



LIVELIHOOD BASELINE PROFILE: REFUGEE CAMPS

MABAN COUNTY

UPPER NILE STATE , SOUTH SUDAN, 2013

HOUSEHOLD ECONOMY APPROACH

FEG

THE FOOD ECONOMY GROUP



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Notes on the cover photos (by author)

Clockwise from top right: Women cutting firewood; girl queuing for water at tapstand; tree stumps on the outskirts of camp; boy watering vegetable garden; man making charcoal; portrait of girl.

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INTRODUCTION

Special Note

This report is relatively unique as compared with other Household Economy Analysis (HEA) baseline reports. In most cases HEA baseline findings relate to a specific geographical area defined as having a relatively uniform livelihood system, within which and over the course of time, households have capitalised on opportunities to differing degrees, resulting in patterns of livelihoods that are somewhat quantifiable. This report, rather, presents the findings for HEA baseline research done on the livelihood patterns of a newly arrived refugee population. Although not the first time HEA has been used for a refugee population, it is possible that this is the first time it has been done so soon after arrival.

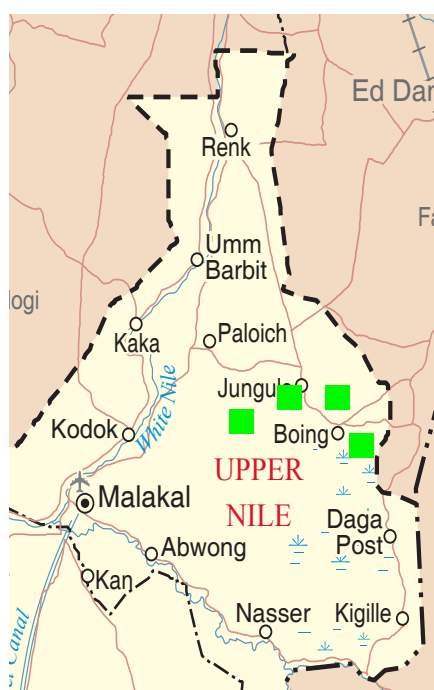
Background & Context

Tension and complications related to previous conflicts, independence of South Sudan, oil, and a "popular consultation" eventually led to conflict in the southern states of Blue Nile and Kordofan of the Republic of Sudan in mid to late 2011 and 2012. The conflict, which included tactics such as burning of crops and villages, resulted in the massive displacement of up to 200,000 people into South Sudan, more than half of which sought refuge in Maban County (Upper Nile State)¹.

The journey made by refugees escaping from Blue Nile state to Maban county typically took several weeks on foot. Most people departed very suddenly, with little time to prepare, and limited opportunity to carry assets or food for the journey. There was massive livestock losses along the way, from disrupted grazing, disease as well as theft and raiding. The journey in itself was a traumatic experience, which followed the traumatic experiences of the new conflict. Refugees arrived in a state of starvation, some with assets and possessions of significance, but most of them without. The rainy season commenced soon after arrival and with it the extensive flooding that is typical of Maban. Malnutrition rates of the refugee population in the middle of 2012 were well above emergency thresholds. MSF surveys reported the



- Area of the refugee camps
- Approximate location of the camps



¹ Source: United Nations High Commissioner for Refugees (UNHCR)

under-fives mortality rate to be above 2 deaths per 10,000 people per day. Livestock diseases and deaths were massive according to anecdotal reports².

An estimated 110,000 refugees are being hosted in four camps spread across Maban with a large number of United Nations (UN) agencies and non-government organisations (NGOs) managing the relief process. Each of the four refugee camps are large enough in their own right to be called towns in most other rural African contexts (from the point of view of the number of residents and the density in which they are living), in particular the two larger camps, with roughly 40,000 residents each.

The local (host) population of Maban is small and sparsely located in remote villages with a maximum of 200 to 300 families each, and mostly very distant from the main road that runs east-west, linking the county capital, Bunj, to the state capital, Malakal. Some villages are located on or near this main road. The four camps are all situated along the main road. The camp furthest to the east is Doro (approximately 40,000 residents³) which is situated within short walking distance of Bunj. A 20 to 30 minute drive to the west is Gendrassa, a smaller, and more well organised camp with around 15,000 residents⁴. A further 10 minute drive to the west is Yusuf Batil camp, a large, sprawling camp with approximately 40,000 residents⁵. The last camp, Jamam, also with around 15,000 residents⁶, is located another one hour drive to the west. Doro, is the only one of the four camps that is located near a larger population centre, the others neighbour small villages only.

An HEA baseline was conducted for Maban county itself at the same time as this baseline was done. The findings are available in the report, "Livelihood Baseline Profile: Maban County" which documents the livelihoods of the host community of Maban for the year 2012. In summary, *"The predominant livelihood system in Maban is sedentary agropastoralism, with the main focus being on farming of food crops, in addition to non-migratory, livestock rearing. Gathering of wild foods is an important supplement to the agropastoralism practiced by all Maban households, including fishing for those villages in the south of the county. Cash-based trade of commodities is very limited in Maban. Most villages are self-sufficient in terms of production of cereals, other food crops and livestock, with significant amounts of exchange of food and labour between households within the village."* From the same report, *"There is an annual migration into the county by the nomadic Falata pastoralists. They arrive into Maban in November with an estimated 200,000 head of livestock seeking grazing areas....depart Maban in May/June, returning to Sudan from where they originate.....the relationship between Falata and Maban communities is a positive one by most accounts."*

Although not investigated in detail during this baseline research, the refugee population practices, broadly speaking, similar livelihood activities as Maban communities. They are sedentarised agropastoralists with a main focus on crops, rearing of livestock including cattle, sheep and goats, and collection of wild foods. According to anecdotal discussions with ministry officials, the livestock herds of the refugee households in their location of origin tended to be larger than the Maban host community herd sizes.

In summary, this baseline research aimed to identify and quantify the newly emerged/emerging livelihood patterns (i.e. since arrival) within the camps. Four key

² Source: Discussions with line ministry and NGO staff, secondary literature

³ Source: UNHCR

⁴ Source: UNHCR

⁵ Source: UNHCR

⁶ Source: UNHCR

factors are crucial to understanding how the livelihoods situation has developed since the refugees arrived.

- By definition, the refugees are being hosted and therefore are not in a position to freely exploit all livelihood opportunities that may present themselves.
- They have been through an upheaval from a livelihoods point of view having fled their location of origin and left behind or lost most of their assets in the process of fleeing.
- They are situated in an area that is extremely remote, very rural and has a tiny economy for all intents and purposes.
- The camps came into existence in a very short period of time. For example, in January 2012, Yusuf Batil was a normal little village. Within six months there were almost 40,000 people living in the once "empty" land adjacent to the village.

Needless to say, patterns of livelihoods need longer than six months to emerge and settle after such upheaval, especially in settlements of such size. It is expected that users of this report keep these important facts in consideration while reading and using this report.

