ASSESSING REFUGEE SELF-RELIANCE: A FOOD ECONOMY ASSESSMENT

Kountaya and Telikoro Refugee Camps, Kissidougou, Guinea

September-October 2002

1. OBJECTIVES

This assessment was a component of a study of the self-reliance of refugees in Guinea that had objectives:

1) To recommend ways to target food and non-food assistance in 2003.
2) To identify target households for intervention to improve self-reliance so that:
   - general assistance could be reduced without harming the most vulnerable, or
   - some refugees could achieve a level of self-reliance so that they would no longer need certain types of assistance

The specific objectives of the assessment were:

1) To assess the current level of self-reliance of the refugees living in Kountaya and Telikoro camps
2) To identify characteristics of households that were the most and least self-reliant
3) To understand how refugees were becoming self-reliant
4) To identify factors that enabled or constrained refugee self-reliance
5) To identify action that would promote refugee self-reliance, especially for those who were least self-reliant or those who were nearly fully self-reliant

2. BACKGROUND

2.1 HISTORY OF CAMPS

Kountaya and Telikoro refugee camps were established and settled in 2001. The refugees installed that year were largely Sierra Leonean, with a Liberian minority. Most of the refugees had lived for three to ten years in camps in the forested region of Guinea referred to as the "*Languette*" (because on the map it resembles a tongue [*langue* in French] jutting into Sierra Leone), close to the border between Sierra Leone and Liberia. During the final months of 2000, rebel conflicts in the *Languette* drove part of the refugee population back into their home country. Many that remained were assisted to move north, farther from the border, into the region of Albadaria. Some chose to stay without assistance in the *Languette*.

Three camps were established to receive the refugees, including Kountaya and Telikoro. The two camps, though separated administratively, are physically adjacent to one another, forming a continuous whole.

In October 2001, facilitated repatriation to Sierra Leone began and continued through the study period. Returns to Sierra Leone slowed in mid 2002 with the onset of rains, the rice planting season, and limited UNHCR resources.

Early in 2002 conflicts in Liberia drove new refugees across the border into Guinea. Until August, these refugees were installed in camps in southeastern Guinea. Then, in early August transfers to Kountaya and Telikoro began. In addition there were some spontaneous and assisted moves into the camps of refugees who had been living without assistance in the *Languette* or urban centers.

3. METHODS

3.1 FOOD ECONOMY ASSESSMENT:

This study followed the approach of a food economy assessment[1], which focuses on quantitative estimates of: household income, household expenditures, and the proportional contributions from different sources of food eaten by the household. Comparison allows cross-checks of the information to assure credibility. Data collection continues until there is correspondence between the estimates of income and spending, and that the quantity of food received from the various sources is enough to assure survival. This multi-faceted approach with cross verification is useful when seeking information about sensitive matters such as income and spending.

The basic framework of data collection for food economy assessments includes income ranking of the target community by key informants from the community, followed by interviews with members of the different economic groups identified, one group at a time. The interviews focus on key determining factors of economic well being, i.e., food assistance and production and income generation, and key manifestations, i.e., diet and spending. To assure coverage and cross-checking, it is customary to interview more than one small group from the same economic group. To encourage participation of all members, each group is usually comprised uniquely of men or women, rather than a mix. In the course of data collection, as the importance of other factors are revealed, complementary data may be collected using appropriate techniques.

Because the particular objective of this study was to discover how to increase refugee self-reliance, discussions with the different income groups included questions to understand factors that enabled or constrained their productive activities.

3.2 DATA COLLECTION

In Kountaya and Telikoro refugee camps, four income-ranking exercises were conducted. For three of these exercises, the key informants were refugees employed as community health workers – a

[1] The Food Economy Assessment methodology was developed by Save the Children, UK.

group of women, a group of men, and a mixed sex group. These workers' job responsibilities included repeated visits to refugee homes. Thus, they had observed how different circumstances affected lifestyle.

One income ranking exercise was conducted with schoolteachers, who observed and understood how different economic levels were manifest in the children. Teachers were chosen to represent different grade levels and schools in the camp.

Annex 1 lists the 38 different income groups interviewed. The sizes of the interview groups ranged from 3 to 12, generally 5 or 6.

Meetings were held with the Telikoro and Kountaya camp committees. These served as courtesy calls to explain the objectives of the study and to ask their consent. They also provided the opportunity to get a general orientation about the camps' organization from the committees.

Special interest interviews were conducted with Income Generation Project advisors, the refugee Market Committees of the two camps, and a group of technical skill trainers.

Market visits verified the availability of goods, prices, and local measures of food and non-food commodities. Walks around the camps gave opportunities to observe living conditions and economic activities, and to chat with people at home.

Most of the interviews required translation. Three primary interpreters were used, two were community health workers, and one was a former employee of Handicap International. They translated using Creole, Kissi, Malinki and Gbandy.

At the end of the data collection and preliminary analysis, a group of 38 key informants were brought together to review and verify the results. The informants were part of the community leadership or members of groups who were involved in home visitations, market activities, teaching, or skilled trades. The representation of this group is shown in Annex 2.

3.3 ANALYSIS

Analysis was on-going. Results from interviews were examined daily, and the results, observations of contradictions and consistencies, unanswered questions, etc., shaped subsequent interviews. After the data collection was finished, key information from the interviews were transferred to an Excel spreadsheet to bring like information together for examination.

There was limited use of tallies and averages of numeric data, for example, average per capita cereal and oil consumption, and intervals between sandal purchases.

Secondary data sources were the HCR registration database, the nutritional survey conducted in November 2001, and post distribution monitoring data.

4. FINDINGS:

4.1 REFUGEE CAPACITIES AND RESOURCES

From the UNHCR registration database (18 Nov 2002), Tables 1 and 2 show attained education and occupation statistics for men and women in Kountaya and Telikoro between the ages of 20-59 years. Notable were:

- There was a relatively high level of education among men and a low level among women
- More than one fifth of the men said they were students by occupation. Combined with those who said they had no occupation, nearly a quarter (23.9%) did not characterize themselves as workers.
- A significant percentage of women said they had no occupation or were housewives (31%)
- The percentage of traders was higher among women than among men
- A relatively low percentage of men and women considered themselves farmers

Table 1: Occupations of adults aged 20-59 years

Women	
Farmer	38.3%
Housewife	26.2%
Trader	18.2%
Teacher, Medical, Engineer	2.5%
Student	5.5%
None	4.6%
Other	4.7%
Men	
Farmer	33.9%
Student	20.5%
Craftsman, Mason, Carpenter	10.6%
Trader	8.5%
Teacher, Medical, Engineer	7.3%
None	3.4%
Other	15.8%

Table 2: Education of refugees aged 20-59 years of age

Attained level	Women	Men
No formal education	77.0%	39.2%
Primary	10.4%	13.3%
Secondary / High school	11.4%	33.6%
University	0.2%	2.3%

4.2 WEALTH RANKING

Each group of key informants that did the wealth ranking defined wealth groups a little differently, but all described and separated households on the basis of their primary source of income. Additional information gathered from members of different income groups, showed that bigger differences among the informants' rankings seemed to stem from wide income ranges within income group (e.g., load carriers or gardeners), or recent changes in circumstances that had affected incomes (e.g., charcoal makers).

In the final analysis, the various income groups were ranked into seven wealth levels (Table 3). This ranking was reviewed and accepted by the key informants gathered for the large community verification meeting.

The population percentages in Table 3 were derived from the estimates of three of the wealth ranking groups[2]. These were cross-checked using the reports from market committees about the number of vendors working in the market and numbers of new arrivals registered in the data base as proportions of the total population. NGOs were requested to provide the number of NGO refugee workers at different salary (incentive) levels to help estimate percentages for the highest levels, but responses were not received from all NGOs in time for this report.

4.3 REFUGEE INCOME

The refugees interviewed earned money in a wide variety of ways, but their approaches could be grouped into six basic categories: daily labor, exploitation of natural products, business, skilled trade, agriculture and NGO employment. Following is a brief description of each of these categories with estimates of typical monthly earnings. Accompanying matrices (Table 4) provide key information about the work, earnings, and factors that promote or inhibit earning power. More details are provided in Annex 3.

[2] The meeting with the first wealth ranking group was cut short when the health animators were called to screen a convoy of arriving refugees.

TABLE 3:Wealth levels Kountaya / Telikoro Refugee Camps: September-October 2002

I **1-3%** **110,000 FG+**	Higher paid NGO workers Wholesale business people
II **8-12%** **50,000-120,000 FG**	Lower Paid NGO Workers Camp Committee Retailers w/ little or no credit
III **30-35%** **35,000-60,000 FG**	Large-scale Gardeners Retailers on Credit Select Tradesmen
IV **18-20%** **15,000-35,000 FG**	Most Skilled Trades People Group Fishermen Basket / Mat Makers Stronger, Better connected Male Daily Laborers
V **5-10%** **10,000-30,000 FG**	Petty traders Charcoal makers Bulgur grinders
VI **10-13%** **5,000-15,000 FG**	Camp Security Older, Weaker, Poorly-connected Male Daily Workers Lone Fishermen Wood cutters Women daily workers
VII **15-18%** **<6000 FG**	Unskilled Handicapped / Elderly / Youth New Liberian Arrivals Extremely Vulnerables

Table 4: Factors that promoted or constrained income: Kountaya – Telikoro, September – October 2002

Source of income	Description	Earnings	Promoting factors	Constraining factors
DAILY LABOR: Monthly earnings: Men: <60,000 FG, most commonly 12,000-30,000 FG; Women: 6,000-15,000 FG/mo				
Farm contracts (Men)	Field work: especially clearing, turning the ground and harvesting; weeding by weaker men Employed by refugee and Guinean farmers. Some men traveled long distance and worked for weeks or months before returning	500-1000 FG/d (most commonly 1000 FG) usually in addition to a meal	-Refugee farming (increased employment opportunities) -Strength and good health -Good network with other refugee contractors and Guinean farmers - Good negotiation skills - Ability/willingness to spend time away from the camp	- Poverty of farmers (work to do, but unable to pay) - Refugee population size: competition of too many looking for same work
Farm contracts (women)	Field work: especially weeding and harvesting More employment by refugee farmers than Guineans	300-1000 FG/d (most commonly 500 FG) usually in addition to a meal	-Refugee farming (increased employment opportunities) -Strength and good health -Good network with other refugee contractors and Guinean farmers - Good negotiation skills	- Poverty of farmers (work to do, but unable to pay) - Refugee population size: competition of too many looking for same work - Distance to farms
Domestic contracts (Women)	Washing clothes, pounding rice or bulgur, cooking, cleaning, carrying water, etc., for NGO workers and others who had money and little time	about 300-500 FG/d; for pounding, a portion of the cereal pounded or right to use mortar	- Payment of NGO salaries - Prosperity of potential employers - Harvest season (milling) - Dry season (dusty clothes)	- Time since NGO salary payment - Competition of too many seeking work

Source of income	Description	Earnings	Promoting factors	Constraining factors
Load carrying (Men)	Carrying loads for: Market traders: carrying market goods to and from market at beginning and end of the day Distance trader: - carrying trade goods to and from Tokonou - carrying goods between river crossing and camp markets Construction contractors: e.g., carrying boards from Telikoro town to camp Farmers: carrying harvest from field Charcoal makers/ palm wine tapper: carrying goods to camp Other refugees: - carrying food from distribution center to homes	50-100 FG/load at market 1000 FG/load each way to Tokonou; 200 FG/load to or from river 1500 FG/load boards from Telikoro Payment for carrying from fields or bush depended on distance and load size; Some paid with harvested crop 50-200 FG or small portion of food for food carried; 1000 FG per sack to carry from Kountaya to Medina	- High market activity - Strength and good health - Good relations with potential employers	- Rainy season (less movement by traders)

