Food Security and Nutrition

Basic Social Services and Protection of Vulnerable Groups

Joint Needs Assessment Somalia

Asif Niazi
World Food Programme
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List of Abbreviations

CEM  Country Economic Memorandum
CBO  Community Based Organization
FAO  Food and Agriculture Organization
FEWSNET Famine Early Warning System Network
FGM  Female Genital Mutilation
FSAU  Food Security Analysis Unit
GIS  Geographic Information System
HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IDPs  Internally Displaced Persons
LEWIS Livestock Early Warning Information System
MCH  Mother Child Health Centre
NGO  Non-government Organization
PENHA Pastoral Environmental Network in the Horn of Africa
SD  Standard Deviation
UNAIDS United Nations
UNICEF United Nations Children’s Fund
WFP  World Food Programme

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1.0 Introduction

1.1 Every country in the world strives to achieve food security. What makes food security in Somalia an enormous challenge is the multitude of hazards and their complex interactions that impede such an outcome. From 15 years of civil war to an arid climate plagued with successive droughts. From a population devoid of education and health services to the deliberate destruction of irrigation, roads and productive infrastructure. From societal norms that preclude fishing as a source of income and food, to the rapidly expanding social acceptance of the narcotic khat as a favorite pastime. Impediments are indeed numerous. However, Somalis and their beloved country have several things going in their favor. The support mechanism from fellow clansmen and order through elders, the incredible amount of remittances from overseas relatives, a resilient populace, an unhindered private sector, over 3,000 kilometers of coastline, a variety of sturdy livestock and two perennial rivers are major assets.

Methodology

1.2 This paper is part of the United Nations/World Bank lead Joint Needs Assessment carried out in 2006. Inputs include secondary data and analysis provided by international and local agencies working for Somalia; workshops conducted with government, diaspora and community based organizations; and field trips to Hargeisa, Bossaso, Garowe, Jowher and Wajid conducted in January, February and March 2006.1 Due to security restrictions, direct field work could not include Mogadishu and Kismayo. Field trips included interviews with government officials, NGOs and the public. Field work included extensive travel to remote rural areas. Focus group discussions in villages for each of the livelihood categories were conducted. Such discussions were also conducted in urban centres. For nomadic pastoralists, interviews were conducted in the field besides their herds and temporary dwellings. These included interviews of the men and women. Pastoralist committee leaders and members were also interviewed. A complete list of people met is presented in Annex 4. Considering the link of food security and nutrition with education, several schools were visited where staff, parents and children were interviewed.

Database and GIS

1.3 An Issues and Intervention Questionnaire covering food security, nutrition and cross-cutting themes on peace, gender and vulnerable children was circulated amongst government and key informants in Somaliland, Puntland and SouthCentral. The results were compiled in a database and analysed (Annex 1). To identify size and potential locations for water retention structures, a GIS was compiled and spatial analysis techniques were applied (Annex 2). A tabulation of outputs and indicators was compiled into a Results Based Matrix (Annex 3). Although Somalia is one of the poorest areas of

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1 Villages visited: Gobata, Korkamare, Waaye, Korak, Kalabair, Jalal, Km22, Gumburaha, Habaswaya, Arabsoi, Bananey, Dumalae
the world, there are small pockets of wealth and middle income groups. This study primarily concentrates on the majority, i.e. food insecure people who live below the poverty line and are afflicted with malnourishment and poor nutrition.

Scope of Work

1.4 The paper presents a situation analysis, suggests strategies that would support food security, identifies constructive linkages with other clusters and proposes a list of initiatives that would bring Somalia nearer to fulfilling a basic human right – food security. Nutrition is an inalienable indicator and a significant outcome of food security. Therefore, the paper will discuss nutrition as an integral component of food security. Guiding principles include capacity building, community based initiatives and national ownership.

Cluster Interlinks

1.5 This paper is one of 38 sub-cluster reports compiled into a single Reconstruction and Development programme document for Somalia. Food Security and Nutrition subcluster is part of the Basic Social Services Cluster which includes Health, Education, Vulnerable groups, FGM and Khat subclusters. The Productive Cluster concentrates on poverty reduction through increasing livestock and agricultural production. The Livelihood cluster concentrates on income generation and sustainable livelihoods. Macro-level initiatives from these two clusters are critical to food security and nutrition. Consequently, this paper will focus more on the household food security and nutrition with macro-level inputs to the other clusters being made during inter-cluster meetings.

FSAU

1.6 The Food Security Analysis Unit of the United Nation’s Food and Agriculture Organization is responsible for food security and nutrition analysis of Somalia. Funded generously by the European Union, the FSAU has been working in Somalia since 1994 and conducts monthly food security and nutrition assessments. These assessments are followed by rigorous analysis and comprehensive reporting. In addition, FSAU also conducts seasonal assessments and analysis. Special assessments are carried out during drought periods. This paper does not attempt to duplicate their work rather it builds on their analysis and attempts to identify needs and interventions that would improve food security and nutrition in Somalia.

