The World Food Programme (WFP) has organized a Food Aid Forum from 6-8 June 2006 in Khartoum, as part of an ongoing process to develop the long-term strategy of WFP in Sudan. In support of the Forum, a series of Expert Opinion papers have been prepared by a wide range of partners on various aspects on food security strategies and their implications for WFP programmes in Sudan. In line with the objectives of the Forum, it is hoped that these papers will help inform a strategic framework offering direction to WFP Sudan through 2011 consistent with national priorities, and improve the understanding of the role and impact of WFP programmes in Sudan.
Given the scale of the need in southern Sudan it is critical to ensure that, in the post-CPA era, resources are allocated to enhance recovery and in proportion to their expected impact.

A greater impact on the unacceptably high prevalence of child malnutrition is expected more from additional investment and attention being paid to education, health, hygiene, sanitation and child care practices than through expanding food aid interventions.

Recently increasing relief food appeals, in “better than typical” years, have been coupled with a consistent trend of under-delivery against planned distributions. The negligible impact of the programme, although most commonly challenged on the basis of needs assessments, is equally attributed to the poor timing of deliveries, and a dysfunctional distribution system.

Presently a limited appreciation of livelihoods has resulted in the low impact of relief food aid with few lasting benefits and high opportunity costs.

With the 2006 appeals for food aid for Sudan reaching billions of dollars it is surprising that comparatively few resources are allocated to strengthen skills for assessing, analyzing, and understanding community priorities, local economies, livelihoods and social safety nets.

Participation and commitment to a more independent livelihoods analytical forum is recommended as an opportunity to improve communication with the new government, community leadership and other partners. This would also provide a platform for reaching consensus on appropriate planning and policy development over the next 5 years.

1. INTRODUCTION
This paper aims to address key questions highlighted by the forum organizers using examples from northern Bahr el Ghazal (BEG) and encompassing recent assessments findings from four counties in the Aweils. This has then been broadened to encompass other related issues. The principles are expected to be relevant to other areas of southern Sudan.

A. Background:
Northern Bahr el Ghazal (NBEG) falls within the western flood plains and the ironstone plateau livelihood zones (Muchomba and Sharp 2006). It has been regarded as being one of the most food insecure areas of southern Sudan, a homeland of the Dinka, and forms part of one of the more densely populated agro-pastoral areas of southern Sudan. During the war years, conflict resulted in a significant decline in trade and market activity that allowed essential livestock for grain exchange. This process helped to sustain food access at a level that would support subsistence for the community and was backed up by other forms of local trade and exchange and access to a wide range of naturally occurring food sources and income resources. Continuing conflict and insecurity focusing on this area disrupted essential activities and during the four years leading up to 1998 the heavy asset depletion (mainly cattle) resulted in better-off households either moving elsewhere or becoming poor households. When northern forces were displaced from Wau town early in that year, over 100,000 people fled to their rural homes in northern Bahr el Ghazal causing the economy to collapse. This resulted in the 1998 famine in Bahr el Ghazal when the emergency food aid response led by WFP saved many lives.
On reflection, what this crisis illustrated was the vital relationship between the different wealth groups and the extraordinary resilience of the food economy. For many years people survived the continuing low intensity conflict largely through increased consumption of naturally occurring uncultivated foods (wild foods) and a combination of fish, kin support and external labour that had become stretched to the limit. It was the final political/military shock, combined with years of asset depletion and disruption to essential seasonal activities, including crop husbandry, which eventually caused the livelihood system to then suddenly collapse. Following the Comprehensive Peace Agreement (CPA), this unique system is recovering its resilience but new threats may undermine it.

B. Emergency Response
Continuing insecurity and conflict resulted in this part of southern Sudan being ranked as highly food insecure and leading to emergency interventions primarily in the form of food aid and the establishment of Supplementary and Therapeutic Feeding Centres (SFC/TFC). Levels and timing of interventions are typically in response to the increased admissions in April/May. This became the common response of agencies and NGOs able to maintain some presence during the war years. Response levels occasionally increased when and if resources allowed or with peaks in malnutrition, security incidents and/or the emergence of a crisis. Increased food rations remain the dominant recommendation found in nutritional reports with numerous references to sources of food and the harvest. However, information on child care practices, breast feeding problems, weaning, the introduction of complimentary foods and water consumption by lactating mothers has been conspicuously absent until fairly recently and following a gradual change in the style and type of response following the CPA.

C. The Picture Today
Recent findings from an ad hoc field assessment exercise in the four of the Aweils counties, which form part of NBEG and encompasses the Western Flood Plains and Ironstone Plateau livelihood zones, indicated that there would be hunger among the poor households between May and September in 2006 and that,

a. Returnees need support immediately if they would have any chance establishing shelter and of attempting land clearing and cultivation this season.

b. Although some poor residents will be exposed to minimum food access shortfalls of up to 15 per cent between May and August, the majority of residents would be expected to cope but be pushed close to the edge if a combination of shocks (see 6 points below) were to occur in their areas between May and September. The degree of potential additional shocks would vary from place to place and be difficult to forecast more precisely.

c. The period from May to September is a time when households are commonly not meeting their minimum energy requirements of 2100 Kcals per person per day. This typically happens as a result of reduced sorghum access and a peak in labour activities. Any additional shocks can result in stress coping.

In the Kiir season (May to September) the poor frequently function on 1900 Kilo calories or below for 2-3months until green consumption begins in September. This is the time when meals are reduced at the time when labour demands increase. As a result the period has been termed the “hunger season”. The term also reflects the time when sorghum “food” is less accessible and so supplemented by drinking more milk often complimented by other conserved and wild foods.