Source of income	Description	Earnings	Promoting factors	Constraining factors
Other	Food distribution work and NGO casual employment for camp maintenance or improvements, e.g., digging trenches, planting trees, construction Loading sand into trucks (men) Palm nut harvest	2000-3000 FG/d for NGO contracts 5000 FG per loaded truck divided among laborers Palm nut: unknown	- NGO activities and policies - Contacts with NGO workers, previous employment with NGO - Strength and good health - Season - Construction activity	- Competition of too many seeking work

Source of income	Description	Earnings	Promoting factors	Constraining factors
GATHERING NATURAL PRODUCTS: Monthly earning: Firewood: 3000-12,000 FG; Charcoal: 8,000-22,500 FG; Fishing 4,500-35,000 FG/mo; Trapping: 14,000-34,000 FG; Basket/mat weaving: 15,000-45,000 FG				
Firewood cutting	Gathering, breaking, and selling firewood bundle. Both men and women	Women: 100-200 FG/d Men: 200-400 FG/d	- Strength and good health - Rainy season - Reduced charcoal use - Knowledge of area - Relations with landowners	- Ease of gathering by others - Environmental consequences
Charcoal making	Cutting and chopping wood to burn in ovens to make charcoal. Campaign to raise awareness of environmental damage reduced use and manufacture. Primary buyers were Kissidougou merchants and camp cookshops. Some better-off refugees continued to use charcoal.	10,000-30,000 FG/mo	- Proximity to Kissidougou - Salaried workers in camps	- Awareness campaign against use - Prohibited legally - Environmental consequences

Source of income	Description	Earnings	Promoting factors	Constraining factors
Fishing	Fishing with nets, lines or baskets. Those who worked alone with lines or baskets earned less. Net fishing brought more. Groups that could handle large nets earned the most. Primary clients were cookshops.	150-500 FG/d fishing alone without net Up to 120,000 FG/mo to divide among a group with net during dry season , but less than 50,000 FG/mo to divide during rainy season	- Skill - Knowledge of area - Possession of net - Dry season (hungry fish)	- Rainy season - Refugee buying power
Trapping	Setting lines of traps for porcupine, groundhogs, and monkeys.	3,500-5,000 FG per animal	- Knowledge of area	- Thefts from traps
Basket/mat making	Gathering of materials and weaving of fish or chicken baskets and mats Always had a buyer; sold 1-3 items daily	500-1000 FG per item	- Little competition - Steady demand - Knowledge of area - Speed and skill of work	- Time

Source of income	Description	Earnings	Promoting factors	Constraining factors
SKILLED TRADES: Monthly income: Extremely variable				
Skilled trades	Provision of technical services or goods that required professional skills such as: carpentry, masonry, iron smithing, bicycle repair, tailoring, weaving, tie-dying, embroidery, hair dressing, barbering, soap making, and radio repair. Due to difficulties in startup, there were unskilled workers in the camp who were not practicing their trade.	0-100,000+ FG/mo	- Expertise/quality of work - Adequacy of tools - Location/Visibility - Network - UN/NGO as clients - Capital/loan/grant for startup - Season	- Difficult access to raw materials - Competition (refugee and Guinean) - Unsteady demand - UN/NGO contract practices - Limited buying power of refugee customers -Lack of orientation of some training programs to immediate startup

Source of income	Description	Earnings	Promoting factors	Constraining factors
NGO Workers: Regular salaries: 45,000 – almost 2,000,000 FG/mo				
NGO salaries	Salaried work with NGOs operating in the camps		- Language skills - Connections with other NGO workers - Previous experience - Education	(Constraints not to income but to benefits of income) - Family / community pressures - Credit interest - Job-related expenses

Source of income	Description	Earnings	Promoting factors	Constraining factors
Agriculture: Monthly income: Gardens: Minimal to comfortable; Farms: ????				
Gardens	Sales of vegetables and tubers Smallest scale: sales of bunches of leaves during rainy season Largest scale: vegetables, ground nuts, cassava, corn .... year round	>50 FG/d	- Access to productive land year round - Able body to prepare ground - Seeds and tool provision - Farming, too - Experience, skill - Knowledge of soil and climate - Repatriation / reduced population	- Labor demands for preparation: turning soil, building heaps - Pests (termites) - Access to seeds/vines - Unfamiliar with sandy soil, seasonal patterns - Crowded camp - Access to water during dry season - Competition (rainy season)
Farms	Rice farming	?????	- Land access - Knowledge of soil, season - Seeds and tools	- Seasonal differences from *Languette* - Labor demands - Lack of "cash" crop - Credit policies (50% interest) - Pests (birds, groundhog...) - Floods

Source of income	Description	Earnings	Promoting factors	Constraining factors
BUSINESS: Monthly earnings: Petty trade: <30,000 FG; Market vendors, no credit: 68,000-200,000 FG; Market vendors with credit: 34,000-100,000; Wholesalers: >100,000				
Petty trade	Buying and reselling small quantities of seasonal fruits, snack foods, cigarettes, and other fast moving foods or non-food articles.	0-1000 FG/d	- Low capital - Experience and knowledge of customers - Location	- Competition - Customer buying power - Household demands on earnings
Retail business	Buying and selling food or non-food goods direct to end customers. Most dealt in a variety of goods rather than a single product. Most bought in the camps, in Tokonou, or in nearby villages. Some travelled to Kissidougou, the *Languette*, or Conakry for merchandise to resell. Some worked from market places, others worked from home, some worked both at home and at work.	30,000-100,000+ FG/mo	- Capital/Loan/Grant - Experience - Variety of goods - Good network with other Guinean and refugee traders - Increased customer buying power - ARC loan repayment certificate	- Credit interest - Limited customer buying power - Guinean competition - Spoilage - Theft - Cost of transport - Harassment outside camp - Rainy season - Limited customer buying power
Wholesale business	Buying and selling food or non-food goods to refugee retailers. Most dealt with a single or a few related goods. Many set up some family member to also sell retail.	100,000+ FG/mo	Similar to Retailers, above	Similar to Retailers, above

4.3.1 Daily labor

There were opportunities for casual, daily labor for men and women. Farmers employed both, depending on the season and the type of work available. Men carried loads for Guinean and refugee merchants, farmers (during harvest), charcoal makers, palm wine tappers, construction contractors, and refugees coming from the food distribution site. Others loaded sand into trucks. Women did domestic chores for NGO workers and others that had spare cash and little time.

NGOs contracted workers for daily labor: e.g., digging latrines or ditches, planting trees, scooping food at the distribution, or cutting grass for roofing.

Monthly incomes depended on the number of days worked and the salary negotiated. Based on the typical daily earnings of 500 FG, women's earnings from either farm or domestic contracts ranged between 6,000 and 15,000 FG per month. Men doing farm work usually earned 1000 FG, so, their monthly earnings probably ranged between 12,000 and 30,000 FG per month. During the harvest season, payments were commonly farm produce rather than cash, and farm laborers generally received a meal in addition to the cash payment

The maximum potential monthly earnings for load carriers could theoretically reach 60,000 FG, but more typical earnings were probably in the range of 8,000 to 24,000 FG/mo. Earnings depended on the number of loads, their size and the distance carried.

Note that in the wealth ranking, described in Table 3, daily laborers were ranked in the lowest three levels:

Level IV: Stronger, better connected male daily workers

Level VI: Women contractors and Older, weaker, poorly connected male daily workers

Level VII. Some newly arrived refugees found a contract infrequently, and vulnerable individuals occasionally earned some small cash by doing particularly weeding or domestic contracts. To arrive to Level VI, workers needed to work at least 12 days per month (3 times per week) with a payment of at least 500 FG/day.[3]

4.3.2 Exploitation of natural products

Refugees earned income by harvesting and selling natural products: fishing, trapping, cutting firewood, making charcoal, making baskets and mats, cutting grass for roofing, making brooms, and tapping palm trees for wine. Income from most of these types of work was seasonal. The various income groups were ranked into wealth levels IV-VI. Estimates of monthly income were as follows:

Level IV: Group fishermen: 12,000- 35,000 FG; Trappers: 14,000-34,000;
Basket/mat making: 15,000 - 45,000 FG

Level V: Charcoal makers: 10,000-30,000 FG

[3] With the arrival of the harvest season and accompanying employment opportunities, the new Liberian arrivals were beginning to move upward into Level VI.

Level VI: Lone fishermen: 4,500-10,000 FG

Firewood cutting: Women: 3,000-6,000 FG; Men: 6000-12,000 FG

The information collected was insufficient to estimate incomes of grass cutters, broom makers or palm wine tappers.

4.3.3 Business

Refugee businesses ranged from petty trade to wholesale buying and resale to other refugee traders. Agents of ARC, the agency that was most involved in providing loans for small business, estimated that about 70% of refugee business men and women did retail only, about 20% did wholesale only, and 10% did both wholesale and retail.

Monthly incomes varied widely, according to the type of business and level of dependence on credit. It was estimated that petty traders, when all conditions were positive, might earn 1,000 FG in a day, but few managed to sustain this income. ARC income generation project agents estimated that steady market retailers earned between 68,000 and 200,000 FG, if they were not operating on credit, and about half that if they were. The market committees believed that most were taking merchandise on credit. Based on information from ARC IGP informants, wholesalers' profits seemed to be about double the income of the retailers of similar products. Those that did both wholesale and retail were even higher. Information gathered from market traders and wholesale/retailers corresponded well with these estimates.

Market retailers were ranked in income Levels II and III, if they were operating without or with credit, respectively, and the wholesalers were among those in the top Level I. Due to the instability of their income, petty traders were ranked in Level V.

4.3.4 Skilled trades

Skilled professionals practiced a variety of trades in the camps. Some were professionals when they arrived in Guinea. Others benefitted from vocational training as refugees. The tradesmen interviewed included: carpenters, blacksmiths, tailors, soap makers, bakers, radio repair mechanics, tie dyers and needle workers. Other types of tradesmen mentioned were masons, cloth weavers, hair dressers, barbers, and bicycle repairmen.

Tradesmen's earning varied widely from day to day and from individual to individual. An element that confounded attempts to quantify their income was that many, because of the difficulty in getting materials, actually got more of their income from sources other than the practice of their trade. Therefore, no general estimate of trades peoples' incomes was attempted. Based on their own and others' remarks about their lifestyle, in the ranking, trades people were divided between Levels III and IV, with the majority in IV.

4.3.5 Agricultural activities

During the study period all of the cultivable land inside the camps appeared to be planted. Many households reported that they gardened year round, harvesting and replanting, and moving from swamp to higher land according to the season. For some of these households, the sale of garden produce provided all or most of their income. For others, gardening subsidized another, more important, income. Several refugees commented that one of the benefits of repatriation was that that those remaining behind could plant the areas vacated by others[4].

Earnings from gardening varied widely, but based on their own and others' reports of the standard of living, those that gardened on a large scale, year round, were ranked at Level III, along with the most successful tradesmen and retailers operating on credit. This reflected not only their cash income, but also the benefits of direct consumption and reduced spending for food.