Climate

1.7 The climate of Somalia\(^2\) ranges from semi-arid to arid. The Southern tip is located 2° South of the equator and the northern most area lies only 12° North. This sparsely vegetated landmass, located in close proximity to the deserts of Arabia across the Gulf of

\(^2\) In 1991, Somaliland declared independence. For this paper, Somaliland, Puntland and SouthCentral refer to independent governments.
Aden, records low rainfall (400-600 mm per annum) and much higher evapo-transpiration (1600-2400 mm). About 45% of land cover consists of rangeland with another 13% land area suitable for cropland. With sparse vegetation, runoff and soil erosion is considerable. The two rivers Juba and Shabelle traverse Southern Somalia. Annual flows are estimated at 6 and 2 billion cubic meters respectively.

Data Analysis

1.8 With no central government in place since 1991, data collection has been left to project based initiatives that have often been area specific with restrictions via mandates, budgets and security. As a result, highly detailed and accurate data collection processes have been successful in localized areas. Extrapolation of such data sets to the remaining parts of the country have been necessitated, forced and at times made with liberty and error. National maps and tables covering the whole country are essentially extrapolations. With the insecurity due to wars, national surveys have not been possible. Under such circumstances, the collected data and its extrapolation are the only empirical instruments available for analysis. Obviously, such analysis must take into account the limitations. There is bound to be differences of opinion on methodologies. However, experts seem to agree, without any considerable divergence, on the following broad conclusions (confirmed by results from the Issues and Interventions Questionnaire):

- Malnutrition is wide spread in Somalia
- Food production is a fraction of what is was pre 1991 period
- Large tracts of irrigation and road infrastructure are in disrepair
- Water harvesting structures could retain rainwater for the benefit of livestock
- Poor knowledge and society norms result in avoidable diseases and loss of life
- Water quality and sanitation is poor in most rural areas
- Diarrhoea and ARI are prevalent in children under five years old
- Schools and health service in rural areas is poor or non-existent
- There is an acute shortage of farm to market roads
- Drought is a recurring phenomenon with devastating effects

2.0 Strategy

2.1 Analysing the food security of a country of this size and diversity necessitates its bifurcation into zones based on common food security characteristics. For this study, the FSAU classification by livelihoods has been adopted. The groups are: pastoralists, agro-pastoralists, riverine, urban dwellers, IDPs and coastal/fishermen community. Diet, food source, hazards that may affect this source, coping mechanisms and potential initiatives to achieve food security, all are linked, with varying degrees, to the adopted livelihood of a particular household. This classification also allows for agro-climatic divisions whereby pastoralists traverse the arid and semi arid areas. Farmers live in the riverine areas along the Juba and Shabelle rivers. IDPs are restricted to living in or on the outskirts of urban centres and the fishermen communities reside along the coast (see Map

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3 For a tabulation of diet, food sources, hazards and coping mechanisms in Somaliland, Puntland and SouthCentral see Food Security Data Sheets in Annex 4.
1). The classification also supports project design since interventions are common amongst households within a group and usually distinct from those for households of other groups. Nevertheless, this classification is a tool to support analysis and in no way considered a binding to food security analysis. Moreover, it does not restrict interventions, particularly for nutrition, across the board. Nor has this analysis considered each group homogenous in its food security and nutrition. Particular attention has been given to vulnerable sub-groups, such as women and children, within each livelihood group. Recommendations account for political boundaries and institutional capacities of Somaliland, Puntland and SouthCentral governments.

MAP 1: Livelihood Zones
2.2 Table 1 provides a relative comparison of the size of these groups. (Reliable estimates of coastal populations are not available but the number is certainly less than 100,000). Table 2 indicates the level of malnutrition in each livelihood group. Map 3 illustrates nutrition status by district.

### Table 1: Livelihood Groups

<table>
<thead>
<tr>
<th>Livelihood Group</th>
<th>Population</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastoralists</td>
<td>2.6 million</td>
<td>51 million</td>
</tr>
<tr>
<td>Agro-pastoralists</td>
<td>2.3 million</td>
<td>12 million</td>
</tr>
<tr>
<td>Riverine</td>
<td>444,000</td>
<td>1 million</td>
</tr>
<tr>
<td>Urban (plus IDPs/Refugees)</td>
<td>2 million</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: FSAU