---

1 This was a SSCCE/LAF initiative to capitalize on HEA training for the UNDP/World Bank RRP project members.
2 This will include stress coping, i.e. reduced meals, sale of assets, family splits, abnormal migration etc.
3 The impact of planned response cannot be determined as distribution plans have not been released.
Since many of the poor have to seek kinship support, which can entail labouring for relatives, it is a low spot in the annual calendar. In 2006 households are at risk of being exposed to additional shocks as a result of:

1. The sudden and unannounced arrival of further returnees, some of whom will seek kin support. (Currently returnees are reported to represent 2-3 per cent of the resident population. Source: local government staff, April 2006)
2. Added disruption to remittances and migrant labour opportunities in the north.
3. The potential drain on resources and services by transiting militia groups.
4. Changes in livelihood patterns and further wealth group shifts impacting on the inter-relationships between different groups and reducing labour opportunities.
5. The reduced market activity that comes when roads are blocked following the commencement of the rains and the impact this has on the availability of staple grains and changes in accessibility and price.
6. Any breakdown or changes in security.

The points listed above make 2006 an unusual year and so contingency planning and pre-positioning of food relief has been implemented in response to anticipated need. Until the situation normalizes, contingency measures are planned for a few more years. However, now that we are in the CPA era the transient (seasonal) food gap could begin to be addressed by supporting:

1. The recovery of trade and markets. i.e. through ensuring 12 month road access.
2. Improving current agricultural husbandry practice.
3. Increased labour and other income opportunities.
4. The gradual introduction of more cash into the economy.
5. Finally, the persistent unacceptable child malnutrition levels whether attributed to periods of seasonal hunger or not will need to be addressed differently. A degree of improvement can be expected by prioritizing access to education for women, combined with addressing health, hygiene, sanitation and child care practices. This, of course, can be complimented by investment in other non-food solutions to sustain and secure improved food access.

11. APPROPRIATENESS OF PRESENT FOOD AID SUPPORT

The following section is addressed in three parts to consider past, present and future aspects of the question:-

A. Past
In the past few years prior to the CPA, the monitoring capacity has faded within WFP and the necessary skills to take on this role and responsibility have not been transferred to the new government. This leaves food needs assessment in a precarious situation and this is reflected in the degree of confidence found in forecasts. For the whole of southern Sudan food aid appeals have not followed a clear logic since 2003.

- Prior to 1998 appeals ranged between 25,000 – 60,000 Mts.
- In 1998 (The year of the Bahr el Ghazal crisis) distributions levels were reported to increase to close to 90,000 Mts.
- The 2004-5 appeal, after several years of recovery, and immediately preceded by two “better than normal”, one regarded as “exceptional”, production years (FAO/WFP 2002-3, 2003-4 and WFP 2004-5 ANA report) the appeal reached a record 178,000 Mts. (See also V11, Opportunity Cost)

Apart from the increasing relief food appeals in “better than typical” years, the track record shows a consistent trend of under-delivery against planned distributions. In the majority of cases, the optimal time to deliver would have been between May and September if distributions were to
realize their expected impact but this has not been possible and is largely attributed to logistical constraints. However, this has also resulted in questioning the robustness of the analysis. Previous analysis indicates that annual deficits over 15—20% are rare. Recent ANA assessments express shortfalls far above this level. The years pass without any accountability checks. However, the cost of coping may have resulted in asset loss, stress migration and/or other unnecessary suffering for some households. This demonstrates the high resilience of the food economy and peoples extraordinary ability to maximize the available resources. Either way, the impact of food relief has been negligible.

A graphic to help illustrate the contribution of food aid is presented in **diagram 1.** below.

![Food Aid Compared to Other Food Sources for Poor Households in NBEG](image)

Sources: SSCCSE/ LAF, CARE summary of reports

The low impact is compounded when small quantities are received over long periods of time and after re-distribution.

In summary, vulnerable people often cope through engaging normal coping options and, at other times and at some unacceptable cost, through stress coping mechanisms. Food aid cannot be seen to have made a significant difference (WFP 2004) especially compared to role played by the expansion of other food and income sources. This is supported by other reports and research (WFP 2004,). The appropriateness of the response, in this case, is challenged both on the basis of needs assessment and equally with regard to the quantities, timing of deliveries, and effectiveness of the distribution system.

**B. Present**

To date, the low impact of relief food aid continues but even if this is improved it is not expected to see lasting benefits and the opportunity costs are considered to be very high compared to possible alternatives. In 2006 the key areas of concern are the Western Flood plains zone northern Bahr el Ghazal (13, 857 Mts. pre-positioned), and the Arid/pastoral zone of Eastern Equatoria (319 Mts pre-positioned⁵). Following improved security, considerable efforts have been made to pre-position food aid in northern Bahr el Ghazal by road, rather than the previous air drop, but its impact may again be diluted by the distribution approach. In addition, a recent

---

⁴ Pers comm., previous TSU manager and LAF analysis
⁵ WFP PPP May 2006
assessment in Aroyo (Aweil Centre) noted some relief food had been pre-positioned in this part of northern Bahr el Ghazal but within the Ironstone plateau livelihood zone, the team who visited the area in April 2006 concluded that the area was food secure. This adds to the problems highlighted above in that scarce resources will not be available for areas with greater need. There is an added opportunity cost as health and water issues are very urgent in the Aroyo area.

In summary, following the CPA, present practice has changed in terms of the mode of delivery only. This reflects the strong logistics and financial bias of the organization. A food aid response is therefore appropriate in some areas and not in others but the impact will remain insignificant if the amounts, timing and distribution of the food deliveries cannot be adapted to meet the circumstances of specific locations. The general reasoning behind interventions are regarded as sound for contingency, largely relating to returnees, and to address hunger during May to September. However, in addition to the operational constraints, the very low to negligible impact (WFP 2004) has resulted from poor analysis, poor timing, and a noticeable loss of institutional memory and investment especially in the understanding of pastoral livelihoods and assessment techniques.

C. Future
In the future and given sustained peace, attention is drawn to the point that the food solution will become less appropriate in southern Sudan area and that scarce resources may need to be transferred to other parts of the country. The need to focus on the community priorities remains urgent. The WFP ANA (2005-6) reported the majority of the population ranking health, education, and water as their priorities.