Some of the vulnerable households identified in the very lowest income group (VII) also depended on small gardens that generated much less income. If family or friends helped to prepare the gardens, turning the soil and building heaps, the elderly, handicapped and single mothers could plant and tend gardens. Direct consumption reduced their spending, and sales provided cash to buy condiments, soap and kerosene. Cash sales were more difficult during the rainy season when everyone had gardens, and income dropped.

4.3.6 NGO work

NGOs employed refugees in a wide range of capacities: cleaners, community health workers, sanitation workers, guards, agricultural agents, doctors, nurses, and more. Salaries varied from 45,000 to nearly 2,000,000 FG per month, according to the type of work and the hiring agency. Because of the stability of their income, even those with the lowest salaries were ranked at wealth level II. Those whose salaries exceeded 110,000 FG were ranked in Level I.

4.4 DEFINING NEEDS

In order to understand refugee spending, it was necessary to understand their needs – biologic, social and cultural. Included among the biologic needs are nutritional requirements and maintenance of a safe environment. The most pressing social needs in this population related to schooling for their children. Culture was a primary determinant of dietary practices and clothing needs.

Household need is the sum of the needs of the individual members. Naturally, larger households have greater needs. In quantifying the refugee households' needs, three different family sizes were considered: individuals living alone, households of three (1 adult and two dependents), and households of six (2 adults and 4 dependents or 1 adult and 5 dependents).

[4] Once a shelter was vacated and the plastic sheeting removed, the walls dissolved rapidly in the rain, leaving more space for planting.

Based on results of the nutritional survey (2001) and Post Distribution Data (2002), the average households size was six. This was the average number of persons identified in responses to questions asking "How many people eat here regularly?" followed by requests to give the age and sex of each of the members. Responses to these questions were believed to more closely reflect household economic units than did the UNHCR data base registration, which indicated a much smaller average size. (See Section 5.2.5)

4.4.1 Nutritional requirements

Practically, the logistics of general food distributions are simplified if all beneficiaries receive the same ration. However, all people do not have the same nutritional requirements. Therefore, rations are based on the "average" need of all people in the population. The data required to estimate average nutritional needs in a population are the demographic profile with regard to sex and age (because sex and age reflect body size and stage of growth), information about daily activities, and reproductive rates.

Based on demographic information from the UNHCR registration data base in October 2002 and assuming that the physical activity of refugee adults was moderate, (Annex 4) the average energy requirement in Kountaya / Telikoro was 2240 kilocalories per person per day. In Kountaya and Telikoro, the WFP food basket, as intended for distribution, included 2103 kcal/p/d. Sixteen percent of the ration's energy came from fat, but standards for food aid call for 17-20% fat. Based on Food Basket Monitoring results, the actual energy distribution between May and November 2002 was only 2040 kcal/p/d (see Annex 4), and oil and CSB, the commodities with the highest concentration of fat, were the most consistently under-served. (See Annex 7) Thus, refugees needed to add about 200 kilocalories per person of fatty foods to their daily diets to meet nutritional requirements. To assure adequate intake of vitamins and minerals, refugees also needed to add fresh fruits and vegetables.

4.4.2 Meal frequency

Sierra Leonean and Liberian traditions include three meals daily, but two meals with snacks between were acceptable. (See Annex 5 for more about the refugees' traditional diets) In Kountaya / Telikoro household income, food production, the time lapsed since food distribution, and the work activities of the adults seemed to be the primary determinants of the number of meals eaten in a day.

The data for this study were collected during the "lean" period, preceding harvest. At this time poorer households ate a single meal daily, and better off households prepared and ate twice daily. Some children ate after-school snacks.

Most refugees ate their largest meal in the late afternoon or early evening. Most households tried to have something to eat in the morning, but reports of preparation of a midday meal were rare. Apart from the best-off in the camp, only households in which adults engaged in heavy farm or trade

work, including blacksmiths, carpenters, and farmers, prepared bulgur and sauce that was eaten "on the job". Apprentices and hired farm workers, were included in these meals.

It seemed that children ate more often than adults. Many, when talking about morning eating, mentioned that if there was a shortage of food, whatever was there went to the children. Even the poorest mothers tried to have something for their children to eat when they came home from school. This meal typically consisted of a staple food, usually bulgur, with added ingredients and sometimes a sauce.

4.4.3 Meal composition

Main meal:

The main meal typically consisted of a staple food, usually bulgur, with added ingredients and sometimes a sauce.

Staple food

Based on refugee reports and PDM data, milled bulgur had replaced rice, their traditional food, as the primary staple. Rice was eaten by some, but usually mixed with bulgur[5], and not on a regular basis.[6] Occasionally ration peas, or, seasonally, tubers (potatoes, cassava, yams), ground nuts, or corn were the basis of some meals, but these alternatives were more common in meals other than the "main" meal.

Reports of consumption of rice that was not mixed with bulgur were rare. Even farmers said that they planned to eat the rice they harvested mixed with bulgur, not alone, so that the rice would last longer.[7] In some households one or more individual(s) ate rice alone while others ate bulgur. This was because these individuals suffered from bloating, diarrhea or other discomfort when they ate bulgur, or, in the case of young children, some were said to refuse to eat bulgur.

Accompaniments

Refugees preferred to have a sauce or soup with their bulgur/rice at the main meal, but because of a lack of time or ingredients, other alternatives, known as jolloff and dry rice, were common.

Jolloff consisted of bulgur or rice, a vegetable, plus condiments, all cooked in the same pot. The vegetables were added to the pot just before the bulgur was finished. Usually red palm oil and salt were added when the jolloff was served

[5]The mixture commonly contained equal portions of bulgur and rice. More or less affluent households could prepare a greater portion of rice or bulgur, respectively.

[6]The frequency of rice eating no doubt increased after rice harvest.

[7]The coincidence of cornmeal distribution during the early harvest period (Nov-Dec) would no doubt influence the use of the rice. Cornmeal and rice would not be mixed.

When a household had no vegetable or too little oil for jolloff, only condiments and a little oil were added to the bulgur or rice. This preparation was referred to as "dry rice", even if it was bulgur. The condiments added to dry rice ranged from nothing to some combination of: salt, oil, "chicken soup"[8], kinda[9], pepper or fish powder.

Most sauces that accompanied bulgur in the main meal were based on a green vegetable, most commonly leaves, okra, or eggplant of various sizes[10]. The split peas from WFP were sometimes added to the vegetable sauce, and other times peas replaced the vegetable as the basis of the sauce. Other sauce ingredients included: oil, salt, pepper, "chicken soup", fish (dry or fresh), onions, ground nut butter and tomato.

The quality of the sauce was judged according to the number, type and quantity of ingredients. Fresh fish was preferred to dry fish. It seemed that most households had dry fish at least occasionally, and many households ate fresh fish at least once a month. Reports indicated that only moderate to better off households ate fresh meat, and in most cases, only occasionally. Apparently as the study period came to a close, the cost of fish was rising, and dried meat of warthog was replacing dried fish in some households.

Though refugees from all socioeconomic ranks aspired to have meals containing these same basic ingredients, the frequency with which all ingredients could be acquired for a meal diminished with income and time lapsed since the general food distribution. Many poor to moderate income families made sacrifices to have a "delicious" sauce on distribution day and, for those who were better-off, another day or two after. Then, until the next distribution, they ate jolloff or dry rice, and an occasional, lower-quality sauce. The frequency with which a household ate dry rice as their main meal would probably be a good indicator of economic status.

In most households the day's earnings dictated the choice of ingredients in the main meal. A hierarchy of choice of ingredients was evident in the difference in reports of what was eaten in households from different wealth levels and how meal composition changed as time passed after a food distribution or salary disbursement. Priorities appeared to be approximately as follows:

1. Salt
2. Oil
3. Pepper
4. Maggi, mapo or kinda (soumboura)
5. Green vegetable or split peas

---

[8] "Chicken soup" was the term used by refugees in reference to Maggi bouillon cubes or Mapo, pure mono-sodium glutanate. The former cost more and were used by those with the means, the latter was less expensive and, therefore, more commonly used, although refugees remarked that it was "not good for the stomach".

[9] Kinda (soumboura in Malinki) was a condiment based on kernels of seed pods of nyere, a local tree. It replaced either chicken soup or dry fish.

[10] The smallest variety was commonly called "bitter ball" and larger varieties "garden eggs".

6. Fish or meat
7. Groundnut
8. Onion
9.Tomato

Other meals:

In the morning most refugees ate CSB, until it finished (1-7 days) and then they ate leftovers from the previous night, tubers, other garden produce (groundnuts, corn), freshly prepared "dry rice", or nothing.

Midday meals, when prepared, were generally dry rice, jollof or a meal based on tubers, corn or banana. Only the best off refugees could prepare a second meal with a sauce.

Uncooked bulgur was a popular after-school snack: mixed with water or ground finely and eaten dry, with or without sugar added. Instead of preparing CSB porridge in the morning, some households gave the children leftovers from the night before in the morning and prepared CSB after school. Other snacks mentioned were corn, yams, groundnuts, bush yams, and small cakes bought from roving vendors.

4.5 Food preparation needs

4.5.1 Grinding

Most newly arrived refugees did not have the means to mill their bulgur, but all others interviewed milled bulgur before preparing it. Entrepreneurs with hand-turned grinding machines were stationed throughout the camps. For 50 FG they ground a kilogram of bulgur, or where there was more competition, 1.5 kilogram. Some said that if the refugee turned the machine him/herself there was no charge. Women reported that when they had no money, if they were regular paying customers, they could occasionally get grinding for free.

Households that could not afford the expense of grinding pounded the bulgur in a mortar. This could be a daily or occasional task, depending on household revenue and priorities.

There were also leaf grinding machines scattered through the camps and in the market. The market committee reported that some vendors of leaves had machines, and during the rainy season, they ground leaves purchased from them at no charge – a way to gain an edge during the period when leaves were abundant in the camps. Reportedly, the leaf grinders' clients were mainly NGO workers who had little time for food preparation.

4.5.2 Fuel

The primary cooking fuel for camp residents seemed to be firewood. Notable, based on observation, was the scarcity of fuel-conserving stoves. Cookshops and tradesmen whose work

demanded it (e.g., blacksmiths) used charcoal. Some NGO workers used charcoal, but others said they used to use it, but stopped as the result of a campaign that raised awareness of the negative environmental consequences of charcoal use.

4.6 ESSENTIAL DAILY NON-FOOD NECESSITIES

4.6.1 Lighting in shelters

Kerosene burned in lamps distributed by UNHCR or bottles was the most common source of light in refugee shelters. Most households burned one "tomato cup"[11] of kerosene daily. Newly arrived refugees, who had not received lamps, and some of the old case load who said they could not afford kerosene all or some of the time, burned small quantities of vegetable oil in a plate, using wicks made from twisted strips of worn out clothing. When the ration oil was finished, some burned palm oil. The poorest carried sticks from the fire into the house for light.

4.6.2 Soap

The ration soap was greatly appreciated, but it apparently was not enough. No refugee asked about soap reported that it lasted between distributions. Inquiries about how many pieces were purchased between distributions indicated that consumption was at least twice the quantity provided, i.e., households needed at least one additional piece per person monthly. Households with very young children needed more. Also, the large group of key informants advised that soap needs increased during the dry season, because of the dust.