### Table 2: Severe and Moderate Malnutrition Levels in Children under 5 Years Old

<table>
<thead>
<tr>
<th></th>
<th>Weight for Age</th>
<th>Height for Age</th>
<th>Weight for Height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%&lt;-2 SD</td>
<td>%&lt;-3 SD</td>
<td>%&lt;-2 SD</td>
</tr>
<tr>
<td>Pastoralist</td>
<td>27.8</td>
<td>6.1</td>
<td>20.8</td>
</tr>
<tr>
<td>Agro-Pastoralist</td>
<td>29.7</td>
<td>8.4</td>
<td>26.9</td>
</tr>
<tr>
<td>Urban</td>
<td>22.8</td>
<td>4.2</td>
<td>16.7</td>
</tr>
<tr>
<td>Female</td>
<td>25.2</td>
<td>7.7</td>
<td>22.8</td>
</tr>
<tr>
<td>Male</td>
<td>26.3</td>
<td>6.3</td>
<td>23.9</td>
</tr>
<tr>
<td>Somaliland</td>
<td>26.8</td>
<td>4.8</td>
<td>17.7</td>
</tr>
<tr>
<td>Puntland</td>
<td>21.0</td>
<td>2.8</td>
<td>22.6</td>
</tr>
<tr>
<td>SouthCentral</td>
<td>27.5</td>
<td>9.5</td>
<td>25.7</td>
</tr>
<tr>
<td>Total</td>
<td>25.8</td>
<td>6.9</td>
<td>23.3</td>
</tr>
</tbody>
</table>

Source: UNICEF, Multi-Indicator Cluster Survey 2000

2.3 Poverty levels are high across the country with higher levels in rural and nomadic groups (Table 3).

### Table 3: Poverty Levels

<table>
<thead>
<tr>
<th></th>
<th>Per capita household income ($)</th>
<th>Extreme poverty (per capita income less than $1 PPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somalia</td>
<td>226</td>
<td>43.2</td>
</tr>
<tr>
<td>Urban</td>
<td>291</td>
<td>23.5</td>
</tr>
<tr>
<td>Pastoralist, agro-pastoralist</td>
<td>195</td>
<td>53.4</td>
</tr>
</tbody>
</table>

Source: Socio-economic Survey 2002, UNDP/World Bank
3.0 Issues

3.1 Pastoralists. Somalis refer to a goat as the mother of a family and livestock in general as the backbone of their economy. Pastoralism is the largest livelihood group and engages two out of every three Somalis. With most of the landscape arid or semi-arid, livestock herding is the predominant profession. Pastoralists roam the land in search of water and pasture. They enjoy the short rainy seasons when water and pasture is abundant and dread the long dry seasons when survival for animals and humans is threatened, especially when the rains fail. For Somalis, drought is a successive phenomenon with devastating effects. Rainwater harvesting and groundwater provide essential water during the dry season. Large waars (earth dug water catchment ponds) and berkets (a small pond, average 300 m³, with cemented floor and walls) capture rainwater and provide relief for the first two or three dry months. Subsequently, berkets are replenished, at a considerable cost, by water trucked from far off boreholes.
Limitations

3.2 With no cold storage facilities and no forum to organize marketing, a herdsman is most likely to descend upon a small market with a 30 plus herd of goats and sheep thus reducing his own stock value. The export market has been hurt by the Saudi ban on Somali livestock. The strength of a clan lies in its size thus family planning is a repugnant foreign notion. Veterinary services are scarce. Due to their nomadic lifestyle, educating nomads is a problem. The norm is to send a child (invariably boy) to an urban relative where the child would attend school. Out of 6 to 8 children, only one would be selected to ease the relative’s burden. Health services are non-existent. Predominantly illiterate and constantly on the move, the pastoralist has few means of communication. Though, families that own small radios are sure to tune in.

Drought and Floods

3.3 Without exception, every pastoralist interviewed during the field visit identified water as the main problem. This priority was confirmed by the Minister of Agriculture (Puntland), NGOs and FSAU. With an average annual rainfall of 400-600 mm, and much less in arid areas, this priority is hardly surprising. Pastureland (environmental degradation and poor rangeland management), health (animal and human) and education were subsequent priorities cited. Solutions offered by the interviewees consist chiefly of constructing rainwater harvesting structures and drilling boreholes. Rangeland management and fodder banks are required to better utilize natural resources.

3.4 Ironically, land at the base of denuded hilltops, particularly in Somaliland and Puntland, suffer from gully erosion and flash flooding. People who a few days ago were praying for rain, are inundated with floods. For these areas, a few check dams/walls have been constructed with NGO assistance and locals find these structures extremely beneficial.

Nutrition

3.5 Poor pastoralists eat a meagre diet chiefly consisting of cereal (rice, sorghum or maize), tea with sugar and occasionally onions and tomatoes. Meat is eaten only once a month. Fruits are hardly ever available. Milk is available only during the wet season when adults would have some with tea. Children would get milk only in this season though breastfeeding is prevalent for infants up to twelve months old. Drinking water is not boiled and diarrhoea and vomiting is common amongst children. Adults complain of night blindness and anaemia. In times of shortage, coping mechanisms consist of moving, reducing number of meals, incurring debt and charcoal burning. Even if they could afford a balanced diet, most probably they would not achieve it due to lack of knowledge and food preferences. (Most housewives interviewed did not connect water quality with
children’s diarrhoea.) Men and boys eat together while the women and girls form a separate group though the whole family eats at the same time.