DESCRIPTION OF LIVELIHOOD CAPITALS

Natural Capital

A single rainy season commences in May and continues through to October, peaking July through to September. The average rainfall is not precisely known but is estimated at around 900mm per year. Temperatures are hot in the dry season, often exceeding 45° C in February and March, with extremely low humidity levels. Extensive inundation in the rainy season is a normal pattern in the county as Maban is part of a large, flat flood plain that eventually drains into the White Nile. Several seasonal rivers and streams exist during the rainy season, some of which are located near to the camps, with only one permanent river, the Yabus river, in the south of the county. Vegetation is predominantly savannah ranging from sparse to dense. Extensive grazing opportunities exist in the areas around the camps, with man made *hafir* (rain catchment reservoirs) as the main water source for livestock in the areas of the county where the refugees are situated.

Physical Capital

The main physical capital brought by refugees was livestock; cattle, goats, sheep, donkeys and camels (rare). The *estimated* number of cattle owned by refugees at the end of 2012 was roughly 20,000⁷. The timing and circumstances of departure was a major determinant of the eventual herd size that households managed to maintain upon arrival and registration into the Maban camps. It seems that in general, those that departed earlier in 2012 tended to fare better in terms of arriving with larger herds as they were able to prepare their departure better. Those that waited until the last minute, tended to arrive with fewer animals. The exact reasons for this are complicated and not researched in detail. It is likely to relate to having to sell animals under duress during the escape journey to buy food (at very bad terms of trade), as well as suffering from livestock diseases both along the way and in Maban itself. Luck, or lack thereof, is a factor when it comes to the impact of livestock diseases as rich families with dozens of cattle and goats are just as likely to suffer in the same way as people who brought two cattle and a goat. Although eventually of course, the fewer one starts with, the more likely one is to end up with zero. Births of all livestock type were limited in 2012, most likely due to stress as the timing of the escape journey coincided with the period when animals from Blue Nile normally gestate (birthing

⁷ Ministry of Livestock

normally starts with the onset of the rains). Accordingly, milk production and consumption was minimal during the reference period.

Other physical assets brought to the camps included small personal items, clothing and bedding, basic tools and some cooking equipment. In general, families that have more adult or near-adult males were able to carry more assets. Small grinding stones, which can be mounted into a clay base plate, were carried by households who traveled with sufficient time to prepare. Some families brought firearms.

All households live in tents provided upon arrival by UN agencies and NGOs. Other items including jerry cans and buckets, cooking sets, and basic bedding were provided by the same organisations. Some households have bed frames made locally from bush materials. Water is provided by reticulated piping systems that treat and deliver to tapstands located throughout the camps. A few households have started to cultivate small plots of land to grow vegetables with inputs provided by NGOs. School and health facilities are run by UN agencies and NGOs.

A full ration based on the international standard of 2,100 kilocalories per person per day is distributed monthly. This per person ration includes 15kgs of cereals (mostly sorghum, sometimes maize or wheat), 1.5kgs of a legume (beans, lentils) and 1 liter of cooking oil. Salt and 450g of soap are also distributed on a per person basis.

All the camps have grinding mills which have been set up either by private enterprise or with the support of NGO/UN. These operate on a payment basis, either in cash (ranging from 1 to 2 SSP per 3kg) or a part of the grain that is brought for grinding.

Human Capital

The refugees are mainly of the Ingassena tribe, originating across the border in Blue Nile State of Sudan. People are relatively conversant in the second language, Arabic, however this not at all universal. They are predominantly Muslim. Education levels vary but are mostly low. Polygamy is practiced by men who were mostly better off in the village of origin. There are traditional healers in camps.

Social & Political Capital

Families in the camps are organised according to the village of origin, with the same *sheikh* (chiefs) and *omda* (paramount chiefs) structure acting as the political line of authority. There are regular gatherings of leaders and household representatives.

Various committees have been established in the camps in order to facilitate transfer of information up to authorities as well as dissemination of information to the public. These include women's groups, youth groups, community watch groups, and traders and market committees.

Given the upheaval and trauma of the situation it appears that the normal, pre-crisis wealth-based hierarchy and positioning of households is temporarily less relevant, as there has been an almost-complete "leveling down" of most households to the same basic level. It was difficult to ascertain the subtleties of relationships between households as they relate to each other and their leaders; suffice to say from a livelihoods point of view, all households are reliant in near totality for their water, food, and other basics on external relief agencies (although some remain better off than others).

Financial Capital

Most households arrived into the camps with little or no cash. Many households departed from their villages of origin with insignificant amounts of cash, most likely due to the fact that they are subsistence farmers operating in a low cash economy.

Many of those that did depart and travel with higher levels of cash struggled to find ways to change it at or before the border, and, being unaware about the newness of the South Sudan currency, used it up to buy food on the escape journey. For those that did arrive into the camps with cash, amounts were small, however, sometimes sufficient to start a micro-trading business (described in the Sources of Cash Income section).

Facilities for money transfer from abroad are limited and only available in Bunj.

Element of Luck

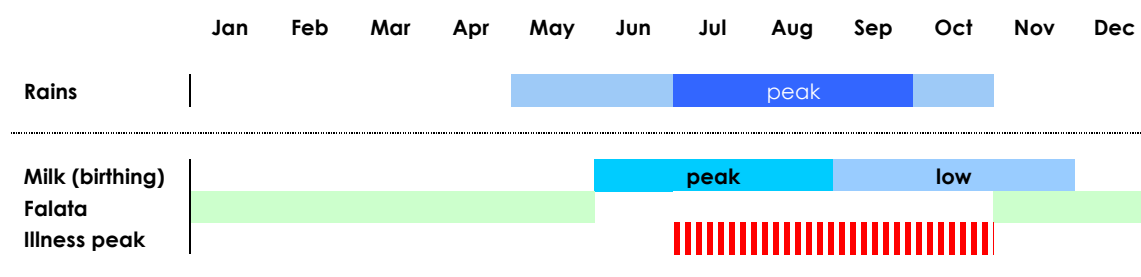
Luck, or at the very least a form of unpredictability, plays an inevitable role in all livelihood systems; rains and crops, livestock and diseases, up and down trade in a shop. Over time, however, ways are developed to conduct the livelihood activity such that it is less unpredictable, more efficiently done and therefore more fruitful. In the case of a new "livelihood system" such as this context, the elements of "luck" play a more significant role than would normally be the case. Better off cattle owners would normally have the chance to purchase vaccines; here their livestock are vulnerable to the same diseases as everyone else as access to veterinary services are limited. Traders will usually determine the most strategic location to sell their firewood, in an attempt to get more consistent sales. In the camps there are so many people trying to sell firewood, literally hundreds of them, that it is almost a matter of luck if one manages to secure a sale, at the very least its not guaranteed. The people who got the unskilled labour jobs were in the right place at the right time. Thousands of others, equally capable people, were less lucky. Over time, the element of luck will play less of a role. However, so far, the outcomes that households realised in their time in the camp, were not only determined by the six livelihood capitals described above, but were also influenced to some degree by this element of luck.