4.7 PERIODIC NEEDS

4.7.1 Clothing

Most refugees wore used clothes, referred to as "junks". However, married women were generally expected, when going into public, to wear "lappers"[12] rather than skirts or pants.

Few refugees bought new (as opposed to used) clothes. The priority among those who did, was to have a new outfit for each child at Christmas, Tabaski, or the New Year, depending on the household's religion and tradition. In better off households, adults would get new clothing at this time, too. In other homes, where they could not afford truly new clothes, parents tried to have "new" junks for the children at holiday time. Many could not afford that. Special school events, including the opening, also provoked clothes purchases. Otherwise, clothing was purchased when old clothing was no longer wearable.

[11] A measure made from the smallest empty tomato paste tin.

[12] "Lapper" was the common name for the cotton fabric worn wrapped around women's waists and made into traditional shirts and outfits.

Comments indicated that clothing for school children was a priority in most households, especially for older children who had to be "encouraged" to go to school. Mothers said that the little ones went to school happily – dressed in rags and with no shoes – as long as their friends went, too.

Babies required many clothes changes because they got dirty fast.

4.7.2 Shoes

Most refugees, adults and children, wore plastic sandals. Some of these sandals, particularly the less expensive models, broke easily. Some groups got caught up in discussions about which models were more or less durable. Camp cobblers could repair many breaks, by stitching or melding the pieces back together, but, after repeated repairs, replacement became mandatory. Estimates from various groups suggested that adults' sandals had to be replaced about every 4 months (7 of 12 responses). A few were lucky to make their sandals last one year. Some of the newly arrived Liberians said they had to share sandals with relatives or neighbors– taking turns going out of the house while the other stayed barefoot at home.

For children, however, shoes did not last so long. Parents said that the children lost their shoes. Also, there was a Guinean used-shoe merchant who bicycled through the camp calling for "old shoes". For each shoe rendered, even unmatched, he awarded a child with a hard candy. Consequently, several parents said they bought children sandals six times per year. Some said they replaced at least one of their children's shoes every 2-4 weeks. Others said they bought 2-3 times per year, but noted that between pairs the children often went weeks or months without shoes. Some children seldom, if ever, had footwear.

4.7.3 School supplies

There were no formal school fees, but parents reported a need to buy copy books, pens and pencils. Teachers confirmed that children needed these supplies. It was estimated that, on average, parents needed to buy 25 copy books per child for a school year. Children in higher grades needed 48 or more.

4.7.4 Medicine

Many refugees cited medicine as a major source of expenditures. The reasons given for spending, in spite of free distribution of drugs at the health post were:

- They received the "wrong" medicine at the health post and did not get better. Many said that the only medicines distributed were chloroquine and aspirin. So, they went to the pharmacy and bought something better – usually in injectable form.

- They did not get enough medicine – only enough for 1 day.

• Getting treatment at the health post took all day, and they could not afford to miss work, so they went to private doctors or self-medicated.

• If they fell sick on Friday afternoon or the weekend, the health post was not open, so they had to seek care elsewhere or self-medicate.

4.7.5 Kitchen ware

A few groups commented that the cooking pots provided the year before were wearing out. Others said that they needed plates to eat from and covered bowls to keep their evening leftovers for the morning. Especially without the covered bowls, they worried about things falling into the food. None had purchased any kitchenware recently.

4.7.6 Bedding

There were several reports that the blankets and mats distributed last year were "torn down" and needed replacement. People were "feeling cold". Therefore, we included a check of the condition of blankets and mats in several households during a walk around Telikoro. All the blankets examined were thin, obviously having seen hard wear, probably due to the repeated washing with strong soap and beating. The mats were flattened and coming apart. Nevertheless, no one had mentioned buying any bedding recently. However, women said they were planning to make bed sheets from the flannel distributed to use for sanitary pads. In a visit to one vulnerable house, a sheet already made was found.

4.7.7 Shelter maintenance

Given the severe weather conditions and prevalence of termites, shelter roofs and walls required regular maintenance and repair. There was no general distribution of plastic sheeting after shelters were constructed, even though it had been observed in the region that the plastic sheeting had an effective life span of only a few months. In the hot sun, the plastic coating melted, and the integral fibers separated creating holes where water could leak through. Without plastic sheeting, savannah grass was the primary roof material.[13] Termites were the biggest threat to these roofs.

4.8 SUMMARY OF ESSENTIAL NEEDS

Based on reports of less well off households about what they ate and how often they made non-food purchases, a summary of the cost of minimally-acceptable ingredients to add to the food aid

[13] Palm thatch and papoe roofs were less common.

ration plus non-food essentials was made. This was presented to the community verification group, who insisted on a few adjustments and changed the description of the list to "average" spending. Table 5 shows the monthly costs for different family sizes. In the cases where costs of items varied seasonally, simple averages of highs and lows experienced during the previous year were used in calculating monthly cost.

Notable was that for all family sizes food and its preparation accounted for the largest part of spending (61-67%, depending on family size). Fish (16.5-17%), oil (13.5-14%) and children's clothing (including sandals; 11-13%) were the biggest single expenses for large families with children. Smaller families spent most on fish (14%) and oil (13%), and singles spent most for kerosene (14%) and fish (12%).

The following paragraphs briefly describe how the costs were figured.

4.8.1 Food costs

The average food purchases for a family of six members included:

Salt	10 g /p/d for 15 days per month
Oil	60 g /p/d for 15 days per month
Maggi cubes	2 Jumbo per day
Pepper	100-200 FG per day
Greens	1 large bunch per day
Dry fish	60 g/person, 3 times per week

Table 5: Monthly costs of essential needs

# Persons	1	3	6 (1 adult)	6 (2 adults)
Food				
Pepper	3000	3750	7500	7500
Chicken soup	1000	2000	4000	4000
Greens	2250	3375	6000	6000
Oil	2625	6000	10500	10500
Bulgur	1800	0	0	0
Fish	3214	6429	12857	12857
Salt	188	563	938	938
TOTAL COST FOOD INGREDIENTS	*13,777*	*22,116*	*41,795*	*41,795*
Grinding	1125	2250	4050	4050
Cooking fuel	3000	3000	4500	4500
TOTAL FOOD PREPARATION	*4125*	*5250*	*8550*	*8550*
TOTAL FOOD AND PREPARATION	*17,902*	*27,366*	*50,345*	*50,345*
Non-Food				
Lighting	*3850*	*3850*	*3850*	*3850*
Soap	*500*	*1250*	*2500*	*2000*
Sandals				
Adults	725	725	725	1450
Child		1333	3333	2667
Clothing				
Man	1400			1400
Woman		2583	2583	2583
Child		2800	7000	5600
TOTAL CLOTHING AND SANDALS	*2,125*	*7,442*	*13,642*	*13,700*
Shelter repairs				
Roof	1667	1667	1667	1667
Walls	833	833	833	833
TOTAL SHELTER REPAIRS	*2500*	*2500*	*2500*	*2500*
Copy books	0	*3000*	*5000*	*4000*
GRAND MONTHLY TOTAL	***27,177***	***45,408***	***77,836***	***76,395***

The community group emphasized that the amounts were not satisfactory, but were minimally acceptable in terms of making the food palatable, and they reflected the priorities of typical households. It was particularly the quantity and type (dry, broken pieces) of fish that remained most unsatisfactory, even though it was agreed to triple the quantity suggested originally. Refugees interviewed before that had described purchases of much less fish. Also, most refugees used Mapo in place of Maggi, but because of the harmful effects of Mapo (pure MSG) consumption, costs were based on Maggi use. Notable is the absence of tomato and onion, the lowest priority items in a "delicious" sauce.

Also notable in this estimate is the absence of purchase of additional cereal except for a family size of one. For the single person eating alone, the purchase of 3 kg of bulgur per month was included to meet men's (the majority of singles) higher than average energy demands. (See adult energy requirements in Table A4.2 in Annex 4.) In other households the estimates of typical cereal consumption (413 g/p/d; See Annex 9, Table A9.1) were close to the quantity distributed (450 g/p/d), and so no additional purchase was included.

In spite of these reports, a portion of the refugees interviewed said that their bulgur ran out 5-7 days before the distribution. This was probably related to bulgur sales. Contrary to previous suggestions, there was no evidence of massive exchanges of bulgur for rice, and consequent energy losses. However, some moderate to low income households sold a portion of beans, bulgur, or oil on distribution day so that they could buy rice to mix with their bulgur for one or two meals (See Annex 6). Sales to support purchase of a half-portion of rice for one person for one day would need to bring 125-175 FG. At the time of the study this would require the sale of 625 - 875 g of split peas (12.5 - 17.5 days ration) or 2.5-3.5 kg of bulgur (5.6-7.8 days ration). The latter corresponds with the reports of 3 to 7 days shortages. The energy losses from such sales for rice purchase would range from 70 kcal/d to 420 kcal/d, considering the whole month.[14]

With these purchases, the energy and fat deficits of the ration were compensated with intake of additional red palm oil. Based on reports of quantities used, money spent for oil for daily preparations and the duration of the oil distributed,[15] daily oil consumption was about twice the quantity distributed i.e., about 60 g/p/d (see Annex 9, Table A9.2). The purchase of an extra 30g per day added 270 kilocalories of energy, and all of it was fat.

Included in food costs were the costs of preparation: grinding at a hand mill and firewood for cooking. Grinding costs were based on the price of 50 FG/kg. The cost included purchase of firewood for half the year, believing that in the majority of households, a family member gathered wood at no cost during the dry season.

[14] Nevertheless, the bulgur for the 3-7 days would have to be replaced, increasing the food expenditures for a household of 6 by 743-1890 FG/month when bulgur could be purchased at 100 FG/kg.

[15] Or, the duration of the red palm oil received in exchange for the distribution oil.

4.8.2 Non-food

A single tomato cup of kerosene to burn in a single lamp was included for all family sizes (100-200 FG/cup). Soap purchase included one ball of locally purchased soap, known as kabakuru, per household member plus one additional for a family of three (total of 4 per month) and plus two for a family of six during a month (total of 8 per month; 200-250 FG/ball).

The community verification group indicated that the quantities included for clothing were far from satisfactory for especially women and children. Not all members of the group were convinced that the amounts were even "passable". The annual clothing budget included:

Women:	Men:	Children
•20,000 FG for 4 pairs of lappers[16]	• 15,000 FG for 3 outfits of used clothing	• 10,000 FG for 4 outfits of used clothing
•5,000 FG for used shirts, shorts, skirts	• 1,800 for underwear (3)	• 5,000 FG for a school outfit
•3,000 FG for underpants (5)	•7,500 FG for slippers (3 pairs)	• 1,800 FG for underwear (3)
•3,000 FG for brassieres (2)	•1,200 FG for shoe repairs (6)	• 8,000 FG for slippers (4)
•7,500 FG for slippers (3 pairs)		
•1,200 FG for shoe repairs (6)		

The costs of minimal annual shelter repairs allowed four roof repairs at a cost of 5,000 FG each, plus 10,000 FG annual for wall repair. The 20,000 FG roof budget was a little less than the average of expenditures reported by the refugees interviewed. It allowed for cost of grass and labor for about eight bunches of grass per repair.

Nothing was included for medicine, since refugees should be getting any medicine they need at the health posts. Nothing was included for kitchenware or bedding, because, apparently, so far, little expenditures had been made for these items. However, reports indicated that unless there were a new distribution of essential items, these were likely to soon become more urgent needs that would have to be included in household budgets.