3.6 **Agro-Pastoralists.** Agro-pastoralists live in arid and semi-arid areas practicing subsistence rainfed agriculture. A major portion of their livelihood relies on livestock not agriculture. Agro-pastoralists often leave family members, especially young and elderly, in their villages and wander off with livestock in search of water and pastures. In some respects they are more vulnerable than pastoralists since they can not pursue areas distant from their cropland and homes. During severe drought, a final coping mechanism is to abandon their dwellings and relocate their entire families. Having a permanent base allows service providers, such as education and health workers, an advantage with agro-pastoralists which the pure pastoralist lifestyle does not allow.

**Communal Pasturelands**

3.7 Traditionally, pastureland is communal. However, increasingly, individuals are enclosing essentially public areas for private use. This practice is illegal and impedes the traditional sources for grazing. With little or non-existent government control, the practice is increasing. After water, rangeland management is considered the most important issue followed by health (livestock and human) and education. Rainwater harvesting and borehole drilling are the most appropriate technologies recommended by locals and their governments.

> The government can not control communities, 
> we can only plead with community elders for cooperation,
> Ibrahim Harrer Ali, Minister of Livestock and Agriculture, Puntland

**Nutrition**

3.8 Diets are very similar to the pastoralists consisting chiefly of cereals (wheat, rice, maize and sorghum). Tea with sugar is taken by adults and children above one year old. Milk is available only during the wet season when adults add it to tea and children drink freely. Infants are usually breastfeed for one year. Drinking water is not boiled. Diarrhea among children is prevalent especially during the dry season. With wet season comes malaria. Adults complain of malnourishment and anaemia. Night blindness is common.

> By God, malnutrition of my children makes me wake up at nights,
> Jama Al Noor, Agro-Pastoralist, Nugal District.

3.9 **Riverine.** The riverine community lives along the fertile banks of the Juba and Shabelle rivers in SouthCentral regions. This group of about 400,000 is unique in its requirements since water and grazing land is abundant. Irrigation canals divert water from the rivers and irrigate crops of maize, beans and rice. Once the breadbasket of Somali, the riverine now produces a fraction of pre-1991 harvests (for details see Production Cluster report). These farmers are considered more vulnerable than pastoralists since their productive asset, land, is immovable rendering migration only a
distant and last resort coping mechanism. Agricultural extension services are nominal and banana and sugar cane production were devastated by the civil war. With small land holdings, most farmers produce enough for own consumption or barter for other cereals. Poverty levels are high.

**Threat to Cattle**

3.10 The tse-tse fly is a serious menace to livestock in riverine areas. Until its collapse in 1991, the government organized seasonal aircraft spraying to contain tse-tse fly breeding in areas along the river banks. The government’s collapse brought an end to this practice. Insect populations increased and killed livestock. Today very few farmers in the riverine own cattle or livestock. Animal power has been replaced by hiring tractors for ploughing. Consequently, most of the small farmer’s earnings are spent on renting tractors.

**Silt**

3.11 The second major problem is silt. The rivers originate in Ethiopia where deforestation and denuded landscape has increased the sediment carried by the waters. Large amounts of silt are deposited in river and canal beds in Somalia. Consequently, desilting is required twice every year. Due to the shallow water table, grain storage pits dug in the ground collect moisture and damage seed and food. Concrete storage tanks built above the ground would protect seed and grains. Large warehouses are required to store surplus during good harvest years. These warehouses could provide food aid agencies with local produce to be distributed to food insecure areas.

**Symbiotic Relation**

3.12 During the dry season, agro-pastoralists from inter-riverine areas bring their cattle for water to the river and canals. They pay local farmers rent for grazing rights. This symbiotic relation serves both groups. Income from rents supplement the farmers’ incomes and droppings from cattle provide manure for the farms. Interviews with the agro-pastoralists suggest that their motive for this seasonal migration is water not grazing. Stocks from their own crops provide ample fodder and if water were available through wells, their movement would be unnecessary.

**Nutrition**

3.13 Maize is the staple diet. Tea with sugar is the main beverage. During the wet season, kitchen gardens with vegetables crop up. Villages often have small banana plantations. Poultry is often seen in their villages. Eggs are mainly sold and the proceeds used to purchase cow milk. Eggs would also be fed to sick children. Breastfeeding is common but often supplemented with cow milk. Diarrhoea among children is prevalent during the dry season. The wet season brings malaria.
3.14 **Urban Dwellers.** Urban centres offer a variety of livelihoods but the poor mostly engage in casual labour and small trade. Except for Mogadishu, most urban centres are relatively small with populations less than 2 hundred thousand. Urban poor are mostly illiterate. Vulnerable groups include orphans, widows, elders with no children, and the mentally or physically challenged. With little industry and commerce, incomes are low and poverty is high. Schools are unaffordable to a majority of the children. Poor road connections and multiple checkpoints extorting tax on commodities, raise prices dramatically. For example, a kilogram of sugar in Mogadishu costs 4 thousand Somali Shillings ($0.60). By the time it reaches Wajid, 200 kilometres northwest, it has passed numerous checkpoints, each with its own tax, increasing the price to an incredible 14 thousand Shillings ($1.2).