Harmful aspects of food aid and the current distribution system listed by traders included the negative impact on the labour market namely lost opportunities for the poor and a loss of incentive for better-off groups to extend land under cultivation. Constraints to trade and especially livestock: grain exchange resulting in overstocking and increasing tensions between pastoral groups and competition for water and grazing areas was also noted. (i.e. in lower reaches of the western flood plains zone). Although people commonly operate on less than their minimum energy requirements between May and September, there will be problems if this is considered a structural deficit and not addressed in other ways in the longer term.

111. APPROPRIATENESS IN ADDRESSING MALNUTRITION

A. Background
In BEG Global Acute Malnutrition (GAM) rates rising to 20 per cent plus are typical in May and the trend has been consistent since surveys began. This peak subsides during August and September to levels closer to 15% critical GAM levels. (Typical but unacceptable). Surveys are now being conducted more regularly and consistently, including the wet season, and the indications are that the earlier trends stand. The issue is that malnutrition levels are critical year in, year out. The seasonal peak does not reflect an acute malnutrition event but a worsening of the prevalent chronic levels accumulating towards the end of the dry season. Following recent analysis, the link to food access now appears less obvious than the link to worsening water access and associated deteriorating health, hygiene and sanitation practice. In addition, mother’s workloads and the constraints this places on adequate child care increases. (Nutrition reports cited include those referenced at the end of this report from Concern, Fear Fund, ACF, AAH, UNICEF and those referenced in UN Standing Committee on Nutrition, January, 2006)

---

6 1998 an exception
B. Causes of Malnutrition
Recent enquiry has revealed that the dry season has a large impact on mother's ability to consume adequate water in order to ensure that her ability to adequately breast feed is not adversely affected. In addition their workload is very high in the first 6 months of the year as it is the time for peak wild food collection, and petty trade and other trade activity such as firewood sales, grass collection and sales, pole sales etc. Brewing and beer sales also picks up during this season which could impact on care practice and child nutrition. (i.e. feeding of brewer’s grains to children.) However, mother’s workload is always very high but the real concern is that children are being left with other carers (Siblings, aunts, grandmothers etc.) during this period. Research from Ethiopia indicates that when this occurs for more than 2 hours per day, children are up to 5 times more likely to become malnourished. (Duffield, 2006). One of the teams reported that the daily seasonal activity calendar indicated that mothers were not directly taking care of their children during three out of four seasons (nine out of twelve months) and if so only for a limited period. Finally, the majority of malnourished children admitted at Supplementary Feeding Centres (SFC/TFCs) suffered from malaria commonly compounded by respiratory infections and diarrhea.

C. Other Care Practice
The introduction of complimentary foods frequently induces diarrhea. As a result weaning is sometimes delayed for up to 2 years. (Sometimes this results in an older child is also suckling and this can impede access to essential nutrients for the younger child). A common weaning practice is to introduce water and sugar. The water is often contaminated. When children get sick mothers are commonly reported to stop giving the child breast milk. There are almost no latrines and hygiene practice is bad. Immunization rates are very low. Knowledge of Oral Dehydration Salts ORS is low. Soap use declines in the dry season but is mainly used for washing clothes even in the wet season. Numerous non-food factors contribute to these chronic malnutrition levels and the peak correlates closely with seasonal factors relating to water quality and consumption levels. Some improvement in nutritional status is noted with the commencement of the rains that allows improved water access but typical GAM rates close to 15% are indicative of the fact that any improvements to water quality, health, hygiene and care practices remain unaddressed. The rainy season runs between June-September (4 Months) and the dry season runs between October-May (8 months).

D. Health, wealth and education
Mothers in SFC/TFCs were from all wealth groups. Although cattle are away at the Toic (dry season grazing area) and milk access is down, mothers from households with no livestock and households with livestock were both at the feeding centres. Men may have several wives and further work to be undertaken to determine if lesser wives, or those lacking adequate male representation, are more vulnerable to having malnourished children. Such women have been observed to become increasingly marginalized and can be excluded from certain types of social support when the traditional “safety nets” tighten. This is a social aspect but from the human capital position, none of the women interviewed had had any opportunity of primary education but the maternal health status was reported to be good. Finally, a common way to quickly recover lost assets and social position is to marry a daughter and receive cattle as the bride price. This is having a detrimental impact on mother’s (who are often children) health, wealth of the household and nutritional status of their children.

In the past, assumptions have been made about the hunger season, resulting predominantly in a food aid response. The next section challenges some of these assumptions. Reports again show little impact of these food aid interventions. Are there other non-food or less tangible factors that
need to be considered if we are to see some improvements in these unacceptable levels of malnutrition?

**Fig 2: Seasonal trend of malnutrition in Aweil West and North counties Source: Concern**

![Graph showing seasonal trend of malnutrition](image)

Figure 2 shows that malnutrition rates peaking from May. (N.B. The graph, provided by Concern (Teshome Feleke, 2006), covers 2003-2006 and is consistent with other sources of nutritional data with some covering earlier periods). Remembering that nutritional data is referred to as trailing indicator, the graph does not illustrate that the child's status has resulted from conditions in the preceding months. i.e. throughout the dry season and peaking at the end of the dry season. Strangely malnutrition rates start to show a decline (improvements nutritional status) from June/July onwards which is the later part of the hunger gap season (see fig 3).

**Fig 3: Seasonal food access by zone during periods of conflict**

*Source: SSCCSE/LAF, southern Sudan livelihood profiles. (Trends from reports covering 1996-2003)*

![Graph showing seasonal food access](image)

Figure 3 illustrates reduced food access between May and August. (see Flood Plains line for the Aweils in Bahr el Ghazal). Referring back to Figure 2, nutrition levels start to improve as food

---

7 See nutrition reference
access declines. Households split during the dry season and older children and adults who are at the Toic (dry season grazing areas) as well as having better water access will have been consuming more milk, fish and wild foods. This could enable them to be in better condition to help them through May to August period when they return to help with land clearing, planting, weeding and other seasonal tasks in the lead up to the next harvest season. Milk will also now be accessible to younger children at this time.

