OF TWO TRADERS

<i>Item</i>	<i>Pre-conflict</i>	<i>2007</i>
Source of timber	<i>Gimbeel</i> : Fora Boranga, Wadi Saleh, Umm Dukhn	<i>Gimbeel</i> : Fora Boranga, Wadi Saleh, Mornei, Jebel Marra
Amount of <i>gimbeel</i> traded pa by one trader No of building poles sold pa by one trader	20-25 blocks (<i>kuttla</i>) 300-500 poles	200-300 blocks 4,000-5,000 poles
<i>Gimbeel</i> , price per block Bamboo—per bundle of 25 sticks	Bought for SDG 35-40, and sold for SDG 60-65 SDG 25-30/ bundle	Bought for SDG 100-150 and sold for SDG 180-200 SDG 40-60/ bundle

These findings are troubling. They imply that serious deforestation may be happening in some areas and that a war economy in timber may be developing, both issues that deserve further investigation. They also highlight the urgency of developing alternative building technologies, and the importance of involving timber traders in such efforts to reduce the incentive to trade in illegally-logged timber as many struggle to keep their businesses going.

VIII. THE CURRENT STATE OF MARKET MONITORING IN DARFUR

Before the current conflict in Darfur, Save the Children UK (SCUK) was running a well-established Darfur Food Information System (DFIS) in North Darfur and had begun to support the Agricultural Planning Unit (APU) in West Darfur to strengthen its food security monitoring. DFIS was orientated towards early warning of drought and its impact, using the household economy approach. Market monitoring was one component of the system. However, DFIS struggled to adapt when the conflict erupted in Darfur and violence and insecurity replaced drought as the main threats to food security (Buchanan-Smith, 2006). When SCUK suffered serious security incidents in 2004 with staff fatalities the organization closed down its Darfur program. Although part of the system was handed over to OXFAM GB, SCUK's withdrawal left a major gap in food security monitoring that no agency has really been able to fill.

Oxfam GB was one of only three international NGOs with a long-term presence in Darfur, pre-dating the conflict. (The others were SCUK and Practical Action). Having had a focus on food security and livelihoods in its development program, it seemed appropriate that Oxfam GB should step into the breach in early 2005 when SCUK left, taking over its database and especially its market monitoring network. Oxfam continued monitoring cereals, livestock, cash crops, grass, and daily wage rates in 11 markets in North Darfur and eight in South Darfur, producing a monthly bulletin. However, this project appears to have faded. Market monitoring in South Darfur stopped completely in 2007, and production of its bulletin is now on a quarterly basis. Oxfam staff questioned whether the market information and analysis they produced was being used, which in turn raises a question about the type of data being collected and the level of analysis.

WFP's Vulnerability Assessment and Mapping program (VAM) became involved in food security monitoring in Darfur in 2004/05 (although WFP had been collecting some market data in Darfur before the conflict). This included weekly data collection of prices for cereals, cash crops, livestock, firewood, and charcoal, and wage rates in the major urban and secondary markets. Most of the data was forwarded to VAM in Khartoum for analysis and was used most intensively once a year in the annual emergency Food Security and Nutrition Assessment (FSNA). The WFP offices in Darfur also used the cereal price data locally. Recognizing that the system was making limited use of the market data it was collecting, in late 2007 WFP started to explore

how it could scale up its food security monitoring in Darfur, and how it could become more decentralized and locally relevant by managing the system and carrying out the analysis within the three states. When fieldwork for this study was being carried out in November 2007, the planning for WFP's upgraded system was underway. Implementation of the system will depend upon funding.

The APU of each state government is also involved in market monitoring of grain and livestock prices, usually in the main towns where government officers have access. Oxfam GB's market monitoring system mostly depended upon a network of government officers supplying data from the market towns in which they were based, inheriting this approach from SCUK's market monitoring network.