**Training and Credit**

3.15 Skills development and credit schemes are considered important initiatives. With the large percentage of the workforce illiterate, adult literacy would be required. Attention must also be given to skills and trades that could be adopted with little or no literacy. Somalis are visual learners and trades requiring such skills would be suitable for immediate needs. Somalis always know the trade of livestock and credit schemes to launch them into trade of livestock products would be useful.

**Nutrition**

3.16 Bread made from sorghum or wheat is the staple. Tea with sugar is the only affordable beverage. Milk is a luxury for the wealthy. Iodised salt is rare. Anaemia and malnourishment is common among the population. Skin diseases and oedema are common among children. Infants at three months age are known to be given adult diets. Culturally, colostrum is considered harmful and not given to newborns. Infants suffer from diarrhoea and infant mortality rates are among the highest in the world.

3.17 **IDPs.** Drought and wars have forced large populations to flee their ancestral lands and seek refuge in relatively safer areas in or on the outskirts of urban centres. It is estimated there are around 3 to 4 hundred thousand IDPs. These movements have often been immediate and the households have arrived with little or not assets at all. In a society with strong tribal ties, these foreigners are without clan support and are rendered a minority status. Incredibly, some IDPs are highly skilled including doctors, engineers, teachers, mechanics and nurses. All condemned to casual labour. It is unclear how much of this is because of their diminished tribal status and how much is actually due to lack of employment opportunities. Interviews suggest that employers prefer to employ from their own clans giving IDPs secondary consideration.

**Training and Credit**

3.18 Issues for the small number of IDP camps built on government lands are primarily: access to loans for establishing micro-enterprises and employment opportunities. IDPs living on government lands are entrepreneurial and seek skills training and micro-credit.
The shock and trauma of relocation, over time, manifests itself into flexibility and innovation.

Land Tenure

3.19 Land ownership is the main issue for the majority, who live in shacks on private lands. The trauma of fleeing wars and droughts has turned into a nightmare of insecurity. Everyday the men and women set off in search of incomes leaving the children home in care of the eldest child. Land owners have extensive rights, charge rent, and often, without notice, would place rocks in the shacks. (An indication that the premises must be vacated immediately.) The parents would return to a terrified group of children and no alternative place to relocate. This insecurity has stifled their ability to plan, to invest in skills training or small businesses. Life is a daily survival with constant threat of eviction.

Human Rights Tragedy

3.20 Permanent construction is forbidden, walls are made from cardboard boxes and houses are small one room shacks 4x4 meters (12 ft x 12 ft) in size. There is no electricity or plumbing. There are no private toilets. A camp of 500 households in Bossaso has six public toilets and the open coastline. To make matters worse, public toilets and the berket, which is the only source of water, are owned by the landowners who charge heavily for their use. With an average income of 10 thousand Somali Shillings (0.75 dollars) most of the household incomes are spent on water and food. Children do not attend school because fees and uniforms are unaffordable. Exploitation is the only suitable description of this racket. It is a human rights tragedy.

3.21 Land ownership is the primary issue of these IDPs in a country with a land mass larger than France. Once settled on their own lands, micro-credits, income generating schemes and free schooling would be required.

Nutrition

3.22 An average IDPs diet consists of cereal (maize or rice) and beans. Meat is too expensive though, at times, goat and sheep intestine may be cooked. Fruits and vegetables are extremely rare. There is no space for livestock or poultry raising. Children under six months old would occasionally drink powdered milk dissolved in unboiled water. Diarrhoea and malnourishment are prevalent.

3.23 Coastal Dwellers and Fishermen. In spite of an extensive coastline, Somalis are not enthusiastic fishermen and the industry is small and restrictive. Traditionally, inlanders prefer meat and cereals but dislike sea food. Trawlers from other countries catch lobster freely in the Gulf of Aden and pay no taxes. Local fishermen lack skills and gear (nets, boats and engines). They lack capital to invest in these requirements and have no access to loans. During the summer, when waves are high, fishing is discontinued and the fisherman must resort to other means of income, usually casual labour. The main interventions required are skills development and credit.
Nutrition

3.24 Diet of a poor fisherman consists of wheat, rice and fish. Tea is taken with sugar but no milk. Vegetables include onions and tomatoes. Fruits are almost never affordable. Infants are breastfed but once they are a year old, they eat the same food adults consume. Diarrhoea is common among children. Malnutrition, anaemia, oedema and malaria are common in the fisherman community.