4.9 MEETING ESSENTIAL NEEDS

The comparison of the average expenditures and estimated incomes showed that only households in the top wealth level, and some in the second level (at most 15% of the population) could meet the needs of a typical family of six (76-78,000 FG) with their primary income.

[16] This was the point of greatest contention. Women said that the 2500 FG lappers were not worth buying. It would be better to spend 15,000 for a lapper that would last longer. While the argument seemed valid, discussions with refugee women indicated that they could never access a 15,000 FG lapper, so these could not be included in the budget.

This could be an indication that the estimates of either the income or expenses were in error. However, the interviews suggested two other explanations:

1) Refugee households had other ways of getting what they needed.
2) Many households had more than one working adult, i.e., in addition to the primary income, they had another source of income.

4.9.1 Strategies for acquiring resources without cash

Some of the coping strategies allowed refugees to acquire essential items without earning money. Most, were generally positive coping mechanisms, but some increased risks to health or violence:

• Working for food or non-food items: Refugees worked in exchange for food (leaves, rice, corn, red palm oil), clothing, and household items.

- Possible savings could have ranged widely, but probably these things largely replaced monetary income. Even the meals fed to farm workers generally replaced 200-300 FG of earnings.

• Gardening: Refugees planted and harvested vegetables and pepper for their own use

• Farming: The timing of the study did not allow verification of the use of rice grown on refugee farms, but farmers indicated that they planned to eat most of it. The bulgur replaced by the rice would either be fed to farm laborers or sold to get cash for other necessities.

• Gathering wild food: Refugees gathered leaves, mushrooms and bush yams and a few even caught fish and wild game to eat

• Begging / Receiving gifts:

- Households begged money, food, fuel, soap, and other essentials from extended family, friends, and sympathetic strangers.
- Young women hung around bars waiting for men to buy them a meal
- Households in the lower wealth levels, bought little clothing and sandals, relying heavily on charity from employers and kind-hearted refugees from higher economic groups.
- Market vendors exchanged or gave away leftover perishable items at the end of the day

• Bargain buying: Some women bought clothes and shoes from junk dealers who had "made their profit" and were willing to sell remaining stock at a minimum.[17]

[17] Women said that sometimes they could get an outfit for adults for as little as 1500 FG. Petty traders advised that distribution days were the best to find deals because there were more Guinean traders present who did not want to carry a lot of goods away.

• Gathering firewood: A household member could gather firewood all year round, not just half the year.

• Pounding bulgur: A household member could pound the bulgur instead of paying to grind it

• Doing own house repair: Household members could cut and carry grass for the roof and do all shelter maintenance.

4.9.2 Supplementing primary incomes

Other strategies involved supplementing the primary income with income from another source or traveling far from the camp to get higher returns from their primary work. For example:

- More than one household member was an income earner
  - Nearly every able adult was engaged in some income-generating activity.
  - Sometimes part of the primary income was used to purchase goods for petty trade by another member
  - Wholesale traders tended to set up one family member as a retail seller, and they kept the profits separate. It seemed that in such cases, the retail business often funded the daily expenses, like food kerosene, and soap, while the wholesale earnings financed larger, periodic purchases.
- Women picked greens from the forest or their gardens to sell
- Farmers, presumably, would sell some rice or bulgur after harvest
- Refugees changed normal work tactics to increase revenue:
  - All but NGO workers, the most successful business people, and those unable physically fell back on daily labor as a source of immediate cash when faced with an exceptional need
  - Radio repairmen took their tools and toured neighboring villages repairing radios and buying goods to resell in the camps.
  - Men traveled to far villages to work farm contracts.
- Some raised poultry, mostly to sell for cash (about 1,500 FG per chicken). Few ate the meat except at special holidays and celebrations. None reported eating eggs.
- During the period that cornmeal was distributed, a large portion of the refugee households sold cornmeal and bought bulgur at a lower price. The exchange provided as much as 200 FG per kilogram, and refugees used the cash to buy oil and sauce ingredients. (For more about ration sales and exchanges, see Annex 6)
- Children were put to work: One mother said that she took care of the clothing needs of her younger children, but she expected the older ones to buy clothing for themselves – earning money by doing farm or domestic contracts or carrying loads. Children were observed doing petty trade and sitting by merchandise in the market.

- Teachers observed that some girls from households that they knew did not have the means, came to school too well dressed. They expressed concern about the link between peer pressure to have nice clothes and child prostitution.

4.9.3 Management tools

Most households lived hand-to-mouth, spending whatever they earned in a day on that day's immediate needs. It was difficult for many of them to accumulate funds for larger expenditures. There were a number of money-management techniques that refugees used to gather larger sums to relieve an immediate need. These techniques did not bring additional resources into the households. Some actually had a negative impact.

Neutral efforts:

- Tontines: Market traders used tontine collections to make large purchases. Members contributed 200 or 500 FG daily to these rotating pools. Once every 20 days it was their turn to take the pot of 4,000 or 10,000 FG.
- Work tontines: Some groups of contract workers rotated their wage payments in a fashion similar to a tontine: 10 worked together with one taking the wages every tenth day.
- Borrowing within the household: A gardener/farmer said that in his household they used the profit from garden sales to set up a small business. Then, when they needed to pay labor to clear and prepare a new garden, they borrowed from the business earnings. They paid back the business with profits from the next garden harvest.
- Budgeting: A number of different budgeting plans were described:
  - For those whose earnings were sporadic, on receipt of a large sum, the household planned their spending For example, each time charcoal makers sold an oven's production they divided the cash into parts for: payment to a landowner; household food, fuel and kerosene; "most urgent needs". Clothing was often one of these urgent needs. The family together decided who got what each month.
  - One woman budgeted her food ration use: measuring so that each commodity lasted the full 30 days.
  - Another man reported that he bought junks year round, as he was able to scrape together 500-1000 FG, but he saved all of the clothes until the holiday came. Then everyone would get 2-3 outfits for the year.
- Savings plans: Some had well defined saving plans,

- They regularly set aside a percentage of all earnings, or all daily earnings beyond a certain minimum
- One man had a box where he put a little money (50-100 FG) every day. Then when he or his father (his only dependent) had an exceptional need for clothing or medicine, he took from the box to pay.

Costly efforts

- Sales of rations other than cornmeal:
  - Some sold ration food, usually oil or beans, to get a larger sum of money at one time. Then they bought red palm oil and fish, little by little as their daily earnings allowed. Many were not able to recover all that was sold. (See Annex 6)
  - Others sold a little bit of their ration, usually beans or bulgur, on days when their earnings did not reach enough to pay for absolute minimum of ingredients (especially salt, oil, and "chicken soup").
- Credit or layaway purchases:
  - Especially traders and NGO workers tended to buy clothing and more expensive items on credit. NGO workers sometimes paid in installments over several months. Others used a "layaway" approach, i.e., they gave a vendor a deposit to put something aside for them and then paid little by little until the full price was covered, before taking the article. With both approaches, interest was built into the price of the item. If credit became long overdue, vendors might add more interest.
  - Kerosene, grinding, soap and food ingredients were often taken on credit at the end of the distribution cycle. Vendors expected to be paid on the day of the next food distribution.
- Sales of possessions
  - Clothing, plastic sheeting, a blanket, part of a kitchen set, or any other possession of value might be sold to get cash. These types of sales were most common soon after a household arrived in the camp, before the household was able to begin gardening or to find means of earning income.
- Cash loans:
  - Small cash loans among family or friends generally bore little or no interest.
  - Larger cash loans (>5,000 FG) typically carried 50% interest, if paid on time. For each passing month, more interest, equivalent to 50% of the original loan

amount, was added. According to loan recipients, credit providers were Guinean traders, NGO workers and ARC loan recipients.

4.9.4 Evidence unmet needs

Practices described by many of the refugees interviewed indicated that they were unable to consistently meet the costs described as "average". (See Table 6)

With regard to food:

- All but those with salaries said that they bought according to the day's earnings.
- Most said that they ate a "delicious soup" for only one or two days immediately after food distribution, when they did not need to buy oil or salt and had peas to add to their soup. Then,

Table 6: Evidence of households' difficulty to meet needs

- Practice of living "hand to mouth", buying for one day at a time, according to the cash at hand
- Prevalent use of Mapo and kinda in place of Maggi and/or fish
- Lack of reports of purchases of worn household goods (bedding, kitchen)
- Predominance of reports of eating less:
  - Less cereal
  - Less ingredients
  - Fewer ingredients (dry rice)
  - Fewer meals
  - Going to sleep hungry
- Poor condition of shelters
  - Leaks
  - Lack of plastic sheeting
  - Falling walls
- Frequent reports and observation of clothing problems
  - Wearing less "decent" clothing
  - Sharing sandals
  - Wearing single lappers
  - Going barefoot
- Evidence of insufficient soap
  - Wearing dirty clothes
- Children dropping out of school:
  - Lack of clothes/shoes
  - Problems with copy books
- Prevalence of use of vegetable or palm oil for lighting or sitting in the dark

until the next food distribution they ate “low quality” sauces, jolloff or dry rice.

- Typical reports of spending for a family of five or six were 400-600 FG/d compared to more than 1100 FG per day in the proposed “average” spending. F
- Fish purchases were much less substantial than that suggested in the “average”, although they were possibly more frequent.
- Those that did not have vegetables in their gardens admitted that they were not always able to buy some.
- The poorest said they sometimes ate only one meal of bulgur with little or no oil.

With regard to clothing:

- Many women, at least while working during the day, wore only a single lapper around their waist, instead of the customary two.
- To extend the life span of sandals, many did not wear them while they worked. Load carriers, farmers, woodcutters, carpenters, and even blacksmiths said they worked barefoot and only wore shoes for social occasions and when moving about the camp. Many children were instructed to remove their shoes as soon as they came home from school. On weekends they were allowed to wear sandals only to go to the latrine or to the market. Fear of disease in the latrine and school attendance seemed to be the primary motivations for children having footwear.
- In the mid-income ranges, several groups of women said that they had bought no clothes since coming from Gueckedou. They were still living on past prosperity.

Leaking roofs were a problem for all but the newest arrivals. Many refugees complained that they could not sleep at night because of the rain. Some demonstrated how they huddled in dry spaces away from the falling drops. Observation of a number of houses just after rains revealed that the interiors and walls were soaked. A number reported that one or more walls of their house, water logged, had fallen. Notable was that the large portion of households visited that had these problems lived in “vulnerable” houses built and maintained for the most vulnerable members of the camp population.

Teachers said that the purchase of copybooks created difficulties for the majority of households and were completely beyond the capacity of others.

While these signs of difficulty were most apparent among those with low income, i.e., the 50% below Level III, those in Levels II and III also indicated that some were true for them, too. These higher wealth groups especially reported problems related to food (using Mapo instead of Maggi, and eating dry rice) and shelter maintenance (leaking roofs). However, the difficulties of those in Level II may have stemmed more from choices to spend more on clothing and sharing with extended family than on a general shortage of funds.

Only the poorest (Wealth level VII) sat in the dark, but those in levels V and VI sometimes used oil instead of kerosene to light their shelters. Even higher income groups used oil occasionally, but this was due to camp-wide shortages of kerosene rather than lack of household funds.