Apart from these examples, most international (and national) agencies involved in market monitoring are doing so on a small scale in their area of operation to inform their own programming. This appears strongest in West Darfur. For example, Concern is collecting data on the price and availability of food items (plus some other items such as charcoal and firewood) to inform its nutritional interventions. One of the most advanced examples of market monitoring is being done by Catholic Relief Services (CRS) in West Darfur. A number of their livelihood programming interventions are specifically designed to support the market, for example providing seed through a seed voucher system. They have therefore been collecting market data on seeds, tools, and cereals. At the time of the fieldwork for this study, in November 2007, CRS was planning to develop value chain analysis to inform proposed work to support agro-enterprises. CHF is collecting market data on handicrafts in Al Fashir and Nyala to inform its handicrafts income generation project with IDPs. We also encountered one example of an NGO—Practical Action—supporting market data collection for market information purposes to serve local producers—the Mewashie Market Network in Al Fashir—rather than agency or government decision-makers.

The impression gained during this market scoping study is of a number of disparate market monitoring exercises. FAO, with responsibility for food security and livelihoods coordination within the international humanitarian system, has attempted to coordinate food security monitoring, including market monitoring, in each of the three Darfur states. It also produces a monthly food security bulletin. But according to FAO staff this has been a challenging task. Agencies do not appear to be sharing their food security information on a regular basis nor responding to attempts to systematize market data collection. FAO does not carry out its own market data collection, but instead is dependent on information from others, especially from the gov-

ernment.³⁹ In March 2006 international agencies came together in a meeting in Nyala to review food security monitoring across Darfur. Some useful sharing took place at this meeting but it does not seem to have made a substantial difference in improving the coordination or strategic development of food security and livelihoods monitoring, of which market monitoring is a part.⁴⁰

Our brief review of the type of market monitoring in the three Darfur states indicates that::

1. It is predominantly quantitative, focused on price data for Darfur's main agricultural and livestock produce. Data presented in bulletins usually has little contextual or qualitative information (for example on trade routes, who is trading in different commodities, or even changes in quantities being traded). This limits analysis of the impact of conflict and insecurity on the market.
2. Most of the price data is collected in the markets which were the most important prior to conflict. There has been little adaptation to how the market network has changed during the conflict years as new markets have emerged in IDP camps and in some rebel-held areas.
3. Despite FAO's efforts, there is little evidence that agencies are sharing their market data and analysis. Instead, there seems to be duplication as more than one agency monitors the price of the same commodities in the same markets. There is little systematization in reporting and analysis.
4. It is difficult to collect accurate market information in the current context. Traders often fear that the data will be used for taxation purposes so there is little incentive for them to cooperate and to provide reliable information. As noted above, having good and trusted relations with traders proved a critical ingredient in this scoping study, partly because of survey fatigue amongst traders (and others), and partly because of the strong incentives to trade 'illegally'.

39 It is worth noting FAO's role at national level in launching and running the Sudan Food Security Information for Action (SIFSIA) programme, which aims to strengthen government capacity in collecting food security information, analysis, and policy-making. The Darfur component is being developed. Since early 2008 SIFSIA has produced monthly market updates covering North Sudan.

40 The UNICEF sentinel site monitoring programme for nutrition did, however, come out of this meeting.

5. The enumerators that most agencies depend upon are usually junior and poorly trained. Some agency staff interviewed for this study commented on inaccuracies in the data they receive.
6. Agencies reported problems with data analysis, mainly because of a lack of skills.
7. Agencies in West Darfur face a gap in their market data collection as they do not have good market information from Chad, despite the crucial importance of trade between Chad and West Darfur.
8. Some agencies are concerned about the sustainability of the market data collection systems they are setting up, yet they also acknowledge the limitations of collaborating with the government. This is partly due to limited government capacity, but also restricted access of government officers to many parts of the three Darfur states. Working closely with the government to build capacity may also challenge the humanitarian principle of independence. On a more practical note, as the government is associated with some of the obstacles that traders face, especially high taxes, this raises questions about whether traders would be prepared to speak openly and honestly to government officers.

In terms of how market data is being used, agencies in North Darfur described how alarming price trends might trigger an assessment. In other words market data is being used for early warning purposes. It is also used in pre- and post-harvest assessments as part of the jigsaw of food security indicators, and as described above it is used by individual agencies to inform their own programming. Since the DJAM process stalled (as security in Darfur deteriorated after the signing of the DPA), however, there is little evidence that it is being used for longer-term purposes, for example to understand how Darfur's trade and economy has been affected at a more fundamental level by the conflict, to build an overview analysis and to understand the longer-term impact on traders and producers.