3.25 A summary of issues and interventions is listed in Table 4.

**Table 4: Issues and Interventions**

<table>
<thead>
<tr>
<th>Livelihood Group</th>
<th>Issues</th>
<th>Policies Strategies</th>
<th>Priority Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastoralist/</td>
<td>Water Pastureland</td>
<td>Sustainable use of natural resources</td>
<td>Land use planning: Rainwater harvesting, Boreholes, Rangeland management, fodder banks</td>
</tr>
<tr>
<td>Agro-Pastoralist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riverine</td>
<td>Siltation, Tse-tse fly, Damp</td>
<td>Irrigation management system</td>
<td>Desilting, Aircraft spray, Concrete granaries</td>
</tr>
<tr>
<td></td>
<td>earthdug granaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>Skills Credit Employment</td>
<td>Livelihood diversification</td>
<td>Training, Micro-credit, Income generation schemes</td>
</tr>
<tr>
<td>IDPs</td>
<td>Ownership, Credit Employment</td>
<td>Land tenure</td>
<td>Land titles, Micro-credit, Income generation schemes</td>
</tr>
<tr>
<td>Coastal/Fishermen</td>
<td>Skills, Fishing gear, Credit</td>
<td>Technology transfer</td>
<td>Training, Credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All groups</td>
<td>Malnutrition</td>
<td>Awareness raising</td>
<td>Nutrition education, Food aid, Supplementary/Therapeutic feeding</td>
</tr>
<tr>
<td>Food Insecure Areas</td>
<td>Access</td>
<td>Market integration</td>
<td>Rural roads, Markets, Regional warehouses</td>
</tr>
</tbody>
</table>

4.0 Food Aid

4.1 For a semi-arid region with recurring droughts and no significant industry to substitute income sources, food aid has been a valuable intervention in saving lives and filling the gaps caused by poor production. However, achieving food security requires investments that would reduce and eventually remove the need for food aid. Without doubt, food aid would be critical until incomes and production capacities are increased substantially. Therefore, it is important to channel **food aid** into building assets that would contribute to sustained food security.

* A hungry man has no patience,
Mohammad Maalim, Deputy Commissioner, Hudoor District.
Access

4.2 With the precarious state of road networks, a large proportion of the population remains remote and inaccessible. Production in one area does not necessarily translate into food security in another. As stated earlier, prices double and triple in remote areas. With over 70% of the population living in rural areas, physical access to markets is a serious limitation to food security. There are issues to be considered while planning and targeting food aid programmes:

a. food aid should be administered to food insecure populations identified through village level vulnerability analysis
b. food distribution to riverine areas should be avoided during harvest times
c. where possible, using local produce for food aid should be considered
d. in addition to emergencies, food aid to food insecure areas should be used to build assets and provide training

Supplementary and Therapeutic Feeding

4.3 High levels of malnutrition, particularly in drought stricken districts, demands supplementary feeding centres. Several centres are currently operating under UNICEF supervision. Malnourished children receive fortified foods from the centres and their families are supplied with general food aid from WFP. This ensures supplementary foods are administered to the needy children instead of being consumed by their poor and often desperate families. This arrangement practiced in SouthCentral should be implemented in the North. Children with severe malnutrition are admitted to Therapeutic centres where lifesaving nutrients are administered. With such a high prevalence of malnutrition, both Supplementary and Therapeutic feeding centres must be established in each district with malnutrition rates above 10%. Currently there are 14 supplementary and 11 therapeutic feeding centres in SouthCentral (UNICEF). Regular monitoring would allow estimates of expansion. The overall objective should be to provide supplementary feeding and therapeutic feeding to mitigate and eliminate suffering from malnutrition.

Micronutrient Deficiency

4.4 In middle and lower Shabelle riverine areas agriculture produces more food than in food insecure areas such as Gulgadood region. Yet anaemia incidence is higher due to malaria and hookworm infestations (UNICEF Jowhar). Somalis are fond drinkers of tea, which being an iron inhibitor, contributes to ferro-ferric deficiency. Iodised salt is non-existent in diets. Most salts used are either locally harvested or imported from Ethiopia. This leads to iodine deficiency. Incredibly neither WFP nor UNICEF foods include iodine. The National Immunization Days (twice a year) are used to administer micronutrient deficiencies and these programs must be continued. Each livelihood group interviewed, complained of micronutrient deficiency disorders. Most empirical data, gathered from MCH centres, is not representative of the general population.
Nutrition Education

4.5 Nutrition education, such as UNICEF’s Improved Feeding program which works through CBOs and MCHs is invaluable and coverage should be expanded. However, nutrition education must also reach the general population. With 5 of the 7 million people living the lives of nomads and semi-nomads in rural areas, incredibly high illiteracy rates and limited mass media, nutrition education through radio broadcast programs is the most viable option. The transmitter at Radio Hargeisa has a 1.5 kilowatts capacity offering limited reception. In order to reach remote rural areas, a transmitter of 50 kilowatts is recommended. Similar equipment is recommended for Puntland and SouthCentral. Regular national broadcasts could be useful in fostering nationhood in a country stifled with war and division.