![Seasonal calendar of the western Flood plains zone](image)

These findings therefore suggest that nutritional status is improving when food access is declining. Does this improvement link with better water and milk access following the onset of the rains? (see fig 4). It also shows that although adults may be consuming less than 2100 Kcals per day during the hunger season, an expected deterioration in adult nutritional status is not being reported. More needs to be understood, not just about the redistribution of relief food, but how kin sharing also impacts on milk access, firstly for children and then adults. Although the poor may not own livestock, milk has been generally accessible to all children in typical years. In the future, a greater impact might be achieved through more integrated planning and as the seasons change and as the connection between water and improved milk access for children becomes better understood.

To summarize, more work needs to be conducted in order to assess mothers both in and outside feeding centres and to determine more accurately the impact that the wealth and other social status of the household may be having on nutritional status etc. However, it has been observed that the malnutrition trends do not change significantly in good years or bad years which suggests that changes in crop performance is not having a significant impact. No significant changes to these trends can be attributed to food relief food interventions. (WFP 2004) Further improvements to allow adequate access to 'safe' water, especially for lactating mother’s, combined with a reduction in the heavy workload of women and improved child care, health and

---

Footnotes:

8 One exception was the 1998 year where increased malnutrition was due to multiple factors.

9 General food rations were given to SFC beneficiary households in 2005 see Nutritional Anthropometric Survey Report, March 2006, Concern and a positive impact was noted. However this was not considered in isolation to other seasonal changes i.e. This could also be attributed to improved food access from the harvest and health and care practice factors in the later part of the year.
hygiene practices would be expected to make a difference to the unacceptable levels of child malnutrition. How do the allocation of resources to address non-food factors compare?

IV. FOOD SECURITY INFORMATION SYSTEMS

Food aid responses are often triggered by media attention, politics, resources at hand, and analysis generated by information systems, but not necessarily in that order. It appears that even when information is robust and timely the situation is commonly misinterpreted. In the case of southern Sudan we observe that:-

- Annual food deficit figures are assumed to be equally spread throughout the year while the problems are seasonal shortfalls.
- The present distribution system, though known to be unworkable, remains,
- The present low analytical capacity has resulted in a loss of confidence in any information system leading to reduced attention and delayed investment in this area of the work.
- Increased appeals for more food aid have been expected to overcome the above problems.
- Unacceptable malnutrition levels are sustained because they will require a different type and style of response to address them in a more sustainable way.

A. Background

WFP provided the main information source regarding food security issues between 1994 and 2002/3. The regular and reliable reporting was well recognized. However, the Technical Support Unit (TSU) was disbanded around 2002-3 and replaced by the VAM office with a noticeable loss of the technically qualified trainers, trained field monitors, and level of monitoring activity. More recently, WFP staff have been posted in sentinel sites across southern Sudan but these staff are not trained to the same degree and the assessment and analytical approach has changed. Very brief training is now given to relative novices before they are fielded with questionnaires prior to ANA work and other surveys as opposed to more iterative line of field enquiry that preceded this change.

The Food Security Assessment Group (FSAG) was closely associated with the old TSU and in 2003 what remained was revitalized and became the Livelihoods Analysis Forum (LAF). This was created to prepare for the anticipated CPA and in preparation to support the new government and the livelihoods programmes to address non-food issues post CPA. Following the signing of the peace agreement in 2005, the LAF was officially recognized by the SSCCSE who became the new custodians, with responsibility for information and analysis, at that time. Quarterly analytical fora then moved to Rumbek.

During the same period WFP experienced several management changes and there appears to have been a significant loss of institutional memory. In 2005 the WFP information system has not functioned well. The ANA questionnaires used did not generate information that could be considered robust and useful for determining food access. A ‘virtual’ analysis that followed revealed a very different picture. The final ANA report did not reflect the outcomes of either analysis. 10 This ANA exercise was an expensive operation and reflects another aspect of opportunity cost. When analyzing the latest ANA report, roughly 25-30% of the population as reported to as having a 20-30% annual shortfall in their minimum energy requirements. With such diversity among the livelihood zones, this is unlikely as some livelihood zones are producing considerable surpluses and the size of the deficits presented would herald an immanent crisis situation.

10 Personal communication
B. Utility of Information

Poor comprehension: A low level of understanding of livelihoods and the complex nature analyzing food insecurity is the crux of the matter but this is compounded, for the same reasons, by the dysfunctional distribution approach. What is not being recognized is that WFP is trying to impose a totally different value system onto the local administration (Harragin 1998)\textsuperscript{11} by expecting to give relief to food to a small targeted group. A key issue that emerges from this work, and the Targeting and Vulnerabilities report (SPLM/SRRA-OLS; 1998) is that because relief food aid, and especially that distributed through general distributions, is considered as a gift, it is frequently redistributed to all. After varying degrees of taxation, and with further percentages entering market channels, when the remainder is redistributed, very little actually reaches the intended beneficiary. So it is important to appreciate the two viewpoints.

The Sudanese perspective: The local administration is under pressure to deliver to meet the expectations of their people. As a result, a huge communication gap exists between the parties involved. Further contributing factors are explained in the southern Sudan Vulnerability Study (Harragin 1998). In the postscript of the first report, the point is made that targeting is not necessarily the solution but is created to overcome the shortage of resources. The southern Sudan setting has all the criteria to justify a blanket distribution to all households. (Seaman and Taylor, 2004). This is supported by other work that illustrates how traditional systems operate (Dr Biong Deng 2004). This body of research suggests that the WFP could expect a much higher impact if food aid were distributed to all households at the critical time rather than attempting to distribute small amounts over an extended period to a lower percentage of targeted beneficiaries. The community could be informed in advance of their entitlement and that this would be the only general distribution for the year. This would also present a major opportunity for the SSCCSE to triangulate its household census work while at the same time providing WFP a new opportunity to begin communicating a revised future food aid strategy.