Similarly, the inability to get soap to keep clean was primarily a problem only in the lowest wealth level. The practice of exchanging the soap distributed by HCR for longer-lasting kabakuru was a common measure by those who were in slightly higher wealth levels. Only those in the top level bought commercially made soap (Ideal and Titanic). Those in wealth levels II sometimes purchased some of the special, locally made soaps (e.g., that made with palm kernel oil).

5. ANALYSIS AND DISCUSSION

5.1 SATISFYING BASIC NEEDS

Comparing refugees' average expenditures (Table 5) and primary incomes (Table 3) it would seem that the primary income in at most 15% of the households could cover expenses for six members. Additional households apparently managed with two or more incomes, or they had found other ways to get what they need so that they could reduce their spending.

Table 7 quantifies the degree to which some of the more positive coping mechanisms could reduce costs or provide additional income. If a household maintained a year-round garden and forewent purchases by applying labor, costs for firewood, shelter repairs, bulgur milling, and

Table 7: Potential savings from coping mechanisms

	Potential savings		
	1 members	3 members	6 members
Gather all firewood	3,000 FG	3,000 FG	4,500 FG
Pound all bulgur	1,125 FG	2,250 FG	4,050 FG
Repair own shelter	2,500 FG	2,500 FG	2,500 FG
Plant year-round garden	5,250 FG	7,125 FG	13,500 FG
TOTAL	11,875 FG	14,875 FG	24,550 FG
REMAINING NEED	15,302 FG	33,533 FG	51,945 FG

purchases of leaves and pepper might be eliminated. If all of these strategies were employed to the maximum, the remaining financial demands, depending on household size, would be about 15,000 FG to 52,000 FG.

For a household to reduce spending in this way they needed the support of someone, probably a man, able to prepare a garden space and repair the shelter. They also needed someone to gather wood and pound bulgur on a regular basis. These support persons did not necessarily have to be

members of the household, but must have been willing to do the work without cost to the beneficiary household – monetary or material. Any cost would diminish the contribution of the coping strategy.

A factor that apparently helped refugees to supplement their incomes during the previous year was the exceptional circumstance of the replacement of part of the bulgur ration with cornmeal in four months' distribution. This had significant economic benefits. If a household sold all of the cornmeal and repurchased an equivalent quantity of bulgur, s/he could profit 200 FG per kilogram. The maximum potential monthly gain was 1,200 FG per person. In this way, the remaining need to be satisfied with household earnings could have been further reduced to about 14,000, 30,000, and 45,000 FG per month, respectively for household sizes one, three and six.

With these reductions in spending and supplementary income, households in wealth levels I, II and a portion of level III might have managed with the primary household income, i.e., at most 50% of the households. Households that depended primarily on an income from level IV or V could have managed with support from a second similar income, i.e., another income from one of these levels. Households depending on income from level VI or VII, even with a second similar income could not meet average expenses for a family of six, or even a family with only three members.

5.2 VULNERABILITY

5.2.1 Description of the vulnerable

According to the findings of this study, possibly half of the households were vulnerable in that they were not able to pay for a minimally acceptable standard of living. These households were those in which:

- No one was employed by an NGO with a salary of more than 75,000 FG, and
- No one was operating a credit-free business, and
- No one was well established in a trade, and
- For every two dependents there was less than one worker able to pursue income in Levels III-IV

5.2.2 The most vulnerable

Considering the **most** vulnerable, a large proportion of those in the two lowest wealth levels were the refugees newly arrived from Liberia. Hopefully, with time, as they became more familiar with their surroundings and neighbors, this group would move upward among levels I-VI. However, because of the demographic profile of the newest groups, i.e., the shortage of able bodied or skilled men, many households were likely to remain in the lower three levels.

Also included in the lowest levels were those traditionally regarded as vulnerable, i.e., the old, the handicapped, and women alone with children or other dependents. A vulnerable individual with no dependents might have managed with income in Level VI if they received lots of community and

humanitarian support (assignment to a "vulnerable" house, support person to offer occasional labor free of charge, and charity in the form of money, clothes, or food). Others, especially those with dependents, seemed to live at an unacceptably low standard and/or employed negative coping strategies.

Findings also showed the vulnerability of households headed by middle-aged men who were unable to successfully compete against younger men for daily labor contracts. These men no longer had strength to sustain heavy farm work (turning swamp, climbing trees) or load carrying for pay on a regular basis. Many of these men, if they farmed, even needed to pay others to do some of the heaviest labor. Some younger men were also disadvantaged because of poorer physical constitution, or a poor work network.

A worrisome finding was that men and women employed as camp security, with a monthly incentive of only 12,500 FG, were also in level VI. In theory, this was a group of volunteers that would not be expected to work full time. On the contrary, they said they were "on call" 24 hours per day and, therefore, were not able to take other full time work or even daily contracts. Yet, the one who was interviewed seemed to be living better than one would expect, given his salary. Discussions with other camp residents indicated that some members of camp security used their position to profit financially. From this position of power they could demand favors (food or money), especially from those they caught in some illegal or anti-social act, but also from any one that they could threaten with a report of such an uncommitted act. Thus, the payment of such a low salary with the expectation of full-time availability seemed to be an invitation for extortion and bullying.

5.2.3 The growing proportion of vulnerable households

The age/sex profiles for October 2001 and 2002 in Annex 4, Table A4.1 show a decrease in the proportion of adult males (20-59 yrs) in the population during the year, particularly in Telikoro. In October 2001 overall, there was one adult male among 5.1 refugees, and in Telikoro the ratio was about the same: one among 5.2 refugees. In October 2002, overall, only one among 5.7 refugees was an adult male, but in Telikoro there was only one among 6.5, i.e., less than one per average household size.

Two phenomena could explain this reduction. Men frequently repatriated ahead of their wives and children. Also, due to fears of allowing entry of combatants into Guinea, able men were prohibited from crossing from Liberia, while women, children, and the elderly crossed. The greater change in Telikoro probably reflected the higher concentration of newly arrived Liberians in that camp. With continued repatriation of the more able and the entry of new Liberian families, this trend was likely to continue overall, reducing the probability that a household would have the support of an able bodied male.

Questions asked during interviews about intentions to repatriate revealed four groups that had no immediate plans for repatriation: 1) widows and elderly men and women who do not expect to find a close relative to help them on the other side; 2) those who came from the region of Sierra Leone that borders Liberia; 3) those that had vivid memories of their family members being tortured and burned, and 4) salaried NGO workers who were unwilling to leave steady employment at a time when their extended families were issuing requests for assistance getting reestablished. An increasing representation in the population in the first group could significantly alter the demographic profile during the coming year.[18]

5.2.4 The least vulnerable

It seemed that some of the households in the top level (I) were nearly self-reliant if not completely so, especially NGO workers who received regular salaries. Income from business was less consistent.

According to their reports, NGO workers' biggest problem was the pressure from extended family for financial or material support. Socially, those who had more than average were expected to help others. Also, as one group pointed out, they were able to hold NGO jobs because they were educated, and extended family had helped them to get where they were – making sacrifices so that they could attend school. They could not ignore the needs of these family members or their children.

Therefore, when considering how much income was needed to be self-reliant, a larger than average family size should be considered. Taking for example, a family size of 9, a quick estimate of the minimum expenditures of a household that bought everything, and lived close to an "average" life could be made by adding the expenses needed to support a household of 6 plus a household of 3 (121,803 FG, See Table 5), and adding 81,000 FG for the purchase of rice to replace the bulgur and CSB (500 g/p/d at 600 FG/kg), 18,000 FG to purchase oil and salt for the other 15 days of the month, 3,750 FG for additional soap, 3,000 FG for beans, and 10,000 FG for additional clothing required by their job and social standing. The total is 247,553 FG/mo. Thus, refugees regularly earning more than 250,000 FG/mo would probably be able to manage to live in the camps at a lifestyle similar to other refugees, without any food or non-food assistance. According to the wealth ranking, such households represented less than three percent of the households in the camps.

5.2.5 Targeting the most and least vulnerable households

It seemed, that an able worker in the age range of about 20-44 years, who was not employed by an NGO or doing bigger business, could support him/herself and at most two dependents. Thus,

[18] Notable is the change in proportion of elderly during 2001-2002. In 2001, the elderly comprised 7.3% of the population and in 2002 only 5.9%. Statistics of those that repatriated showed that 8.7% were over 60. A significant portion were apparently anxious to return to Sierra Leone, but those that remained in the camps at the time of the study, on the contrary, seemed more reluctant than younger refugees.

any household with an able-adult to dependent ratio less than 1:2 was probably vulnerable— unless someone in the household was working for an NGO or was successful in business or trade.

However, the HCR database was not readily adaptable for targeting vulnerable households based on demographics because the household profiles in the registration database did not reflect real households in terms of economics and food sharing. A refugee household often had two or more cards covering different members. This was partly a strategy of refugees to assure access to assistance targeted to female-headed households. However, it also seemed to be a product of the system of registration of refugees. Many refugee households were fragmented during flight, crossing the border at different places and at different times, and the different groups were registered as they arrived. After initial registration, the procedures of re-verification and census tended to perpetuate the initial fragmentation because refugees were asked to produce a card and a matching number of members in order to receive a new card. In addition, during the transfer from the *Languette*, as a means of conserving non-food items, some single adults who had no economic ties were registered on the same card.

Nevertheless, household in the data base with able-adult to dependent ratios less than 1:5 were probably vulnerable. Even if a second adult from these households were registered on another card, the ratio could not fall below 1:2. However, targeting using only this <1:5 ratio would miss many households that were vulnerable, e.g., single-adult households of size 3-5 who were all registered on a single card and single women, handicapped or elderly who shared ration cards with able adults with whom they had no economic ties.

Alternatively, community service agents and community leaders could identify vulnerable households. However, subjective decisions open the door for favoritism and self-seeking behavior. Several NGO workers admitted that, in order to relieve the pressures put on them by extended family, they worked together – across agencies – to facilitate the employment of one another's family. Similar biases could also be expected among community leaders. To minimize potential biases and favoritism, selection for targeted assistance in this way should be carefully organized, well supervised and closely monitored. Criteria for identification, based on household composition and participation in different income generating activities, should be clearly defined and presented to the community for approval.

With regard to targeting the least vulnerable for reduced assistance, NGO workers with a monthly incentive of 250,000 FG/mo could be candidates. However, NGO workers were the primary source of charity for poor households, and this should be kept in mind when selecting a cut-off and considering how much to reduce assistance. Reducing their assistance too drastically could have a negative impact on the situation of more vulnerable households.

With careful analysis of income, some businessmen and women could also be candidates for targeting for reduced assistance, particularly those doing wholesale trade, but the cut-off salaries might be higher or the reduction less than NGO workers, due to the instability of their earnings.

5.3 BUILDING SELF-RELIANCE

The promoting factors for various income types, as shown in Table 4, can be grouped into five categories: 1) resources (including physical capacity) to invest; 2) a favorable economy, with job opportunities, customers with money to spend, and good lending practices; 3) marketable skills, including formal education and language; 4) freedom of movement; and 5) knowledge of the area. Constraints were basically the opposites: poor health or physical weakness; difficult access to resources due to low income and restricted movement; the low buying power of potential clients and poverty of potential employers; lack of education and skills; scarcity of job opportunities; and unfamiliarity with the environment.