Assessments

4.6 Assessments are required to establish food insecurity and malnutrition prevalence. Assessments are also carried out for water, infrastructure, health, education and other sectors. It is noted that inter-agency assessments, though more complex to organize, render better results since agency bias, whether perceived or actual, is eliminated. An aversion by the public to assessments has been noted during interviews. Every intervention, no matter how small in scale, requires an assessment. There are regular monthly assessments and many ad hoc assessments. Drought brings its own barrage of assessments before, during and after. All these questions raise expectations and complains since projects are months if not years down the line. Asking and measuring a hungry desperate family how hungry they are, without providing any immediate relief, is itself a challenge for both the researcher and the interviewee.

Proxy Indicators

4.7 Where possible, donors should be content with trend analyses, secondary data and proxy indicators, especially when drought conditions are evident. Analysts would do well to find less intrusive indicators. For areas where no significant change has occurred in food security factors, malnourishment data from earlier surveys should not be rejected as outdated. Nevertheless, the value of assessments should not be undermined. Suitable substitutes for anthropometric measurements are as yet unavailable.

Community Needs

4.8 Delegates from communities and areas suffering from food insecurity would often knock on the door of government officials and petition for assistance. These are not planned events but are rather reactions to dire circumstances in the food security situation on ground created mainly by nature. It is important for government, aid agencies and their donors to understand the urgency of such requests which are best described as a last resort coping mechanism. Agencies, particularly large ones, are often unable to respond to small unplanned requests for assistance.
Response

4.9 It is imperative that planners build the response capacity within such agencies. Allocations of budget and food supplies may be anticipated for each season and reserves maintained for such eventualities. It is unfair and impractical to expect locals to synchronize their needs and requests to the planning cycles of offices in Rome, Geneva and New York. Suboffices should have the mandate and resources to cater for such requests without delay. This is not advocacy for adhocism rather an admission that the needs of the beneficiary should dictate, to the extent possible, the timing of the response. It would also improve government relations, and consequently influence, with locals.

5.0 Vulnerabilities

5.1 The effects of war and political instability on food security are undeniable. Food security improves with political stability, freedom of movement and protection of property. The long term levels of malnutrition in Somalia (see Map 2) highlight districts with highest levels of malnutrition. These areas in the SouthCentral correspond with areas under most stress of war and political instability. The role of democracy is also pivotal. In the long history of famines in the world there has never been a famine in an independent and democratic country (Sen 1999).

HIV/AIDS

5.2 According to a 2004 survey, the port city of Berberra in Somaliland has a 2.9% prevalence of HIV/AIDS among women attending anti-natal care centres. The prevalence for the whole country is estimated to be 0.9%. Generally, a prevalence of above 1% is considered an epidemic (see HIV/AIDS subcluster report). FAO studies in Kenya conclude that the death of a male head of household resulted in 68% reduction in the value of net agricultural output (Source: UNAIDS). Food security is directly threatened by HIV/AIDS and interventions for prevention and cure must be an integral component of achieving food security in Somalia.

Khat

5.3 Somalia is one of the poorest countries on earth, yet over 220 million dollars are spent annually on Khat imports (see Khat subcluster report). Men of poor families are reported to prefer spending scarce money on khat rather than food, leaving their children hungry. Khat chewing is a favourite social pastime and a major source of government revenue (19% of Somaliland’s revenue is generated from tax on Khat imports). Initiatives to channel money spent on khat into money on food would improve food security especially amongst poor households.

Vulnerable Children

5.4 Every fourth child in Somalia is food insecure (UNICEF 2000). In food insecure districts, particularly during droughts, the numbers are much higher. Under five mortality
rate (224 per 1,000) is one of the highest in the world (CEM 2005). Under such dire circumstances faced by the general population, vulnerability of orphan children is understandably alarming. Islamic teachings abound with care for orphans and urban centres have several orphanages funded by charities from Islamic countries. Prophet Mohammad (peace be upon him) was an orphan himself and the Quran is replete with references to orphans.

“Did He not find you an orphan and give you shelter (and care)? And He found you wandering, and He gave you guidance. And He found you in need, and made you independent. Therefore, do not treat the orphan with harshness, ...”

Quran 93:6-9

They ask you concerning orphans. Say “The best thing to do is what is for their good;...”

Quran 2:220

“... stand firm for justice to orphans.”