Recent analysis and consensus: In the Aweils concluded that if the timing of a carefully planned blanket delivery to all households in NBEG could be undertaken between May and September the impact could be expected to be far more significant. (Aweil assessment team consensus 2006). The concept had been previously raised with WFP management but an anticipated negative donor response prevented further consideration. However, there could have been other concerns over logistical constraints and management problems.

Misinterpretation: The past situation reflects inadequate analysis and poor utility of information. This suggests that key decision-makers may need a greater comprehension of the issues and /or broader expertise. When these situations occur the communication gap widens. Local authorities can become increasingly accused of orchestrating diversions. WPF can be accused of exaggerating deficits and having different agendas. Both parties are working in an environment of increasing competition for resources and information can either help or hamper depending on the agendas, the degree of community involvement, opportunities for dialogue and consensus building.

To summarize, increased food aid appeals hope that if more food aid is delivered the hunger and malnutrition trends will have to start reducing? As the percentage deficits get larger and the percentage of the poor increases, there is a danger that the reasoning behind the seasonal and blanketed distribution approach will continue to be discarded. The need for greater accountability is raised here. We cannot just point the finger at WFP if no-one is challenging the highly questionable ANA results (way above those of 1998) and the pointlessness of the distribution

\textsuperscript{11} See especially Chapter 13
methods when the problems have been clearly highlighted since at least 1998. Why are southern Sudanese authorities not demanding more appropriate responses? Why do donors continue to fund these appeals? Why do the interventions remain the same year after year when the negligible impact is clearly reported? What are the institutional forces that seem to allow this to continue?

C. Narrowing the Communication Gap

A report outlining some of the common denominators found in successful Food Security Information Systems (FSIS) projects has some helpful recommendations (Shoham, J. 2006). The recent FAO paper (Pingali, Alinovi and Sutton 2006) also highlights how a “twin track” approach can help to link immediate hunger relief with longer-term strategies for sustainable growth. A practical application of this has evolved in “two pronged” approach developing within the SSCCSE/LAF which will increasingly facilitate community voice to be heard at the analytical table of the analytical fora and meets quarterly. The World Bank/UNDP, RRP project funded with the EC is supporting community driven recovery and development and the Livelihoods Analysis Forum will play a key part in developing dialogue between senior government and local government. The SSCCSE/LAF has reached consensus with members to adopt the seven essential components of a successful food security information system as outlined in the Shoham (2006) report. Some adaptations have been included and these were applied during the recent assessment work conducted in northern BEG.

The field work in northern BEG was supported by the SSCCSE/LAF, southern Sudan Livelihood profiles reference document (Muchomba and Sharp 2006) which provided the baseline reference guides for the analysis. Nutritional reports (from Concern, ACF and Tear Fund 12) revealed added value when analyzed against the background story provided by this baseline reference material. All other primary and secondary information available was considered once the HEA (household Economy Approach) analysis has provided the contextual backcloth for the analysis. This was seen to add considerable value to other indicator based information as well as allowing consensus to be established with LAF members. During the recent analysis LAF members included SC-UK, FEWSNET, Concern, HARD, Tear Fund and Local Government Authority (LGA) and a WFP staff member who were divided into four teams to conduct assessment exercises in the Aweil East, West, Centre and South. During the field work the teams conducted HEA assessments with different wealth groups and key informants and interviews with mothers with children admitted to SFC/TFCs (Supplementary and Therapeutic Feeding Centres) in the same areas. This was conducted between April 7th and 27th 2006. The teams are grateful to Concern, Tear Fund, MSF and ACF staff who were consulted at feeding centres (SFC/TFCs) regarding their nutritional work and who facilitated the interviews with at these centres. The principles found in the Household Economy Analysis (HEA) methodology were used to look at livelihood zones, wealth groups, and seasonal variances. The Food Economy Group (FEG) analytical spreadsheets were also used to support analysis regarding household food access and to run various scenarios. The influence of livelihood capital as outlined in the Sustainable Livelihoods Framework (SLF) initiated by DFID was also incorporated into the analytical process.

The FAO inception report and proposal for the SISFIA work that is ongoing and funded by the EC has incorporated many of these key concepts into in the formulation process. However, this may take sometime to materialize and in the interim donors appear undecided about whom to support. WFP has had access to funds from SENAC (Strengthening Emergency Needs Assessment Capacity) through ECHO (Bruxelles), support to the VAM unit has been forthcoming from both USAID and the EC. The EC is also supporting the FAO SISFIA work-in-progress. In

---

12 See nutrition references
the interim, the SSCCSE/LAF continues with small but helpful support from the ECHO regional office and the voluntary participation of its members that include relevant GOSS ministries, most of the main NGO and SINGOs involved in livelihoods and food security programmes, OCHA and the EP&R team. WFP VAM officers and FAO staff attend the quarterly analytical fora. Prior to the CPA, LAF attended and presented the information system position and anticipated needs at Joint Assessment Mission (JAM) cluster meetings 7 and 8. Since then the proposals for support to the SSCCSE have been submitted through the UN work-plan process and to various donors and including the multi-donor trust funds. (Eliaba Damundu and Sharp, B. 2005). The lack of any response is attributed to a belief amongst donors that this is adequately covered under the EC funded SISFIA project where funds are reported to be earmarked for implementation under the FAO. In the interim ECHO support has been very timely but the SSCCSE are suffering from personnel constraints resulting from the heavy demands of the census and have, to date, been unable to fill positions and implement planned activities within LAF.

To conclude, the communication gap between agencies and organizations has definitely improved since the inception of the SSCCSE/LAF and the has been a result of the common language that has evolved. This has originates from reaching consensus regarding the use of a standard framework used to develop the contextual picture needed for broader livelihoods analysis at an early LAF meeting. (LAF minutes May 2004, June 2005).