Discussions with agency staff in each of the three state capitals indicated that they are well-aware of the limitations of how market data is currently being collected, analysed, and used. But no agency has yet managed to develop a more qualitative and insightful system. Limited capacity appears to be a major constraint, both in terms of skills and resources.

IX. CONCLUSIONS AND PROPOSED FOLLOW-UP



CONCLUSIONS

This scoping study shows the remarkable adaptability of traders in Darfur since the conflict began. Despite an extremely hostile environment, trade in most of Darfur's commodities has continued. However, it paints a bleak picture of how the economy has contracted, of traders going out of business, of extremely high transaction costs, and limited profit margins. Darfur's market infrastructure has been badly damaged—an ongoing process with serious implications for eventual recovery. There is also evidence of war economies developing—illicit trade which may be funding some aspects of the conflict.

In carrying out this scoping study it has been striking how little attention has been given to these trends in the last four years. Apart from the DJAM process (which was stalled as security continued to deteriorate after the signing of the DPA) and two or three livelihoods studies (referenced in this report), there have been few attempts to gain an overview of how trade and the economy have been affected by the conflict and the implications for livelihoods, of both traders and producers. Instead, most assessments have focused on indicators of immediate vulnerability, such as health and nutrition. The wider economic context has mostly been ignored.

The approach adopted in this study offers an accessible way of exploring and investigating how trade and markets have been affected. It has taken a snapshot of the current market network to reveal how trade routes have changed, where new markets are opening and others have closed. It has reviewed the changing profile of traders—offering insights into how control over trade in some geographical areas and in some commodities has changed—and it explores the policy context and implications for trade in different products. The impact of the conflict and of continuing insecurity in each of these areas emerge clearly.

The description of how the market network has changed and of shifting trade routes demonstrates the inter-related nature of conflict and trade dynamics. This scoping exercise has shown how alliances may be forged between warring ethnic groups if they have a common interest in keeping trade routes open. A good example is the trade route for fruit and vegetables from rebel-controlled Jebel Marra to Darfur's main urban markets. This can help track changing conflict dynamics and may also reveal peacebuilding opportunities around trade. This is an area that deserves much greater attention over wider geographic areas.

The changing profile of traders shows how hard many traders have been hit by the conflict, at worst becoming bankrupt and joining the ranks of IDPs, at best having to find alternative (but usually less profitable) ventures. For Darfur's main cash crops—*tombak*, groundnuts, gum arabic, and oranges—the findings of this study are alarming in terms of how trade has declined, especially for groundnuts and gum arabic. Long-established market infrastructure has been badly damaged. In contrast, the cereal market has been propped up by large amounts of food aid entering the market which has kept traders in business. Although this is very much a by-product of the large food aid operation in the three Darfur states, it is a positive by-product, welcomed by traders themselves. Without food aid it is very likely that the cereal market would have more or less collapsed following the negative pattern of cash crop markets, but with even more dire consequences. This study also reveals where war economies may be developing, according to political affiliation and political favors, or where there is an absence of regulation, most obviously in the case of timber.

The overview of the policy context exposes how crippling this has become. Sudan has a reputation for high taxation: many taxes have shot up in the case of the three Darfur states, doubling and even quadrupling from pre-conflict levels at the discretion of the respective state government and locality. This has subjected a struggling economy to intense pressure and created incentives to smuggle and trade illegally. As well

as formal taxes there are now numerous informal taxes and protection payments levied at checkpoints, by militias, and rebel authorities. The combined effect is high transport and transaction costs, low prices received by producers, and squeezed profit margins for traders.