Following are suggestions for ways to build self-reliance in Kountaya and Telikoro by encouraging and facilitating household food production or income. In accordance with refugees' current approaches, these strategies focus on expanding agriculture, the practice of skilled trades, business, or NGO employment.

5.3.1 Increasing access to investment resources:

5.3.1.1 Provide loans, grants or tools and materials as start-up capital for business, trades, agriculture, and poultry raising

The primary objective would be to launch a large number of sustainable small trade, business or food production operations that do not rely on credit. In some cases, provision of tools and materials that are difficult to access from the camps might be more effective than grants for purchase. Care should be taken not to build expectations of continued support.

5.3.1.2 Promote contact and cooperation among refugee and between refugee and Guinean farmers, business and trades people

Activities that could be organized to bring farmers or trades people from different groups together and promote similar coordination include:

• forums for information exchange (e.g., Guinean farmers sharing their knowledge and experience in the area with refugee farmers),

• joint work projects (e.g., swamp management with both refugee and Guinean farmer-laborers),

• enrolment of Guineans and refugees in the same vocational training,

• favoring contracts with refugee/Guinean cooperatives for purchase of services or goods (See Section 5.3.3.5).

The Handicapped trade associations provided a good model of cooperation. Membership included both handicapped and fully able people sympathetic to the difficulties related to handicaps, and both refugees and Guineans.

5.3.1.3 Improve refugees' access to raw materials for agriculture, poultry raising, and trades.

Most income generating activities require materials and replacement of tools to keep going. While programs should encourage refugees to acquire what they need on their own, due to constrained movement, they may need some assistance. For example, blacksmiths said that a good source of iron for their work was broken car/truck parts, in particular, springs. Ruined parts taken from the HCR/NGO fleet could be recovered from GTZ and recycled to associations of camp blacksmiths. Individual members of the associations could buy the metal, covering the cost of transporting them from Kissidougou to the camps, perhaps with a small percentage. Alternatively, the parts might provide iron for blacksmith training activities.

5.3.1.4 Promote conditions and practices that prevent illness and assure access to quality health care for rapid recovery

Productivity requires good health. The refugees interviewed complained a lot about the health care – long waits; insufficient and ineffective medicine; absence of care on weekends; distribution of chloroquine and aspirin, regardless of the complaint; failures or tardiness of referrals for expert care; and the unwillingness/incapacity of the health post staff to inform patients about their illness and anticipated results of medication. This study was not intended to evaluate the health care services in the camps. However, the level and extent of complaints indicated a need for such an evaluation and responsive action.

5.3.1.5 Promote adult literacy, numeracy and language skills

NGOs need employees who are literate and can communicate with expatriates or Guineans. Business and trades people need to communicate and work with numbers.

5.3.2 Promoting a favorable economy

Efforts to build an economy that favors refugee self-reliance would have as objectives: To increase the buying power of refugee households and increase demand for goods produced or marketed by refugees; to promote productive activities that use refugee labor and to assure that potential employers have money to pay, thus increasing job opportunities; and to assure that hiring practices favor refugee employment. There also was a need to eliminate negative credit practices that hinder progress. Some possible approaches would include:

5.3.2.1 Promote UN/NGO hiring practices that favor refugee employment, establishing goals and policies for all agencies to strive for.

For example:

• Among unskilled labor, hire 80% refugees and 20% Guineans (or some other agreed ratio)

• For temporary work (skilled and unskilled)[19], establish practices/policies that favor hiring a large number of refugees occasionally rather than a few steadily.

NGO daily contracts pay two to five times what refugees can get from other refugees or Guinean employers. Relatively few days of NGO pay could enable the purchase of a significant portion of the year's periodic non-food expenses, provide capital to launch a small business, or buy tools or materials for establishing a trade practice. Favoring steady employment of a few for the duration of a short-term activity could foster dependency, as the refugee loses the motivation and immediate need to maintain other work networks or to seek alternatives that are more sustainable.

5.3.2.2 Reform lending practices

The practice of giving and taking loans with 50% interest was a serious threat to refugee self-reliance. While the practice was not apparently new, it seemed that it increased with the promotion of refugee farming. A portion of assisted farmers who were interviewed had accumulated large debts (100,000-300,000 FG) borrowing money to pay laborers. At that time, a few weeks or months before harvest, some were concerned that they would not be able to repay even after harvest. Others faced the need to pay more laborers but had already exhausted their credit possibilities. Some reportedly had sold their farms pre-harvest at extremely low prices to repay debts and avoid imprisonment. Others had rendered their ration cards to creditors who would collect the food ration in lieu of payment until the debt was cleared. One woman reported to an HCR field officer that she was on the verge of prostitution to repay a debt.

Of particular note is that while some lenders were Guinean traders, among the lenders there were also NGO workers (whether refugee or Guinean was not specified) and refugee business people who had received ARC loans.

An investigation has been initiated to ascertain the legality of these loans. Regardless, measures must be taken to reduce this practice and to assist refugees who face steadily accumulating interest, to negotiate a reasonable repayment amount and schedule with the lenders.

However, since the need for cash credit will not go away, at the same time that bad practices are eliminated, mechanisms must be put it place to assure good practices.

[19] This would be less appropriate for temporary work that requires specialized training. For example, repeat hiring of casual workers for social or health surveys or vaccination campaigns may be desirable since cumulative training would assure good performance and better results. However, hiring policies that favor employment from the camp population for these activities, instead of training and employing only from the Kissidougou population, would be beneficial.

5.3.2.3 Promote refugee and Guinean farm and garden activities

Farms would hopefully provide some cash income, but they had already provided jobs for daily laborers. However, especially because of the reports of substantial debts accrued by farmers (See Section 5.3.2.2), a thorough evaluation of all effects of the agricultural campaign would be helpful to guide future programs. To estimate the degree to which farming would contribute to refugee self-reliance would require a systematic sampling of assisted and non-assisted farmers, investigating not only yield, but also the actual profits, considering total costs (including paid labor) and returns, and comparisons of the experiences of successful and unsuccessful farmers.

Gardens alleviated daily expenses and generated income, but had less potential for creating jobs. One simple way of promoting income from gardens would be distribution of a variety of seeds so that everyone does not have the same vegetables to sell. Distribution of seeds for the particular products popular for petty trading (e.g., corn, yams, peanuts) would also support that income group.

5.3.2.4 Reconsider food aid commodity selection

Food pipeline problems in 2002 inadvertently generated a boon to the refugee economy with the distribution of a combination of bulgur and cornmeal during five months of the year. The differences in market prices of the two commodities allowed every household in the camp the possibility of increasing available cash, without any nutritional loss[20]. There was even a potential for gain of nutritional energy if the 200 FG, gained from the sale of 1 kg of cornmeal and replacement with 1 kg bulgur, were spent on 90-120 g of red palm oil (800-1,080 kcal gain, depending on current price of oil).

Whether the market would support such favorable conditions long term is questionable. Nevertheless, on-going monitoring and analysis of market conditions with regard to food aid commodities could lend insight to ways of not only meeting nutritional needs, but simultaneously stimulating the local economy, with little additional cost for the food (theoretically, the cost to the international community for maize meal was 5.3% higher[21].)

It is recognized that, once established, there is little flexibility in the content of food baskets for general food distribution, due to the lead-time required to guarantee delivery of such large quantities. A two-cereal food basket was suggested and rejected this year, but this was prior to having information about the potential economic value of such a plan. Perhaps this could be reconsidered for 2003 or 2004.

5.3.3 Promoting refugees' practice of skilled trades

[20] Bulgur has a lower fat content, which would be remarkable given the low fat content of the food ration. However, because it was highly probable that some of the money gained was spent for oil, the loss was probably compensated.

[21] FOB prices updated by WFP Office of Budget, 1 July 2002, were 200 USD per ton for maize meal and 190 USD for bulgur wheat.

Although five percent of the refugee adults (20-59 years), including 10% of the men, described their occupation as a tradesman, carpenter or mason, some were unable to establish their practices in the camps. Thus, it seemed that training was not enough. Trained refugees needed additional support to initiate and maintain the practice of their trades.

5.3.3.1 Hire as many skilled workers (carpenters, masons) allowed by Guinean law for camp construction projects

The Kissidougou Protection Section will research the legal limits of hiring refugee professionals for work inside the camps. The Programme Section will need to negotiate agreements with partners to promote and monitor hiring of refugees.

5.3.3.2 Investigate ways to promote Guinean / refugee cooperatives for camp projects

Consider how to promote Guinean/refugee professional cooperative organizations that might be contracted for building construction and other camp projects. Because there may be legal constraints, research is needed to better define the limits and explore possibilities, with hopes of finding some way of contracting cooperatives of this type.

5.3.3.3 Investigate ways to contract to buy refugee-made products for distribution to other refugees

As examples:

• IRC was already seeking funds to finance a school-feeding program using bread purchased from refugee bakers to make sandwiches for the children.

• HCR logistics was plans to investigate means of contracting to buy refugee-made soap for the general distribution. The health centers were already using some refugee-made soap.

• In N'zerekore, tools distributed as part of the farm-assistance program were purchased from refugee blacksmiths.

• Seed purchase would benefit repatriating Sierra Leonean farmers who could not carry large quantities of rice with them.

In many cases, contracting with refugee associations or refugee/Guinean cooperatives might be more practical than dealing with individuals.

5.3.3.4 Promote marketing of refugee-made crafts to camp visitors and NGO workers

It was difficult to find refugee crafts for sale in the camp; they were primarily sold from homes. The construction and opening of a gift shop in a location that is highly visible, particularly to camp visitors (donors, Government authorities, UN and NGO workers and supervisors), would give refugee and local craftsmen and women a place to display their work and promote sales and income.

The shop could accommodate decorative wood and metal crafts, crocheting, tie-dye, embroidery, weaving, tailored and decorated clothing or other items.

5.3.4 Facilitating movement

Issues related to ease of movement arose in three contexts:

- daily laborers could find more work if they traveled to remote villages where there was less competition for employment
- refugee business people encountered problems when bringing merchandise through police / military barriers
- prices increased during the rainy season because of the condition of the roads and footpaths

The primary barrier for movement to villages by daily workers was family composition, willingness to move, safety concerns and needs to be present in the camp for activities such as food or non-food distributions and other types of assistance. Women were generally more restricted, both because of concern for their safety moving through remote areas and because of greater demands of childcare and household activities. There were no obvious ways of improving men or women's movements of this type. The solution for those unable to move seemed to be creation of more work that they could do in or near the camp, e.g., promoting refugee farming and NGO employment.

5.3.4.1 Provide identity documents for refugee traders

Refugee business men and women asked for some type of document or identity card to show that they were engaged in legal commercial activities. They believed that this would reduce their problems and costs (bribes for passage) at the barriers.

5.3.4.2 Assist transport of market goods to the camps

Another idea presented by the refugees was to explore how NGOs could assist in transporting and warehousing non-perishable, commonly sold goods in the camps. They envisioned the possibility of buying from the warehouse with low credit.

5.3.4.3 Improve roads and pathways

Finally, with regard to the problems presented by the rains, road and path improvements would help both Guinean and refugee commerce. Daily labor for refugees and Guineans would also be created in the course of making those improvements.