IV. CONFLICT AND FOOD AID

A. Background
Conflict continues to threaten food insecurity and information and the way it is used regarding food aid needs to be given careful consideration in relation to the previous section. Apart from the normal planned distributions, WFP frequently responds to unpredictable disruptions resulting from conflict that can result in local displacement and loss of assets and other resources. But there is a danger that a food aid response may not always be appropriate. Livestock numbers are increasing with peace and associated asset recovery. Over the next 5 years we can expect to see production surpluses being “banked on the hoof” i.e. invested in livestock. With increasing prosperity men are quick to take new wives and cattle continue to be used as dowries.

B. Intertribal Conflict
The increasing livestock numbers is expected to resulting increasing competition for resources. This often leads to intertribal clashes and the displacement mentioned above.

C. Food as Target:
Although there is always a risk that food aid can become a direct target, this section tries to consider a different angle as southern Sudan has seen food being targeted in other ways. Local power-brokers can win support by attracting food aid. This presents a risk on local insecurity incidents being created for other reasons than competition for water and grazing but is linked to boundaries, land rights, and securing future access to these resources etc.

D. Response to Local Insecurity and Resulting Displacement
Food aid is often part of an ‘emergency’ response following such incidents. Depending on the circumstances this in danger of ‘rewarding’ or playing into the hands of the orchestra’s of the conflict. The same is true even if it is not being deliberately manipulated. Prior to the days of food aid (especially in the Lakes region) cattle were frequently traded for grain from the surplus produced by neighbors. This resulted in a form of livestock off-take. However, this trade can be reduced during times of increased food aid deliveries. To avoid or help resolve conflict livestock off-take or improved livestock trade and marketing could be
considered as amore appropriate solution in order to try and reduce these insecurity incidents. Local traders associations interviewed highlighted that they were avoiding livestock investment because of the high risk of conflict. They can invest profits in stock and but other better wealth groups have few alternative banking alternatives. The traditional ties to livestock, and the role they play in a man’s status and the household’s community linkages, will remain. However, the traditional trade and exchange for grain should be encouraged rather than undermined.

The example above example has been used to make a point here but there are others and this will also be relevant to the way resources are distributed to returnees when the poor, within host populations, may be facing similar challenges to sustain themselves.

V1. FOOD INSECURITY

A. Background
Firstly, with regard to the previous section on malnutrition, being highly food insecure does not appear to be one of the common denominators of mothers with children at feeding centres. Malnutrition trends did not change significantly in years of adequate food access. Mothers interviewed in the recent Aweil assessments reported that they always ensured that children had a groundnut paste for complimentary feeding and/or other adequate food. The majority insisted that food access was not the key problem that resulted in their children attending a feeding centre.

B. Pre-war
Cultivation in the pre-war period was a minor activity in comparison to the levels seen today. For poorer households, sorghum from own production contributes less than 20 per cent of their annual needs. This has meant that a bad crop year, when production falls by half of normal levels will only require a combined expansion of 10 per cent from other sources and this not normally a problem. However, the risk associated with cropping has resulted in a shift away from agriculture and an increase in seeking income from trade and exchange and especially labour exchange.

C. Causes and coping
The food insecurity can be directly attributed to conflict and political/military interference in essential husbandry practice, asset depletion, and the prevention of normal coping activities. Admittedly there have also been poor production years. However, droughts and floods are typical occurrences and a system has evolved that can deal with these events. A very heavy shock, i.e. a combination of both conflict and natural weather variations over a period of years is what eventually breaks the otherwise highly resilient system. Without very careful analysis it is hard to know how close to the edge households are as the system allows increased degrees of coping until it suddenly snaps. At this point in time adequate monitoring is lacking.

One problem of prolonged deliveries food aid in the CPA would be the likely adverse impact on the market dynamics. Over the next 5 years, when the proportions of wealth groups have recovered adequately, the interrelationship between better-off groups and the poor will be paramount in enhancing food security. The poor depend heavily on access to food through labouring for the better-off. Better off groups can strengthen food security by increasing the local availability of staple grains. This occurs when stability and market recovery create increased local demands and resulting incentives to produce. The better-off will then expand there land under cultivation and create increased employment for the poor. Continued food interventions could inhibit this process. Firstly, traders make greater profits from trading food aid than local produced grain, subsidized northern grain or locally produced surpluses. This is because there are no production costs or transport costs. The result is that there is a disincentive to produce as well as to trade locally produced staple. To add to this the poor loose out on vital employment.
The better off wealth groups and traders are keen to mechanize and are requesting tractors. (To date this has been limited and so the risk of labour saving technology displacing the poor labourers has not yet become a problem). They plan to become bigger farmers and avoid livestock as they see this creates intertribal fighting and other forms of conflict. Some of the better off groups have experimented with Ox–ploughs (2-5% of the population). Increased production and better yields have resulted. However, it is interesting to see that the real benefits have come as a result of better tillage rather than the extended area under cultivation. This illustrates that the Dinka are new to farming. Their knowledge of good crop husbandry reflects the more traditional shifting cultivation practice. The concept of soil management, aeration, fertility, moisture holding capacity and factors that affect the release of soil nutrients remains limited. At best some rotation has started with peace and animal manure is used by the wealthier livestock owners. The concept of improved field sanitation and breaking of disease bridges etc is minimal. The place to start improving better staple grain access is here. Post harvest loss production could then follow. In the past, and current practice has not changed, seed was scratched into the soil. Nature did the rest. If a crop followed it simply meant that less cattle would need to be traded. It was seen as a bonus and not a crisis if it failed. The point is that improved crop performance is achievable but it will need an incentive for farmers to develop husbandry skills and to be seen as a risk worth taking. Most decision–makers seek to minimize risk rather than maximize opportunities. Food aid is increasing risk by attempting production, but maximizing an opportunity to profit from trading is considered less risky. For the poor crop production is increasingly regarded as high risk and as a result they have been observed to be expanding trade and labour income sources.