This scoping study has mainly focussed on Darfur's three most important urban markets: Al Fashir, El Al Geneina and Nyala. It has shown how the coping economy, the shadow economy, and the war economy co-exist. Trade in Darfur's main cash crops is an example of the coping economy in action. Despite the obstacles to production, transportation, and trading, some farmers are still struggling to earn income from their cash crop production. Traders who are still in business have had to adapt to a high risk environment and much reduced profit margins. The emerging markets in IDP camps, now favored by town residents as well as IDPs, are a striking example of the shadow economy, mostly operating beyond the reach of government in a *de facto* tax haven. Within this shadow economy IDPs are engaging in coping strategies that include selling part of their food aid rations. This study has hinted at examples of war economies developing: most notably in timber and possibly also in stolen livestock. These deserve further investigation. An emerging war economy in timber has serious environmental implications.

There are a number of examples of how humanitarian assistance is inadvertently impacting the market. The most positive example is the one cited above of the impact of food aid on the grain market. One of the most negative examples is the impact of the large presence of international agencies in fuelling the construction boom in Darfur's state capitals, and timber-based construction funded by international agencies in IDP camps. Both have contributed to a massive increase in demand for timber.

FOLLOW-UP

Livelihoods programming

1. The economic and market impact of humanitarian assistance, and especially of livelihood interventions, needs to be given greater attention by humanitarian agencies. This does not have to be complicated, but should involve regular and rigorous monitoring of certain key indicators. Indicators to monitor in the main urban markets should include:

- a. impact on demand, supply, and hence price, of the commodities involved

- b. sources of supply, how these change and the reasons
- c. who is controlling trade in the commodity concerned, if/ how this is changing, and any evidence of exploitative trading practices
- d. the major barriers to trade (e.g. taxes, lack of credit) and the scope for addressing them
- e. the extent to which this is part of the coping, shadow or war economy, and implications

To do this effectively, experienced staff may need to build relationships with key traders rather than rely upon inexperienced enumerators. Examples of good practice, such as CRS's work in West Darfur, could usefully be captured and shared with other agencies.

2. Lack of credit emerges as a major constraint to trade in most of the commodities covered by this scoping study. It is particularly severe for cash crop traders. Feasible ways of making credit available on affordable terms in the current high-risk environment should be explored. This is an area for possible follow-up by agencies such as UNIDO, with the objective of maintaining market infrastructure throughout the current humanitarian crisis so that it does not have to be rebuilt from scratch when recovery becomes possible.

3. Trade in fruit and vegetables, especially from Jebel Marra, is badly affected by slow and unreliable transportation on insecure routes through numerous checkpoints. High losses due to perishability reduces profitability for both farmers and traders. Ways of processing and/ or drying these commodities, either in areas of production or in the market, should be explored.

4. The dairy industry appears to be thriving in Darfur's main urban centers. Further investigation is needed to find out who is involved and if/ how they can be supported. This would be appropriate for UNIDO to explore, and could possibly form part of UN Habitat's economic profiling work.

Strengthening market monitoring

5. Capacity to do more than basic price monitoring is weak amongst most international and national agencies and government departments in each of the three Darfur states. This limits local understanding of

trade and market dynamics, essential for livelihoods programming, and limits understanding of how humanitarian assistance may inadvertently affect markets (negatively and positively). There is a clear need for training and support to build capacity, for data collection which needs to be more qualitatively oriented and more relevant in terms of indicators monitored (e.g. covering emerging markets as well as traditional markets). Ways in which the second phase of this marketing study could contribute are outlined below. Whilst regular market monitoring should remain the domain of international and national agencies and government departments, some of Darfur's academics may be best placed to carry out monitoring of some of the more sensitive indicators, such as how trade routes are changing, and the implications for conflict dynamics. Ways of supporting university staff to do this should be considered.

6. Coordination of market monitoring is weak. As a result, agency efforts are fragmented and duplicate each other in the same markets. Strengthening coordination should be central to the capacity-building proposed above, developing a common language and methodology for a more systematic approach.