5.3.5 Increasing knowledge of the area

5.3.5.1 Foster communication among refugees and between refugees and Guineans

In general, the refugees seemed adept at gathering relevant information about their environment. It was mostly a matter of time. Nevertheless, activities that foster communication between old and new refugees and between refugees and Guineans could accelerate the process. Possible focal points for communication include:

• Farming

One of the most common requests heard with regard to knowledge was for more information about the agricultural seasons, the soil, and appropriate planting practices. Apparently there were significant ecological differences between Albadaria and the *Languette*. The agricultural projects in 2002 included transmission of some information, but either repetition or further information was needed. The arrangement of information exchange plus open question and answer sessions at the beginning and end of each harvest season would be helpful. The invitation of Guinean farmers to share their knowledge with refugee farmers at such sessions would foster networking between the groups.

• Training

Vocational training programs that included both refugees and Guineans could foster the development of cooperatives and networks among refugee and Guinean trades people.

• Other

A wide variety of projects could be designed in ways to promote networking. As examples, a gift shop to display refugee-made crafts could also be open and jointly operated with Guinean craftspeople. Exhibitions or cultural exchanges could be arranged.

5.4 BUILDING SELF-RELIANCE AMONG THE MOST VULNERABLE

Assistance to increase the self-reliance of the elderly, the physically handicapped, and single adults with many dependents must be specially tailored to compensate for the innate limitations of these households. However, care should be taken not to design programs that will require constant external inputs.

The primary limitations of many in this group stemmed from physical weakness and/or reduced mobility, and the lack of mobility reduced their possibilities for networking with others. Still many were capable of planting and maintaining gardens and of operating small businesses or trades from their homes or in their immediate neighborhood. Some had part-time help from older children or extended family.

Another large group among the vulnerable were the newly arrived. Their biggest common disadvantage was the lack of contacts and knowledge of the area.

Interventions that could be targeted to build self-reliance in these groups include:

1) Start-up grants (as opposed to loans) for tools and materials to those members of these groups who know and are still capable of practicing a skilled trade, e.g., tie-dying, embroidery, baking, soap making, weaving, tailoring, carpentry, or repair of shoes, bicycles, or radios.

2) Start-up grants for small businesses that can be operated from home or from a stationary point near home, e.g., table markets, cook shops, or kola.

3) Support poultry raising, giving fowl (preferably more than one variety to different households) and advice for maintaining healthy flocks. Periodic renewals may be required in the case of disease or seasonal decimation of the flocks. Preferential buying for any meat used in community kitchens could be arranged.

4) Skill training with adjacent childcare facilities for single mothers:

Few women have technical skills. The programs should be designed to match the interests of single women, especially training them for skills they can practice with their children close at hand.

5) Buying services and products from Handicapped or socially-minded associations:

The Handicapped Associations or other groups consisting of and supporting vulnerable households (for example MAGE: Men's Association for Gender Equality) could be given preference when contracting for the purchase of soap, tools, bread, school uniforms, and other items distributed as part of the assistance to the refugee population. Already, the Handicap associations have proposed that they be contracted to do maintenance on vulnerable houses.

6) Favor employment of regular and daily workers from this group

Many of this group could do light to moderate physical work and some were literate. Mothers who had trouble arranging childcare regularly could possibly make arrangements for two or three days at a time. Therefore, many could be candidates for some types of temporary work, and attention could be given to hiring workers from this group whenever possible. To draw attention, NGOs could be asked to report percentages and types of vulnerabilities among those employed. Examples of jobs which might be appropriate for this group: food scooping, distributing non-food items, monitoring of distributions, tree planting, preparing sandwiches, monitoring school feeding, cleaning offices or the distribution hangar, repairing food sacks, pre-packaging food for distribution[22], receiving the sick at health centers, assisting with growth monitoring activities, or selling at the gift shop.

[22]There has been discussion with WFP to weigh and pre-package salt, oil, CSB for small household sizes before distribution.

7) Literacy/language/certification training with adjacent childcare for single moms

Only a small minority of women in the refugee community had any formal education. This was one of the reasons given for why the percentage of women among the refugee NGO workers was low. Literacy and language training for women would improve their ability to compete with men for these positions. To accelerate the entry of more women into NGO work, such programs could initially be targeted to women who have already had some education. Upon attainment of a certain level, their names could be given certificates showing their accomplishments and their names circulated to NGOs as potential candidates for work.

IRC provided a good example of this strategy this past year. During the school break, they arranged for special tutoring women who were educated but not certified as teachers or teachers' aids, to help them to prepare for the exam. In this way they were able to raise the percentage of females among school personnel this school year.

The provision of childcare during training would allow women with small children to attend. Consideration could be given to permit those that succeed in entering the work force to have continued access to the childcare facilities.

8) Payment (food, non-food, or cash) of other refugees to help prepare garden spaces or farms for women, elderly or handicapped refugees

Many of the weaker refugees were able to plant and maintain gardens, but were not able to do the heavy work necessary to prepare a garden or farm (e.g., turning ground [particularly swamp], building heaps, uprooting stumps, brushing) but they and their families could plant and maintain the gardens after the preparation was complete.

9) Orientation programmes in which old refugees can share with new arrivals

Orientation programmes could be developed in which longer-term residents of the camps could share information with newly arrived refugees. The arrival of one group and simultaneous departure of another provides a unique opportunity for transmission of knowledge from one group to another with little risk to either party. The departing group has no reason to fear any competition that might have ensued had they been staying.

5.5 MEETING NUTRITIONAL REQUIREMENTS

WFP food aid provided to the refugee population was the primary source of food in refugee homes. In the majority of households, this assistance provided about 93% of the population's energy needs, either through direct consumption or indirectly, through an equivalent exchange of the

distributed oil for red palm oil. (See Annex 6) The remaining energy was usually purchased, mainly in the form of red palm oil (270 kcal/p/d) and dried fish (about 50 kcal/p/d).

In some households the contribution of the food aid was diminished by ration sales. The degree and nutritional outcome differed according to the food basket and prevailing prices. Cornmeal sales made to purchase bulgur and oil worked positively in both a nutritional and economic sense. On the other hand, bulgur and split pea sales generally had a negative nutritional impact with losses of energy and protein. The impact of oil sales depended on the income of the household. If household income was sufficient, the sale of oil was followed by the purchase of an equivalent quantity of oil, little by little over the following days, and so, there was no difference. This was simply a money management tool. However, since most oil sales were associated with loan paybacks or purchases of larger non-food items, they signaled some level of household economic insecurity, and chances were that the household's income would not allow a replacement of the full quantity. Hence, there would be a loss of energy and fat. When losses incurred either the household purchased food to compensate, decreasing the contribution of the food aid, or they ate less.

Generally, dietary practices were good, when resources were available. The refugees habits and traditions were to eat a variety of fresh foods rich in vitamins and minerals. In these camps, it was likely that diets were better during the rainy season, when vegetables were abundant, and that during the dry season fresh food intake dropped. Because of the cost, fish and greens were among the first ingredients to be reduced or eliminated from meals.

Intra-household sharing favored children, as evidenced in after-school snacking, morning meals, and reports of working men sharing their portion with the children[23]. Women were probably the most endangered nutritionally, since they were less likely to get food away from home with their work than were the men.

Of greatest nutritional concern was the excessive consumption of Monosodium Glutanate (MSG) in all except the highest wealth levels. The refugees were aware of the potential harm from this practice, but continued due to economic constraints. Maggi, the preferred condiment also contained MSG, but it was mixed with bouillon and dried spices, which reduced the stomach irritation and the quantity consumed.

6. CONCLUSIONS

6.1 CURRENT LEVEL OF SELF-RELIANCE AMONG THE REFUGEES

[23] In a group of women contractors, some married and some not, said the biggest differences between the diets in their households were that in the married women's households they ate more greens (None had gardens, so greens were purchased.), and the children ate more, in general, because the men gave them part of their portion. One woman, who was married, but whose husband had repatriated, said that since his departure the children cried for more food. Without his ration, they all ate less.

6.1.1 **Given the current level of food and non-food humanitarian assistance, the primary income source of only a small percentage of households was certainly able to meet basic needs of the average family size of six.** These were households whose primary income came from a higher NGO salary (at least 77,000 FG/mo) and those engaged in a stable business with little or no credit. Business people were less secure in their position because their income depended on other refugees having enough income to buy their products.

6.1.2 **Other households managed to satisfy their needs because they:**

- were smaller than average,

- had more than one wage earner or

- were able to reduce cash expenditures by applying manual labor.

With regard to size or multiple incomes, it seemed that each wage earner could support at most two dependents plus him/herself, and then, only if the household could also reduce costs by gardening year-round, gathering firewood, maintaining their shelter, and milling bulgur without any additional financial expenditures. Without the labor contribution, a worker following a single income generation method could not earn much more than enough to meet her/his own needs.

6.1.3 The income of 25-30% of primary wage earners (Wealth Levels VI and VII) did not seem to be enough to satisfactorily provide for themselves alone, even if they gardened, maintained their own shelter, hand-pounded bulgur and gathered all fuel.

Because these wage earners were the primary income, even if there were other wage earners in the household, their earnings were presumably as low or lower. Thus, there appeared to be no way these households could manage satisfactorily unless everyone worked, there were no dependents, and there was some external assistance.

A little less than half of these low-earning households were the refugees who arrived from Liberia during the two months before. Others in the group were those recognized universally as vulnerable: the old, handicapped, youth, or women heads of households who had no marketable skills and were not engaged in business. Also among them were a group not readily recognized as vulnerable, i.e., households headed by middle-aged or physically weak men who had no marketable skills and were not engaged in business.

6.2 BUILDING SELF-RELIANCE

6.2.1 **Following the example of the most self-reliant refugees, to build self-reliance, intervention would focus on expanding refugee participation in:**

Business

Skilled trades

NGO work

Agriculture

6.2.2 The primary points of intervention identified as having potential for increasing refugees' economic activities were:

1) increasing access to resources for investment: providing loans, grants, facilitating access to raw materials, guaranteeing good health care, fostering business networks

2) building a favorable economy: promoting agriculture, creating jobs, increasing hiring by NGOs workers, reforming lending practices of Guineans and better-off refugees,

3) promoting practice of marketable skills: promoting hiring of refugee professionals, buying refugee-made products, fostering professional networks

4) increasing freedom of movement outside the camps: providing identity cards, facilitating transport of goods, improving roads and paths

5) increasing refugees' knowledge of the area: sponsoring forums for information exchange and refugee/Guinean joint training

6.3 TARGETING INTERVENTION TO BUILD SELF-RELIANCE

6.3.1 A low able adult to dependent ratio would be a good indicator of vulnerable households in this population.

Although the HCR registration database was not ideal for demographic targeting, the following registered household types were most likely to be vulnerable:

- Households with five or more people, only one of which is an adult between the ages of 20-45 years with no handicap or chronic illness.
- Households with 9 or members, in which there are 0-1 adults between the ages of 20-45 years who had no handicap or chronic illness.

The vulnerability of registered households of less than 5 people could not be readily judged from the composition, and this was the majority. Any household of this size that included a man in

the age range of 20-45 years with no handicap or illness was probably not among the most vulnerable, but the others of the same size with no such man were only possibly vulnerable. Additional investigation, for example by NGO agents and community leaders, would be needed to determine the actual household composition and degree of vulnerability.

6.3.2 Households in the highest wealth level, i.e., wholesale buyers and sellers with no credit and high paid NGO workers were close to achieving full self-reliance

The highest paid NGO workers were the best candidates for reduced assistance, if done cautiously. Wholesale businessmen and women were also potential candidates, although the verification of their income could be difficult.