Other key issues that arose from the analysis identified the need for:-
1. market recovery and revitalized trade
2. increased labour opportunities for the poor
3. Increased income opportunities for the poor
4. investment in Human and Social capital

None of the above are likely to benefit significantly from food aid apart from possible Food/Cash For Work (FFW/CFW) initiatives. The damage to roads by the large relief trucks is also hampering market access and forcing traders to take longer alternative routes. Road and other infrastructure development are potential employment opportunities but most of this construction is being undertaken by contractors that are paid in cash. However, food gained through work is not expected to be shared in the same way as food accessed through a general distribution so one benefit would be improved targeting. However, the poor are characteristically labour-poor households and so the better off groups may be the one seeking this employment. There is also the risk of increasing women’s workloads and the resulting detrimental impact on child malnutrition to consider.

Under point four above we need to aware further findings and consensus from the teams involved in the field exercise who agreed that:-
1. The development of Human, Social, and Natural capital was believed to hold the greatest potential to bring about recovery and desired change and noting,
   d. The lack, or very low levels, of education
   e. Low awareness of heath related issues and,
   f. Poor access to basic services, low immunization levels etc.
   g. Poor access to safe portable water
   h. Very low hygiene awareness or adoption of improved practice
   i. The heavy workload of mothers contributing to poor child care practice
2. Changes in the unacceptable levels of malnutrition would only materialize with investment in Education, Water, and resulting changes in practice with regard to current
knowledge, attitudes and behavior relating the child care practice (breast feeding, weaning, the introduction of complimentary foods etc). These would need to come about with better health linked to improved hygiene and sanitation practice.

3. Social capital: The above was linked to current gender inequalities and the heavy work load of mothers, the bride price and early marriages (often to recover asset losses), the very young age of mothers and the impact this has on reduced birth weights and the well-being of the child. And,
   a. The links that all this has on the opportunities for girl children to have any education and the impact this will have on her children and future generations.
   b. The need to break the above cycle, rethink response and intervention strategies, if any change for the better is to become a reality.

4. Natural capital: There were strong indications of environmental degradation and the likelihood of this being accelerated in post CPA recovery period. In additions to concerns over the lower water table and its impact wild foods and fish access that has sustained people in times of hardship more than any other food source. Interestingly, Physical capital did not feature but this type of intervention was prioritized in the past. Financial capital remains somewhat invisible but it was noted that the household’s would benefit from an alternative banking system to livestock that leads to the final section on conflict.

V11. OPPORTUNITY COST

With the 2006 appeals for food aid for Sudan reaching billions of dollars it is surprising that so little of that money is allocated to assessing and analyzing the local economies and livelihoods. But, perhaps more surprising, is that opportunity cost calculations are rarely discussed.

When the air-bridge was running at full capacity in 1998 it was estimated by WFP that a ton of food delivered to NBEG cost close to US 1200 per ton. Allowing for some increases since that time we can conservatively estimate that the budget for 49,000 Mts. planned for 2005 would have been close to US$ 60 million for NBEG deliveries alone. If, for example, 20,000 Mts. had been delivered early in May and June, as a general blanket distribution, the impact might have been expected to larger than what actually happened. In addition, the 29,000 Mts. that were not delivered would have realized a possible saving of US$ 35 million. These resources could, theoretically, have been allocated to some other less developed forms of intervention that express potential to make more of a difference. The above examples have been used only to prompt further comparisons and analysis. There are many others calculations that could be made, for example, relating to interventions that might improve household income. i.e. considering that the cost of delivering two WFP bags represents roughly the total annual income of poor household in BEG (based on the sorghum grain equivalent values found in the SSCCSE/LAF Southern Sudan livelihood profiles).

Since the CPA a rapid recovery has been noted in existing markets and the establishment of new markets. This will greatly enhance food security. Poor households are observed to be expanding income opportunities through trade, petty trade and labour. Crop production is seen as high risk and very poor groups have been observed to prioritize alternative production/income activities because of this. Some are seeking livelihoods that have a more urban orientation. It should be noted that “own crop production” makes a small contribution to poor households who are accessing most of their staple grain through purchase and exchange. The development of more sustainable income opportunities for the poor is seen as holding greater potential for these households. Investing in skills for business development and improved education and communication would be expected to reap benefits.
Shifting scarce resources to roads and infrastructure is another example with regard to addressing the ‘hunger season’, as a recovery of markets and trade has already begun to make a difference over the last year. Market activity would benefit from improved infrastructure as roads remain impassable during the rainy season. These improvements would be expected to have a significant impact on staple availability and access thereby enhancing food security. While a few kilograms of relief food can be consumed in a couple of days; these alternative investments would yield lasting benefits and returns.

With the current food aid programme having such a minor impact (very little return on investment or impact on malnutrition), it would be helpful to run some calculations to assess what could be done with those billions of dollars to address the other underlying causes of malnutrition. Further comparisons against amounts spent on the provision of safe water, improved hygiene, sanitation, child care practice etc could be very enlightening.

Food in kind is not expected to be replaced. However, the cash utilized for Logistics, Transport, Storage and Handling (LTSH costs) would have to be considered to make a realistic and honest comparison. The potential for local purchase and the use of cash may not always been given a ‘level playing field’ when comparative costs have been assessed in the past.

In the post CPA era it will be critical to ensure that resources are allocated differently if sustainable change is the goal. Greater attention to water, health, and education are likely to make a bigger difference. Despite this donor resources remain at risk of being reshuffled to respond to the increasing appeals for food aid when the realities of the problems have not been fully exposed. In a period of peace, the need for food aid would be expected to reduce as the need for investment to address the broader aspects of food security and livelihoods including education water and health etc would be expected to expand. The marketing of surplus production either as crop, or ‘banked’ in livestock could soon be a new concern requiring investment in marketing and trade development.

Even after the CPA, the CAP and other donor funds continue to be dominated by WFP food aid appeals. The media appeals continue to play on a compassionate response expected from an uninformed public. Is this, and the way recent PR and advertising campaigns are being run ethical in the southern Sudan context? What if just some of the billions could be reallocated education of mothers, improved access to safe water, steps to help improve child care practices, hygiene, sanitation practice and access to better health services etc.?