Areas for further research and analysis

7. From the outset, this first phase was envisaged as a scoping study. Through interviews with traders and agencies it has started to build an overview of how trade and markets have been impacted by the conflict. It has also highlighted issues that deserve further attention to deepen and broaden the analysis. Specifically, these include:

- a. further analysis of markets in IDP camps, how they are controlled, how they contribute to IDP livelihoods, and how the parallel and war economy may be interacting
- b. trading patterns and practices in rural areas, in terms of farmers' access to markets and how this can be enhanced, and to explore some anecdotal reports of exploitative trading practices and how can these be reduced
- c. further exploring how trade routes (such as livestock trade routes) may be changing, new alliances that are being forged and what this means in terms of conflict dynamics and peacebuilding opportunities

d. further investigation of war economies that appear to be developing. The trade in timber (and the extent to which this is becoming a war economy, also driven by scarcity of the resource in certain parts of Darfur) is the most urgent to be addressed because of its negative environmental consequences. The impact of the brick-making industry is relevant here. A war economy in stolen livestock also deserves further investigation.

e. collation of data and analysis on the export of Darfur's main commodities, covering both legal and, where possible illegal trade, to build a more complete picture of how the conflict has impacted trade beyond Darfur's state borders as well as within. This should include a better understanding of the trade between West Darfur and Chad.

These are some of the issues that should be the focus of the second phase of this marketing study, in order to identify more specifically how livelihoods can be supported through market-based interventions, how detrimental trade practices can be reduced, and how market infrastructure can be maintained whilst Darfur's conflict continues.

It is proposed that this second phase should also include capacity-building in each of the three Darfur states, through training workshops with agency staff, involving some of the participants in the practical fieldwork for this second phase. The fieldwork should be extended beyond the three urban markets that were the focus of this scoping study.

8. The findings of this study are based on fieldwork in Darfur's main markets. This local-level analysis needs to be complemented by a macro-level analysis of the political and policy environment at national level in Sudan and how this is impacting on Darfur's trade and economy. This will help to identify ways in which government policy can contribute to a more enabling environment for trade than is currently the case. This should be of interest to international financial institutions such as the IMF and World Bank.

REFERENCES

- Buchanan-Smith, M., (1988) *Grain Marketing in Darfur. Preliminary Report*, Darfur Regional Government and Overseas Development Administration.
- Buchanan-Smith, M. (2006) *The Darfur Early Warning and Food Information System. Final Evaluation of Phase III*.
- Buchanan-Smith, M., and Jaspars, S. (2006) *Conflict, Camps and Coercion: The Continuing Livelihoods Crisis in Darfur. Final Report*. WFP Sudan.
[http://www.unsudanig.org/darfurjam/trackII/data/cluster/development/GreaterDarfurLivelihoodsStudy2006%20\(WFP-%20Buchanan%20Smith%20&%20Jas.pdf](http://www.unsudanig.org/darfurjam/trackII/data/cluster/development/GreaterDarfurLivelihoodsStudy2006%20(WFP-%20Buchanan%20Smith%20&%20Jas.pdf)
- Collier, P. (1999) "On the Economic Consequences of Civil War" *Oxford Economic Papers* 51: 168-183.
- Collier, P. and Hoeffler, A. (1998) "On the Economic Causes of Civil War", *Oxford Economic Papers* 50: 563-573.
- Collinson, S. (2002) "Politically informed humanitarian programming: using a political economy approach", *HPN Network Paper 41*, Overseas Development Institute, London.
<http://www.odihpn.org/report.asp?type=Network%20Paper&id=2503&number=41>
- Collinson, S. (ed) (2003) "Power, Livelihoods and Conflict: Case Studies in Political Economy Analysis for Humanitarian Action", *HPG Report 13*, Overseas Development Institute, London.
<http://www.odi.org.uk/HPG/papers/hpgreport13.pdf>
- Couteaudier, T.Y. (2007) *Export Marketing of Sudanese Gum Arabic*, Multi Donor Trust Fund-National, MDTF-N-3, World Bank, Khartoum.
http://siteresources.worldbank.org/INTAFRMDTF/Resources/gum_arabic_policy_note_final.pdf
- De Waal, A. (1989) *Famine That Kills: Darfur, Sudan, 1984-1985*, Oxford, Clarendon Press.

Deng, L. (1999) 'Famine in the Sudan: Causes, Preparedness and Response: A Political, Social and Economic Analysis of the 1998 Bahr el Ghazal Famine', *IDS Discussion Paper 369*, Brighton: Institute of Development Studies.