REFERENCE PERIOD

With most refugees arriving in the months of May and June of 2012, the most commonly stated period of consistent presence in the camps was the six months from July to December 2012. HEA methodology normally requires an analysis of a full 12 month period to incorporate all elements and variations of seasonality. The methodology was adjusted to analyse a 6-month period in this case. All findings in this report relate to the July to December 2012 period.

SEASONAL CALENDAR

Given the nature of livelihoods in the camps, with the vast majority of households almost entirely dependent on external relief which is not a function of seasons, there was little seasonal influence on life during the six month reference period. The graph below summarises those elements that were relevant to seasonality.



The rains, and associated flooding and inundation, commence in May and finish in October, with the peak period July to September. Livestock were kept closer to the camps during this period as pastures, browse and water were available in close

proximity. Collection of bush products such as firewood, charcoal, poles and grass thatching generally decreases in the rainy season. Birthing season normally coincides with the onset of the rains.

During the rains diseases such as malaria, respiratory tract infections and diarrhoea were significant. An outbreak of Hepatitis E, reportedly the largest ever in history, started during the reference period and continued up until the time of the field research for this baseline.

The annual migration of the nomadic Falata into Maban commences in November, bringing with them an estimated 200,000 head of livestock. They remain in Maban until May when they return to Sudan. It is widely considered that the Falata and Ingassena are historically antagonistic towards each other. Maban County authorities, in an effort to preempt tension and disputes, facilitated a negotiated agreement between three parties; Maban host authorities, representatives of the Falata, and the head *omdas* of the refugees. The documented and signed agreement (in Arabic and English) covers several crucial areas, most importantly grazing and water access as well as dispute resolution mechanisms. The exact population of Falata that migrates in and out of Maban is not known, however it is estimated at not more than a few thousand families⁸.

MARKETS

Maban historically had only one market centre, in Bunj town. This was a small market mainly serving the non-farming local population that resides in Bunj, the administrative centre and capital of Maban County. Some agricultural commodities sourced from rural farmers within Maban are traded here, including sesame, honey, some cereals, vegetables, fish, livestock, bush products and wild foods (but volume of all of these is minimal). The arrival and settlement of such a large number of refugees led to the spontaneous establishment of a new, and now more vibrant, market situated in Yusuf Batil Camp. The other two camps, both of them smaller than Doro and Yusuf Batil, are serviced by a small collection of shops and traders, rather than a market as such.

There is a wide range of commodities in the markets; staples, sugar, vegetables, tea, coffee, snacks, bread, spices, tobacco, cigarettes, soda, batteries, cosmetics, clothes, shoes, cooking utensils, traditional medicines, restaurants, shisha stalls and coffee houses. Most of the commodities are transported from distant markets in other states of South Sudan, as well as imported from Ethiopia and Sudan. Shops are owned by refugees and non-refugees. Interestingly however, except for sugar, tea, coffee, meat and vegetables the majority of these commodities are rarely purchased by most households due to shortages in availability of cash.

Wooden poles for construction tend to be sold from a centralised “wood market” where wood cutters bring their items in the hope that their items will be sold. Charcoal is sold in shops scattered around both Bunj and Yusuf Batil markets as well as in the shops of the other camps. Labourers gather near the offices of the NGOs which are mostly located within the camps. The degree of over supply of labour compared with demand cannot be overstated. Tens of thousands of people do not have work, and probably most of them will struggle to find work during their stay in Maban.

A large proportion of the sorghum and cooking oil in both markets is sourced from the sale of rations (described in more detail in the sources of income section below).

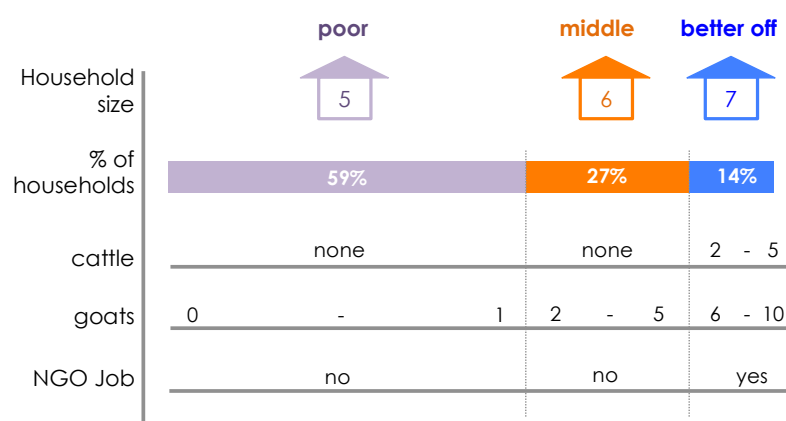
⁸ Source: Ministry of Livestock

Meat sold in Yusuf Batil market is from the sale of refugee and Falata livestock. Falata also bring milk for sale or barter into the camps.

More detailed information on markets and specific commodities in Maban is available in the special report "Rapid Market Assessment; Maban County 2013" which used the Emergency Mapping and Market Analysis methodology. This includes findings on changes to the market and commodity systems of Maban pre- and post-arrival of refugees.

WEALTH BREAKDOWN

Approximately 86% of the population of the camps is entirely dependent on assistance from relief agencies. There are minor variations amongst these households, in terms of opportunities they are accessing to earn very minimal amounts of cash. However, in reality, the differences are not yet significant, in terms of different categories of "wealth". The remaining 14% are those households who have managed in the short time so far to capitalise on work opportunities, or, who retained a reasonable herd size, in particular cattle. Presented in the graph below is a summary of the main characteristics that differentiate households in the camps for the reference period July to December 2012.



There were two very obvious and easily identifiable categories of households within the camps. The first of these, and without doubt the most well off people in the camps, are either those with jobs with NGOs, or, with a significant remaining herd size of cattle and other livestock, or both. Such households, make up roughly 14% of all households in the camps. They tend to have slightly higher household sizes, around 7 members, usually with one or more adult males that works. For jobs such as teachers, hygiene promoters, water supply technicians, nurses, etc ability to get a job was related to skill level and does not require an adult male necessarily as women are also working in such positions. For the majority of daily work opportunities, such as digging, construction, distribution of relief items, loading and unloading trucks, guarding, etc, the main element was luck, and to a lesser degree skill, as these men were selected (by NGOs) amongst hundreds, if not thousands, of other men looking for work in the early days of camp set up. Most of the people who got their jobs in the early days of the camp set up managed to keep their jobs (albeit mostly on a "daily basis") as employers have preferred to keep people whom they already know are reliable. For those households with cattle and other livestock, they either left Blue Nile State with larger herds than most others therefore remained with at least sufficient numbers to earn a livelihood, or in some cases, by virtue of luck, were less affected by the livestock diseases that caused massive deaths in 2012. These households own 2 to 5 head of cattle (av. 4), around 6 or so goats/sheep (up to 10), and some have a donkey and cart. In the above graph this category are called better off.