VIII. COMMUNITY PERCEPTIONS

Although this section could have been included in the conclusions, one of the reasons for wanting to run comparative analysis stems from the comments from the field. During focus group discussions and other semi-structured interviews using PRA and RRA techniques communities ranked their needs as 1. Education 2. Water 3. Health

The order of the need listed above varied with some groups composed of women, men and children. However, in all cases security (linked to good/better governance) and food were ranked after these three. This years ANA drew similar conclusions. (WFP 2006 see NBEG section).

When looking at malnutrition mothers related that food was not the main concern. Other WFP analysis has discovered similar cases of this in other assessments (WFP2006-13). Although the
WFP report (WFP, 2004) recommends that local customs and opinions be recognized, and that several studies have clearly identified the need to respond to these issues especially in terms of the distribution strategy, few changes have been observed. The same report also highlights the need for a more integrated approach to address malnutrition outside the standard food response. This has not been observed and the root of the problem may lie in the fact that the lion’s share of resources continues to be consumed by the food delivery operation. (See also HPG Briefing Note 2006). Who influences these decisions?

1X. CONCLUSIONS

Over the next 5 years food security is expected to improve through sustained peace allowing subsistence livelihoods and recovery in the local economies. The marketing of surplus staples may become a constraint, and support to livestock trade will become increasingly important. However, malnutrition rates will not be expected to change if the non-food issues remain unaddressed and without greater investment in human and social capital.

In the past, food relief would have been expected to have had a greater impact if larger quantities were released to all the population before or during a specific and clearly identified period of need, and once a community awareness campaign had been conducted to that effect. When reflecting on figure 1. Two (50kg) bags of relief food per household would bring the contribution closer to 7 per cent of a household’s annual needs. For poorer groups, this could increase with further food access being achieved through increased kin support and labour opportunities, provided that the distributions were timely.

WFP has three key objectives (WFP 2004) of contributing to 1. Improved nutritional status of target person with specific emphasis on women, 2. The prevention of distress migration, and 3. Recovery and rehabilitation of social and economic infrastructure. The WFP report (WFP 2004) recommended a number of actions that could have improved on this but the majority have not been implemented. With regard to the above, point 1. Chronic malnutrition remains unchanged at critical levels. Information specifically on the nutritional status of women is lacking. Regarding point 2, some stress migration can be expected in the parts of the Aweils in 2006 if further shocks occur and/or planned interventions are late and delivered over an extended period. With reference to point 3, the social infrastructure is at risk of being damaged by the undermining of social support systems and the apparent inability to adapt the distribution system to match the social norms. The natural dynamics of the local economies are at risk of being disrupted if food aid deliveries interfere with labour relationships between wealth groups and when food access is adequate. This suggests that the findings of the 2004 brief to the WFP executive board still stand including the recommendation to build on the experience of the TSU in order to strengthen monitoring and analysis. The recommendations are also valid but may need some additions in order to adapt to the post CPA setting. Some of these may relate to the following points-

1. A continuation of the relief food aid operation, in its past/ present form, is not expected to make any sustainable difference to lasting improvements in food and livelihood security in post CPA period.
2. The seasonal food access problems can start be tackled in the CPA era through improvements to trade and recovery of markets, improved husbandry practice for livestock and crops, better care of the environment and recognition of the huge value inherent in the naturally occurring uncultivated foods and non-food resources of southern Sudan.
3. The chronic malnutrition problems need to be addressed through education, and improvements in health, hygiene, sanitation, and child care practices. Further opportunity costs analysis needs to be undertaken to review the best use of scarce resources to help address the problems, causes and other contributing factors identified.

4. Strategies to develop the increased production of sorghum and other staples will need to seriously consider the likely constraints of marketing the resulting surpluses.

5. The SSCCSE/LAF deserves greater recognition and support to allow analytical capacity to develop more rapidly among members and especially to facilitate greater dialogue with the local government authorities and other community leaders.

6. Relevant GOSS ministries need technical support to develop an assessment and regular monitoring capability.

7. A more positive attitude towards women and girls needs to evolve among Sudanese society. Women’s workloads urgently need to be reduced and access to education improved if a better life is to ever become a reality for children and future generations.

With a continuing peace will we see the same level of funds shifting from emergency to recovery and development and how and who will fill the analytical gap to allow better utility of information for future planning and policy development?
References:
Dr Luka Biong Deng (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


Eliaba Damundu and Sharp, B (2005) Food security and livelihoods technical support to the South Sudan Centre of Statistics and Evaluation (SSCSE) Strengthening the new national information centre to benefit planners and policy makers during the transition to peace thereby laying the foundations for a strong government analytical unit for the future. (Draft Proposals)


Kamunge, J and Khachaturia,Y (1998) population assessment and PDM (June and July reports) Lokichokio: WFP.


Shoham , J (2004/5) A review of Food Security Information systems SC-UK


WFP (2004) Summary report of the evaluation of the Sudan emergency operation. Food assistance to populations affected by war and drought. (EMOPs 10048.0/1/2)

WFP (2005) Annual Needs Assessment

**Nutrition reports:**
Action Against Hunger (2006) Nutritional anthropometric survey in Bahr el Bhazal  Feb to March 2006 (ACF South Sudan)


Tear Fund (2003-6) Aweil nutritional reports.

Teshome Feleke, (March 2006) The Nutritional Anthropometric Survey , Report for Aweil West and North Counties, Bahr el Ghazal Region, South Sudan , Concern South Sudan Nutrition Team

UN Standing Committee on Nutrition (2006). Nutrition Information in Crisis Situations; report number VIII.

UNICEF (2005) southern Sudan monthly reports, October and December 2005

**Suggested reading:**
<http://www.rvi.com>

<http://www.rvi.com>

WFP (2004) Summary report of the evaluation of the Sudan emergency operation. Food assistance to populations affected by war and drought. (EMOPs 10048.0/1/2)  
Web sire address  <http://www.wfp.org/eb>