Duffield, M. (2000) 'Globalization, transborder trade, and war economies' in *Greed and Grievance. Economic Agendas in Civil War* by Berdal, M. and Malone, M., Boulder and London: Lynne Rienner Publishers

El-Dukheri, I., Dammous, H., and Khojali, A.M., (2004) *Rationale for a Possible Market Support Program in Darfur, Sudan. A Brief Look at Markets and Food Security*, Commissioned by USAID and implemented by CARE.

El Fateh Osman Adam (2007) *Interagency Livelihoods Assessment in Abu Shouk, Al Salam and Zamzam IDP Camps. North Darfur—El Fasher: Final report*, coordinated by North Darfur Assessment Task Force.

Keen, D. (1994) *The Benefits of Famine: A Political Economy of Famine and Relief in Southwestern Sudan 1983-1989* Princeton, NJ: Princeton University Press.

Le Billon, P. (2000) "The Political Economy of War: An Annotated Bibliography", *HPG Report 1*, London, Overseas Development Administration.

<http://www.odi.org.uk/hpg/papers/hpgreport1.pdf>

Lautze, S. and Raven-Roberts, A. (2006) "Violence and complex humanitarian emergencies: implications for livelihoods models", *Disasters* 30 (4), pp 383-401

<http://www.blackwell-synergy.com/doi/pdf/10.1111/j.0361-3666.2006.00328.x>

Morton, J. (1985) *A Darfur Compendium. A Review of the Geographical, Historical and Economic Background to Development in the Region*, HTSPE, reissued 2005

Swift, J., and Gray, J. (1989) *Report on Darfur Region Food Security Policy and Planning*, Darfur Regional Government, Republic of Sudan, Overseas Development Administration.

Tearfund (2007) *Darfur: Relief in a Vulnerable Environment*.

<http://tilz.tearfund.org/Research/Disaster+Risk+Reduction+reports/Darfur+relief+in+a+vulnerable+environment.htm>

World Bank (2007) *Darfur. Dimensions of Challenge for Development. A Background Volume.*

Young, H., A. M. Osman, et al. (2005). *Darfur - Livelihoods under Siege*, Medford, Feinstein International Famine Center, Tufts University.
http://fic.tufts.edu/downloads/darfur_livelihoods_under_seige.pdf