In reality of course this is a heterogeneous category; some focus more on livestock with few or no days a month of work with NGOs, while others have no cattle and work most of the month with NGOs, and, there are many households with combinations in between. What makes these households somewhat similar, however, is that they are earning significantly more than everyone else in the camp, 500% more than the next category of households.

The second easily identifiable category of households described by community and village leaders, were those at the opposite end of the income-earning spectrum. A homogenous group who earn no money except from the sale of food rations. They are the clear majority, at almost 60% of all households in the camps. They arrived at the camp with no cash, they have no cattle, and in most cases no goats. Some have one goat. Their household size is smaller at 5 members. Some have no adult males able to work, however the majority do have an adult male but have not been lucky enough to find work. This group also includes female-headed households, elderly households, orphaned households, and split households (adult males stayed in Blue Nile). In the above graph these households are called poor.

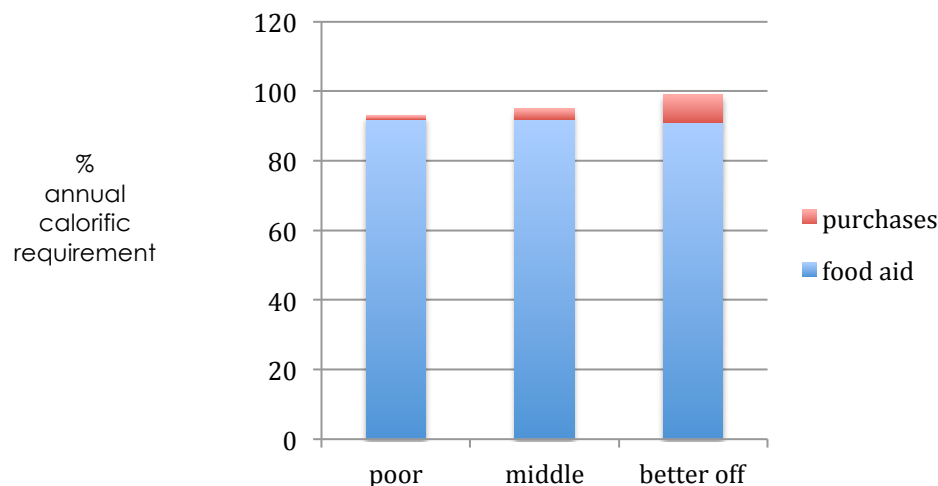
Between these two very clearly definable groups are the remaining roughly 27% of households, who in the above graph are called middle. In reality, they are not significantly different to the poor in terms of what they earn and purchase (as will be described in the income and expenditure sections below). These households typically have around 6 members. They do not have jobs with NGOs, they also do not own cattle. Most such households have 2 to 5 goats or sheep (av. 4). However, from an income earning potential what separates these households from the poor is that they are either have a skill in pole cutting or charcoal burning (and other associated work related to bush products), or, they arrived in the camp with a very small amount of money, but sufficient to purchase something of value that can be on-sold at a slight profit margin. It is common to see these micro-vendors in the camps; selling little piles (*rotol* or *kam*) of dried okra, sugar, onions, chilies, tea and coffee and various other commodities. Again, these are a relatively heterogeneous group with a wide range of ways of earning their little bit of income. They are grouped together due to the fact that they earn roughly similar amounts when averaged over time.

The likely explanation for the difference between the household sizes increasing with income, is not that the higher the number the more being earned, rather the other way around. The more that is being earned by a household, the more likely they are to be assisting or "hosting" members of other households who are struggling (living in, just present for some meals, gifts, etc). In HEA, the term "household" is not interchangeable with "family". "Household" in HEA refers to all those "eating from the same pot", in other words those contributing and consuming resources within a discrete economic unit. It means that if a family of 6 people is taking care of 2 children from another family of 5 people, the respective household sizes are 8 and 3.

It is crucial to keep in mind that these groups are not cut-and-dry discrete wealth groups. There is a whole range of households that have various combinations of the above, and even some that are different altogether (those who operate donkey-pulled ambulances, those who own shops, and various other types). They were conceptually grouped by community leaders into one of the above three categories. This is the inevitable nature of a livelihoods situation that is totally new without sufficient time to settle into more discrete groupings and patterns.

SOURCES OF FOOD

The following graph presents a summary of the total food sources by wealth group for the reference period July to December 2012. Food is presented in percentage terms and as a proportion of the calorific requirement of the household for the six months of the reference period, based on the international standard 2,100 kilocalories (kcal) per person per day. Poor households typically met around 93% of the 2,100 kcal threshold. Middle households on average met around 96% of requirements. Better off households on average reached 100% of the 2,100 kcal threshold.



Poor Households

Consumption of the food ration provided around 92% of the total kilocalorie requirements. The deficit is due mainly to sale of rations. If not sold the ration would fulfill the 100% requirement. To a lesser degree the deficit is due to some interruptions in the pipeline in the early period of settlement in the camp. The combined total of the very insignificant amounts of meat, onions, okra and sugar that were purchased contributed just over 1% of calories. Occasionally wild leaves and nuts (mainly lalof) are collected from the bush around the camps.

The theoretically logical thing for households to do is to keep their ration so that they meet their total kilocalorie requirement. However, the sheer boredom of eating sorghum and beans, sorghum and beans, every day, without garlic, spices, onions, or anything else to add flavour, for thirty days, pushes people to forfeit some of their ration in favour of "more interesting" food. Purchase of foods takes place in the days immediately following the distribution of rations (usually at the start of the month), when some of the cereal and cooking oil is sold. The amounts purchased are very minimal. One to two small cups of sugar are purchased with enough tea leaves just to "colour the water". Less than 200g of low-grade meat (usually the parts sold cheaply by butchers) are used to make a very light broth. Side dishes are prepared with the single purchased onion as well as the two small cups of dried okra. This day or two of simple pleasures at the start of the month are countered by a few days of meal reductions at the end of the month. In balance, there is a deficit of around 8%.

Middle Households

The situation for middle household is roughly the same as for the poor. Around 92% of calories are provided from the ration (similarly, they sell a proportion). Purchases make up just over 3%. The exact same list of items are purchased as for the poor but in amounts roughly triple, meaning these households can enjoy 5 or so days in a month of a little bit of diversity in the diet.

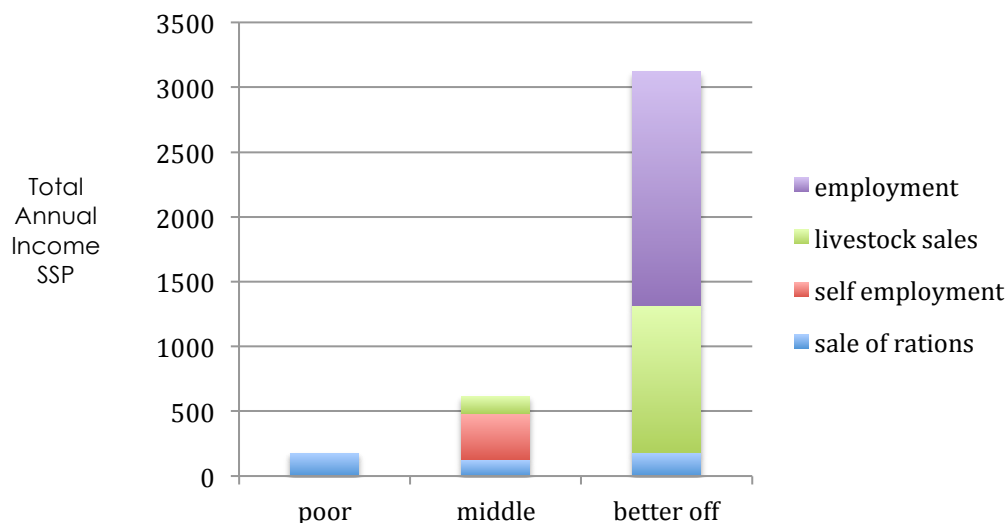
Better Off Households

Better off households surprisingly also sell a proportion of their rations, but more so for simple cash flow purposes than for diversifying the diet *per se* (ration not necessarily sold just after distribution). The ration provides around 91% of their calorific needs. Remaining calories come from purchases, roughly 8%. The calories from purchases are mostly accounted for by sugar, but also come from the purchase of okra, onions, meat and a little bit of sorghum which they buy from time to time when there is a delay in the ration distribution, or in the case of guests suddenly arriving.

Better off households sporadically buy many other food items including meals in the market, biscuits, bread, candies, tomatoes and other vegetables, more beans, lentils and other legumes, milk, spices and various other commodities available in the market. These items do not reflect in the above analysis of foods consumed, because, when considered individually they are not typically purchased. However, better off people report that they consume such products from time to time, and the market is sufficiently busy in the trade of such commodities that it is certain they are being purchased and consumed.

SOURCES OF CASH INCOME

The graph below presents a summary of the various income sources by household for the reference period July to December 2012. Amounts are in South Sudanese Pounds (SSP). Poor, middle, and better off households earned approximately SSP 175, SSP 615 and SSP 3,120 respectively for the six month reference period. Converted to USD per person per day equivalents (based on the normal trading rate of SSP 4 per USD 1) this is roughly \$0.05 pppd for poor households, \$0.14 pppd for middle and \$0.61 pppd for better off.



Poor Households

The poor have only one income source, the sale of rations on a monthly basis. From this they earn roughly 30 SSP per month. They sell sorghum and cooking oil primarily, and typically in the days immediately after distribution. Each 3kg can (*malua*) of sorghum sold earns the households 5 SSP. Each litre of oil sold will earn the household around 4 to 6 SSP.

Middle Households

Middle households earned just over 100 SSP per month, usually from three sources including the sale of rations, low-level trading, and the sale of a goat at some stage

during the six month reference period. Ration sales earned households around 20 SSP per month. The most important source of income for these households, both in terms of amount and consistency, was the ongoing sale of firewood (which requires a license with a once-off fee), micro-vending of small amounts of sugar, okra, onions, chilies, etc, or the less-regular sale of large charcoal bags. On average, middle household managed to earn around 60 SSP per month from this source. There is some degree of variation by camp. In Gendrassa, for example, there was very little trade of wood and other bush products. Instead, the middle here earned their money from micro-trading and butchering and other activities.

Middle households typically remained with a small herd of goats at the start of the reference period. Most of them sold one goat during the reference period with goats typically being sold at around 130 SSP. It is possible that there is some degree of double counting of incomes here. These households required some start-up capital to commence their micro-trading be it to purchase the wood-cutting license or the large bag of sugar (or other item) to later sell in small volumes. Some of these households may have started the reference period with that small amount of capital, while others probably sold a goat to get that capital (in which case the amount is double counted in the total income.) However, it was not possible to come to a clear answer on this matter so it is included as income in the analysis.

Better Off Households

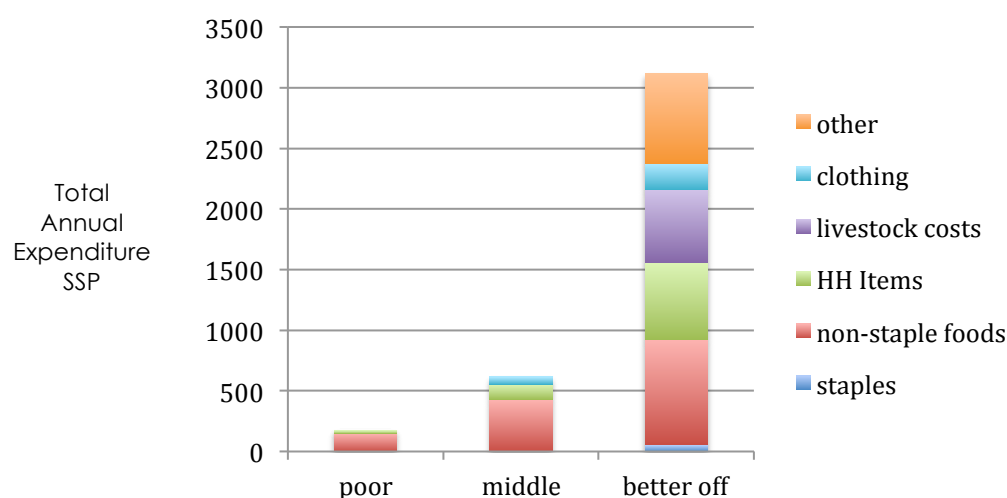
Better off households earned just over 500 SSP per month during the reference period, five times more per month than the middle. Around 30 SSP per month was earned from the sale of rations (cereals and cooking oil). The remaining two sources of income for these households were sale of livestock and employment with NGOs and other such organisations. The analysis, represented by the graph above, gives the impression that such households earned a certain amount from livestock sales, *and* a certain amount from their work with organisations. In reality there are many "combinations and variations" within this group; those that focus and earn more from their livestock herd, those with fewer animals but a reasonably consistent amount of work from organisations, and those with a bit of both but to differing degrees. What is represented in the graph is an average that takes into account the patterns observed in the field work.

On average, households sold a cow and three goats during the reference period, cows typically selling for around 700 to 800 SSP in the camps, and goats selling for around 130 SSP each (total almost 1,150 SSP for the six month period). It is difficult to predict the extent to which sale of livestock will remain to be a cash-earning option for middle and better off households. There is the possibility that they will deplete herd sizes to unsustainable levels, however, this would require that sales outnumber births. The data on births in the reference period (i.e. low birth rates for all animal types) may not be relevant for the future year or so as it is likely, given the period of stability and adaptation in the last six to nine months since arrival, livestock will return to somewhat more normal patterns of gestation and birthing.

Incomes earned from work with NGOs vary a lot, depending on the number of days worked, the skill level required and the organisation paying. The minimum amount earned per month per household is around 200 SSP per month (lower skilled daily work) while there are those earning up to 500 SSP plus per month (higher skilled work such as teaching and nursing). On average the amount is around 300 SSP. Daily wages range from SSP 20 to SSP 25 depending on the level of skill required (increasing to SSP 30 at time of fieldwork).