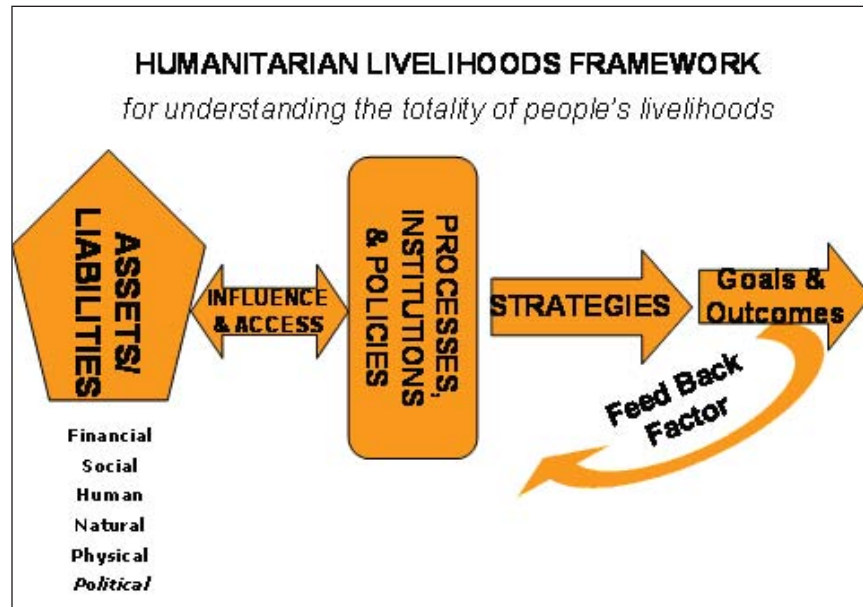
ABBREVIATIONS

APU	Agricultural Planning Unit
AU	African Union
CRS	Catholic Relief Services
DFIS	Darfur Food Information System (DFIS)
DJAM	Darfur Joint Assessment Mission
DPA	Darfur Peace Agreement
FAO	Food and Agriculture Organization (of the UN)
FNC	Forestry National Corporation
FSNA	Food Security and Nutrition Assess ment (WFP)
GAC	Gum Arabic Company
JAM	Joint Assessment Mission
RCO	Regional Coordinator's Office
SCUK	Save the Children UK
SDG	Sudanese Pound
SIFSIA	Sudan Food Security Information for Action (FAO)
SLA	Sudan Liberation Army
UNAMID	United Nations and African Union Mission in Darfur
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNOCHA	United Nations Office for the Coordination of Humanitarian Assistance
VAM	Vulnerability Assessment and Mapping (WFP)
WFP	World Food Programme

WEIGHTS AND MEASURES

1 <i>mukhamas</i>	0.505 hectares
1 <i>guntar</i>	approximately 45 kg

ANNEX 1: LIVELIHOODS FRAMEWORK FOR COMPLEX
 HUMANITARIAN EMERGENCIES



ANNEX 2: TRADERS INTERVIEWED

<i>Al Fashir</i>	2 cereal traders
	1 livestock trader
	1 <i>tombak</i> trader
	1 groundnut trader
	1 gum arabic trader
	2 orange traders
	1 timber trader
	2 cereal traders
	1 livestock trader
	1 processor of groundnut oil
<i>Al Geneina</i>	1 orange trader
	2 timber traders
<i>Nyala</i>	3 cereal traders
	2 livestock trader
	1 groundnut trader
	1 gum arabic trader
	2 orange traders
	3 timber traders
	IDP leaders of Direij camp
	Manager of Nyala abattoir

ANNEX 3: RESEARCHER PROFILES

Margie Buchanan-Smith is an independent consultant and policy researcher. She worked with the Darfur Regional Government for two years between 1987 and 1989, as Agricultural Economics Adviser to the Agricultural Planning Unit, during which time she initiated and designed a drought early warning system for North Darfur and carried out a study of the grain market throughout the region. She led a WFP livelihoods study in 2006 (*Conflict, Camps and Coercion: The Continuing Livelihoods Crisis in Darfur*), and in 2007 co-facilitated with Tufts University a series of workshops in Darfur on livelihoods programming. Margie has held research fellowships at the Institute of Development Studies, University of Sussex, and at the Overseas Development Institute where she was Coordinator of the Humanitarian Policy Group. In the mid-1990s she was Head of the Emergencies Unit at ActionAid. A number of her publications are focussed on Darfur. In 1995 she co-authored a book on *Famine Early Warning and Response—the Missing Link*.

Dr Abduljabbar Abdulla Fadul is senior lecturer in Natural Resource Management and Food Security in the Faculty of Environmental Sciences and Natural Resources, Al Fashir University. From 1975 to 1981 he worked as a government veterinary officer across Darfur and as Provincial Veterinary Inspector from 1978 to 1981. In 1981 he joined the Darfur regional Ministry of Agriculture and was Director General of Natural Resource Planning from 1985 to 1991. From 1991 he worked as a freelance consultant until joining Al Fashir University in 1999. In 2000 he founded the Centre for Peace and Development Studies at the University. He holds a Master's degree in Rural Development and Food Security from the School of Development Studies, University of East Anglia, UK. He was a contributor to Livelihoods under Siege⁴¹, with Tufts University and Al Afhad University in 2004; to Environmental Degradation as a Cause of Conflict⁴² with the University for Peace in Khartoum 2004; and to Darfur, Relief in a Vulnerable Environment⁴³, with Tearfund in 2007. He has also contributed to numerous workshops, evaluations, and studies.

41 http://fic.tufts.edu/downloads/darfur_livelihoods_under_seige.pdf

42 http://www.steinergraphics.com/pdf/darfur_screen.pdf

43 <http://tilz.tearfund.org/Research/Disaster+Risk+Reduction+reports/Darfur+relief+in+a+vulnerable+environment.htm>