EXPENDITURE PATTERNS

The graph below presents a summary of the total expenditure by household type for the reference period July to December 2012. Amounts are in South Sudanese Pounds (SSP).



Poor Households

Poor households spent the majority of their disposable income on the sugar, meat, okra and onions described in the food sources section above, around SSP 150. The remaining money, roughly 25 SSP, was spent on tea and a small amount of salt from time to time to top up what is provided in the ration.

These households grind their grain by hand using grinding stones they own or borrow. This presents no impact on labour-seeking opportunities as time availability is not a limiting factor in this context. Soap is provided for free on a monthly basis by relief organisations. Health services are provided free.

Middle Households

Similarly to the poor, middle households spent the majority of their income on the food items described above, approximately 430 SSP across the six month reference period. They spent between 80 and 90 SSP on tea/coffee and salt. Roughly 40 SSP was spent on paying for grinding which they do only occasionally. Their remaining money, around 60 SSP was spent on clothing.

As for all other households, soap, medical services and school are provided free of charge by organisations.

The proportion of households that have licenses for collection of wood is not clear. Most households in this category rely on harvest of bush products. It is likely that many of them have licenses, also likely that many do not. Expenditure on these licenses does not reflect in the analysis but is certain to be a cost for many of these households. The cost of the license is roughly SSP 160. As many households do this work without the license, i.e. illegally, information was difficult to ascertain with clarity.

Better Off Households

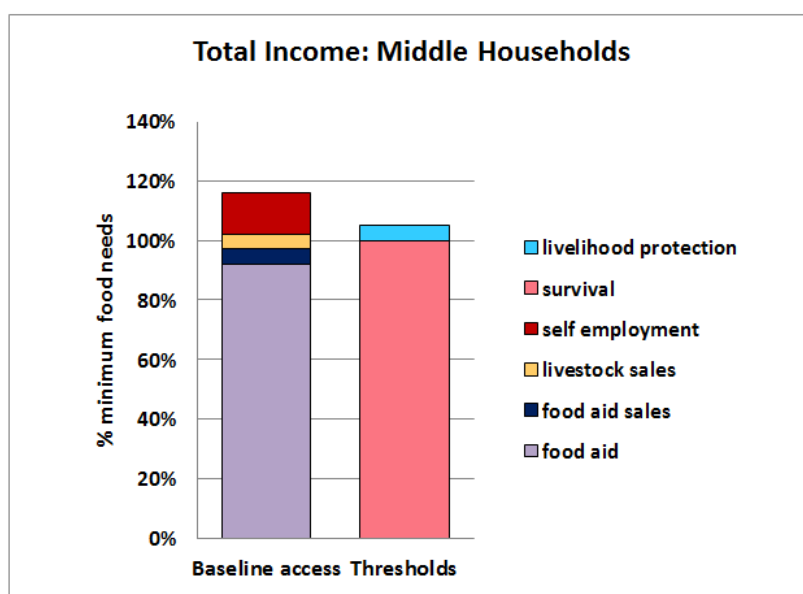
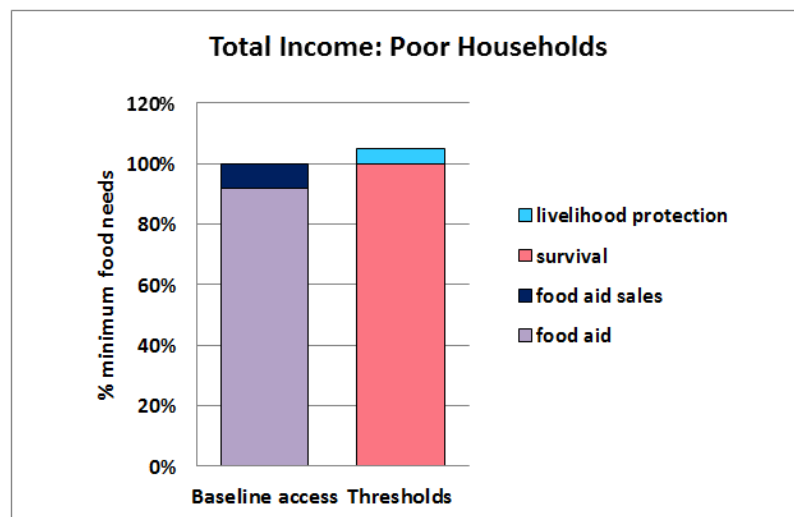
Better off households had the widest range of expenditure, as well as the highest amount. They purchased items including sugar, okra, meat and onions but in larger quantities than other household types, in total more than 850 SSP across the reference period. They also spent roughly 50 SSP on sorghum which they bought in small amounts on a sporadic basis. Analysis of the expenditure on tea and coffee, as

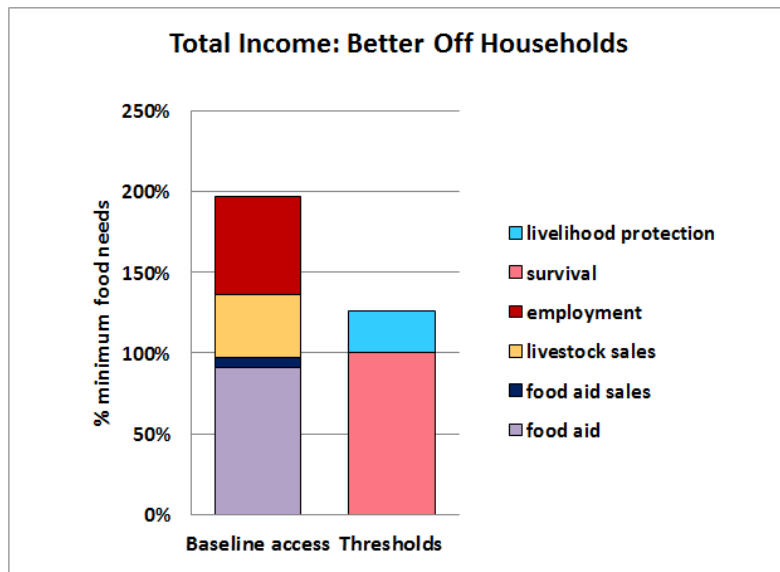
well as salt, shows a dramatic increase in expenditure, almost 350 SSP for the reference period.

Better off households spent almost 250 SSP on grinding, which corresponds to around a half to two-thirds of the cereals they consume. The remainder was ground by hand. They spent just over 200 SSP on clothing, 60 SSP on batteries, and a significant amount, almost 750 SSP, on items such as tobacco and cigarettes, shisha shops, and large range of commodities including skin creams and cosmetics, etc.

Better off households with cattle spent roughly 600 SSP on paying someone to graze and tend to their herd. This expenditure does not reflect as income for the poor or middle as there are too many of these households for the small number being paid by the better off to appear significant and typical as a pattern. Suffice to say, that given the monthly amount of roughly 100 SSP, households being paid to care for cattle would be in the income category of the middle.

SURVIVAL AND LIVELIHOOD PROTECTION THRESHOLDS





The above graphs show estimates of the total income for the baseline period combining food plus cash incomes (presented on the left). On the right side is the graph that presents the survival threshold (indicated in pink) and the livelihoods protection threshold (indicated in light blue).

The survival threshold is normally set to slightly above 100% to account for all food needs required for survival as well as the expenditure for basic amounts of salt, soap, cooking fuel and water for human consumption. However, given that salt, soap and water are provided free of charge by NGOs, and that firewood for cooking is freely available nearby the camps, the survival threshold is set at exactly 100% in this case.

The livelihood protection basket is the total expenditure over and above the survival basket, required to maintain and protect livelihood production. It includes expenditure on productive inputs (set at 100% of the value the respective wealth group made in the reference period) as well as other items related to standard of living which have been set to a value between 25% and 100% of the expenditure made by poor households in the reference period (including clothes, non-staple food items, basic non-food items, etc).

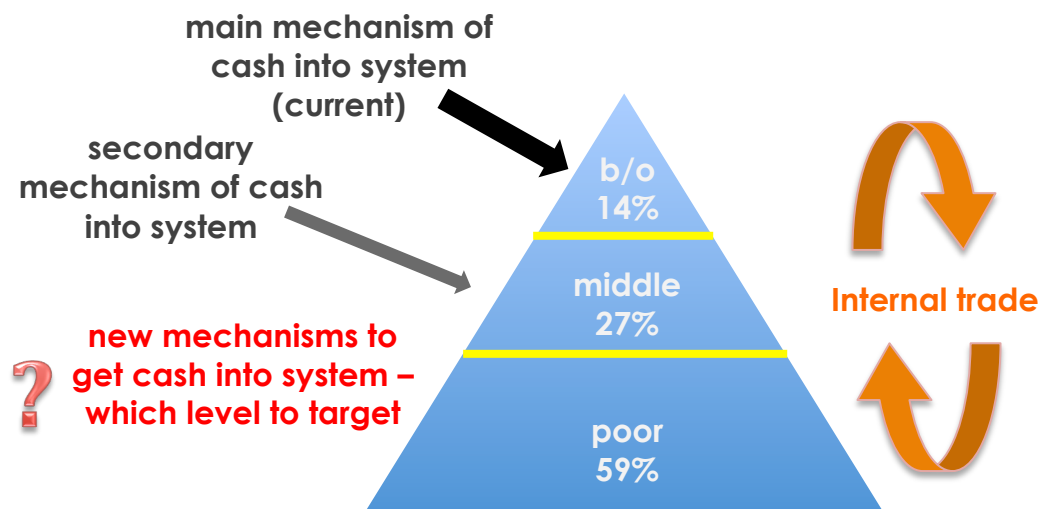
The survival threshold for poor households, including food and non-food is 2,116 SSP and the livelihoods protection threshold is 2230 SSP. Survival and livelihoods protection thresholds for middle households are 2,539 SSP and 2,675 SSP respectively. Survival and livelihoods protection thresholds for better off households are 2,962 SSP and 3,721 SSP respectively.

OPPORTUNITIES AND CONSTRAINTS

It is most likely that the largest source of cash entering the "economy" of the camps is payments and salaries paid by UN and NGOs for products such as charcoal and poles, labour, and specialised services such as nursing, health promotion and teaching. Some cash will enter the system from the local Maban economy (villagers and residents of Bunj spending their money in the camps), however this will be very limited as the Maban economy itself is structurally not a cash-generating or cash-rich economy. At the same time there will be "leakage" of cash out of the system. Suppliers and traders who originate from Maban, as well as other parts of the country, and the villagers who bring commodities to sell in the camps, will all take money with them out of the system. Over time, the cash that remains in the system slowly

disseminates down the economic pyramid through internal trade (see graph below). The total volume of cash is necessarily limited by the total amount paid into the system, and after hypothetically “disseminating down” would be quite low on a per household basis. There will of course, over time, be gradual accumulation of total cash as month by month more money is inputted.

In consideration of this type of economic system, do agencies wishing to conduct food security and livelihood interventions, aim to:



- increase the size of the economy in the camp(s) through mechanisms that increase the total cash in the system,
- facilitate the dissemination of the existing cash in the economy from better off households down to poorer households through internal trade, or,
- both of the above.

Below are various ideas and options (not an exhaustive list) that might be considered in regards to addressing any of the above goals. Some of the proposed ideas below have a non-economic benefit; the gardens and the reforestation. It is important to consider also that the primary target group may, for example, be the poor, but the most realistic mechanism maybe an indirect one, e.g. support better off people with cattle so that they spend more on the micro-businesses of the poor.

Vaccination and Veterinary Services

Herd protection and expansion are likely to be effective ways to improve the economy of the camps. The ecosystem is conducive to livestock keeping, the camp population are experienced in livestock rearing, and there is a demand for meat and milk within the camp, in Maban county, and perhaps even outside the county. A systematic approach to servicing livestock owned by camp residents is the most effective way to facilitate maintaining and slowly rebuilding herd sizes. Services should be paid for, as most households who have such herds, have the cash to make the payments. It might be worth considering using a voucher system for poor and middle households who have small numbers of goats (1 to 3), whereby they can get their animals vaccinated or attended to by a veterinary technician without having to spend the very small sum of money they currently earn. It is not recommended to conduct a distribution of livestock, free or at cost, for any household type. Such distributions are challenging enough in normal rural contexts, much more so in camp contexts where herd management is much more complicated. Similarly, destocking is not recommended.

Remittances and Cash Grants

Much more detailed research would be needed, but the possibility of facilitating remittances, and/or, provision of cash grants could be considered as a means for injecting capital into the camp economy.

Due to the long history of conflict in Sudan and South Sudan there are many people who have left their village of origin and live in Ethiopia, Kenya, Uganda, Khartoum and other places. Some of these would be in a position to remit cash to relatives now in the camps. With the current facilities this would be challenging. If research showed that in fact this could be a viable mechanism for introducing cash into the economy, steps could be taken to facilitate businesses who specialise in this service. This could be a mobile-phone based money transfer system as is used in Kenya with technology support from companies such as Vodaphone⁹, or alternatively, a more standard version that doesn't require mobile phone technology. Safeguards would need to be put in place to prevent the system being used to finance militarised groups operating in the region. This would clearly be an open-targeting intervention.

Similarly, with more detailed research, it might be considered valuable to use cash grants as a means of increasing the money in the system. These should be carefully and specifically targeted at those near the bottom of the above pyramid. Presumably a relatively flexible package would work best, allowing for households to make their own decisions about how best they can capitalise on the opportunity. It is recommended to allow the "market" and people's own creativity to drive the development of income earning options, rather than an NGO present the standard range of "income generating activities". The bottom 20% of households in a camp could be given the option of 12 monthly grants of, for example, 50 SSP, or alternatively, a single grant of 600 SSP. The former would enable them to purchase the small commodities they are currently purchasing; sugar, okra, onions, etc. The second option would enable those with an entrepreneurial idea to invest in something; buying some livestock, or making a little tea shop, etc. A targeting mechanism based on criteria and characteristics would be the basis of selecting the worst off 20% from the poor group; for example it might be households that have no male present in the camp (separated, widowed, etc). Taking Yusuf Batil as an example, with roughly 8,500 registered families, this would mean cash grants to 1,700 households. Again, extensive research would be needed to determine an amount considered relevant (the above figures are just examples), as well as a realistic mechanism for the targeting and distribution. A useful alternative (or additional option) to straightforward cash grants, relating to the recommendation below, would be to employ people from poor households in tree nurseries and to a greater degree doing post-planting sapling care aimed at the reforestation of the areas around the camps. More standard and classic "cash-for-work" type projects on infrastructure etc are not particularly relevant in the Maban context given its remote and rural nature.

SPHERE and the Natural Environment

It is easy to form the impression from visiting the areas of bush near the camps that there is a pending environmental crisis. Trees are cut for constructing latrines and buildings and for making charcoal. Every meal cooked, for 110,000 people, is done so using firewood sourced from the nearby bush. If there are 22,000 households in the four camps, each of them hypothetically burning one small-medium size tree a month for cooking purposes, in one year alone, a quarter of a million trees have been cut down. In four years, the figure would be one million. This doesn't even include latrines and other buildings. Detailed research would be needed to determine whether this is in fact something to be worried about, or whether the carrying

⁹ http://www.vodafone.com/content/index/about/foundation/instant_network.html

capacity of the ecosystem is sufficient to sustain such a rate of exploitation. If it is found to indeed be a looming problem, various strategies could be considered.

- Encouraging the strict adherence to and policing of the current Department of Forestry license system to avoid reckless and uncontrolled over-exploitation. Note that the existing licensing system relates to the harvesting of live trees for purposes such as charcoal, poles, etc. Small household firewood is collected freely by camp residents from trees that have naturally died and dried over time. This latter harvesting is not included, nor should be included, in the licensing system.
- Investigation of feasibility of the use of other fuels (transported by road of course)
- Replanting of trees – “for every stump a new tree” – combined with the licensing system, supported with and through the Department of Forestry, a programme of production of multi-species saplings and caring for newly transplanted trees.
- Investigation of locally-appropriate fuel efficient stoves that are proven to reduce wood use.
- Simple solar ovens using parabolic reflectors for the cooking of beans and other such dishes (the traditional method of preparation of sorghum precludes the possibility of using a solar oven as it needs constant stirring).
- Investigate viability of changing the prevailing construction technique from wood frames, to sand bag construction or mud bricks.

In summary, the UN and NGO community has a duty of care towards Maban's natural resources and ecosystem. The Shelter and Settlement Standard 5 of the SPHERE Project, titled “Environmental Impact” specifies no less than 3 key actions and Guidance Notes 3, 4, 5 and 6 in regards to this very important issue.

Growing Vegetables

Expansion and facilitation of cultivation of basic crops including okra and onions within the camp would be a very effective intervention. It would reduce expenditure burden, increase dietary diversity and reduce the eating boredom by enabling more meals to be consumed with tasty side dishes. It could even contribute to household income. Other vegetables could include chili, garlic, tomato and pumpkin, however it would probably make sense to focus on foods that are already proven to be in high demand, onions and okra. Children can already be seen working on small plots in the camps, so it shouldn't take much in terms of inputs to facilitate an expansion. The focus should be on households at the bottom of the wealth pyramid. If space within the ground of the camp is an issue it might be worth considering standing gardens located near people's tents. Sacks are filled with soil, stood up, and planted with seeds. These are less likely to be attacked by goats as they are nearby people's tents. Agricultural land for cultivation of cereals and foods other than vegetables is not available in sufficient size in the areas of the camps, nor is it known whether the government of South Sudan would even allow cultivation of such crops. The feasibility of promoting vegetable cultivation within the camps during the dry season is obviously dependent on the amount of water provided by NGOs. Current water production levels are not sufficient to support a major increase in vegetable production. Other vegetable types that are cultivated during the rainy season would clearly have no lack of water.

Annex: Notes on the Methodology

The fieldwork for this baseline was completed in January and February 2013 by the team mentioned in the acknowledgements. The findings refer to the period July 2012 to December 2012, the reference period mentioned in the report, and hereafter considered the baseline period. The following is a summary of the methodology of the research.

- Read all material provided prior to fieldwork as well as various online sources.
- Visited relevant line ministries (agriculture and forestry, livestock) and administrative offices.
- Meeting with NGOs that are involved in livelihoods and food security activities in the camps and/or with Maban host communities.
- Fieldwork was conducted in two of the four camps; Yusuf Batil and Gendrasa. Doro was excluded during discussions with the above mentioned NGOs as it was considered firstly to be better off than the other three camps, and likely different in terms of livelihoods (limited amounts of livestock owned). The remaining three camps were considered more uniform in terms of the likely livelihood characteristics and therefore suitable for data collection using HEA methodology.
- Met with camp managers. Met with chief *omda*, as well as other main *omda* of the camps. Camps are structured from an administrative point of view according to the village of origin with the same leaders in place. A list of 9 "villages" considered relatively typical of the two camps was provided by these main leaders.
- Each "village" required three visits as described below.
 - an initial visit to inform village leaders of the research and to request an appropriate time to visit,
 - a second visit (usually the following day) to discuss in detail aspects of seasonality, wealth categories, and other aspects of livelihoods in the camps with village leaders and others considered to be knowledgeable of the community,
 - a third visit (usually the following day) to meet representatives of the wealth groups to discuss the 6 month period July to December 2012 with full analysis of food sources, income sources and expenditure.
- Complete sets of data were collected in the following "villages" within the two camps:
 - Kukur Al Garabia
 - Ahmar Bilut
 - Sharik
 - Teufur
 - Mirk
 - Madrisl
 - Ejo
 - Dera
 - Block P
- Definition of the wealth categories was done by village leaders and other knowledgeable community representatives. As described in the report the most easily identifiable and describable groups in the camps were those at the top of the livelihood/wealth spectrum (those with jobs with NGOs, or with cattle, or both) and those at the bottom (those who earn no money except from the sale of rations). Various other "wealth groups" were described, including traders, wood and bush product collectors, micro-vendors, those who provide services such as transport for NGOs, butchers, etc. Taken individually only two of these groups was significant in number (those who collect wood and other bush products, as well as micro-vendors) and they were eventually categorised into a single wealth

group (perhaps more accurately, an "income bracket group") as they earn roughly similar amounts per month. These were called the middle.

- The selection of the reference period, July to December 2012, was determined by the period of time in which the majority of refugees have been fully resident in the camps (i.e. registered and receiving rations, etc). This is also the period of set up of the camps, especially from a livelihoods point of view, so it clearly represents a very dynamic period of time. It is likely that in 12 or so months time the livelihoods situation will not be the same as it was during the reference period as it will have had time to settle and develop in new directions.