Quran 4:127

5.5 In rural areas, where orphanages are less common, relatives are most likely to take orphans into their care. During interviews, it was common to find that orphan students were exempt of school fees. There are also adoption programs sponsored by the diaspora. The WFP supports a few urban orphanages with food aid. Though most international aid agencies concentrate more on integrating orphan and other vulnerable children into families rather than establishing and supporting orphanages. However, all these activities are scattered and small in scale.

Targeted Support

5.6 A comprehensive program to deal with vulnerable children, their welfare (including food security) is lacking. Securing primary schooling would reduce their vulnerability and contribute to a better future. Assistance programmes should target vulnerable children. For example, food aid programmes should identify food insecure communities through vulnerability analysis. Families in charge of vulnerable children should be identified by the community (through elders or community groups). These families should be supported with aid as an incentive to secure schooling (at least primary level) for vulnerable children.

6.0 Interventions

Strategy

6.1 Public and donor funds should invest in interventions that require capital and technology beyond the means of the community. For example, whereas a shallow well may be dug by a group of farmers, such a group or even the whole village could not fund and sink a 200 meter deep borehole. A second consideration for intervention
prioritisation would be the organizational setup required to both implement and sustain the intervention. Finally, the impact of these interventions should correspond to the Millennium Development Goals adopted by the United Nations. Small and scattered interventions are already on the ground and have been for several years. The NGOs and CBOs have completed numerous projects. However, reducing poverty and hunger of millions of people requires large impact interventions.

The proposed objectives and interventions are in line with policy and strategies adopted by the governments of Somaliland, Puntland and SouthCentral.

**Land Use Planning**

6.2 Land use planning for each district is required to identify areas for rainwater harvesting structures, boreholes, drought reserves, seasonal reserves, settlements and roads.

**Rainwater Harvesting**

6.3 *Waars* and *berkets* are traditional structures well enshrined in the Somali culture. Strict rules of access and sanitation are well established and adhered to by users. Rainwater harvesting provides crucial water during the first few dry months and investing in such structures would make the difference between surviving or succumbing to the dry season. For normal years, this would mitigate loss of animal life. In drought years, this would save human lives.

**Dams and Bunds**

6.4 Check dams arrest soil erosion and slow down water flow allowing time for seepage and groundwater recharge. Locating such structures requires downstream considerations. Depending on location, they can also serve as water reservoirs. Both rainwater harvesting structures and dams/walls are low technology products that locals could construct and maintain without need for heavy equipment. (In any event, the precarious situation of roads and lack of technical support precludes use of heavy construction equipment in most areas.) People of these areas fall in the poverty bracket (less than $/day) and a high percentage suffers from malnourishment. Construction of such structures would provide vital water reserves, generate incomes, build assets and mitigate malnourishment.

**Photos 1&2: Intervention: a) rainwater harvesting bund and b) prohibited grazing**

*Dulcad before Intervention*  
*Dulcad After 3 Months*
Source: Pastoral and Environmental Network in the Horn of Africa (PENHA)

Studies

6.5 Obviously, each structure would require engineering and environmental considerations. Therefore, a study to identify optimal locations and structure type would be required. In addition, an Environmental Impact Assessment would be required. A GIS overlaying existing water sources, population density and contour data would support identification of areas suitable for intervention. Maps showing flood plains and gully erosion would have to be prepared to identify areas suitable for check dams and walls. However, the most critical input to securing the success of these structures would be community mobilization. The communities must own the structures and commit to their maintenance and proper use. NGO experience shows communities uphold their commitments and projects conducted with community mobilization bear successful results.

Impact

6.6 Rainwater harvesting, water retention structures, dug wells and wells are tried and tested technologies. They already exist and are providing vital support. The difference is in scale. Currently a small portion of people benefit from such interventions. A large number of such interventions would be required to resolve the water issues faced by the majority of 2.6 million pastoralists and 2.3 million agro-pastoralists. In the next five year horizon, such structures would be the most beneficial intervention. On a much longer plan, when urban economies diversity and offer employment to pastoralists, when rangeland management is practiced at considerable scales and cold storage chains, markets and abattoirs are in place, the number of free roaming pastoralists would dwindle replaced by large mechanized ranches. Initiatives for that eventuality must be incorporated in national policies and plans. Assets built during these five years would support such long term planning.

Boreholes

6.7 Boreholes are indicated by locals as being central to solving the water problem. A lot of discussion and debate revolves around boreholes. The famines in West Sahel, where animals with bellies full of water and no food, dying around boreholes are well documented (Hardin 1977). The carrying capacity of adjacent grazing lands is a key consideration. Aquifer capacity and recharge rates are often unknown.

Location
6.8 Placing boreholes at strategic distances is a matter for study. The Puntland government recommends a grid of 40 kilometres allowing a pastoralist a maximum of 20 kilometres travel to the nearest water source. However, a more scientific study would be required to identify optimal locations based on: ground water depth and recharge, current and future water demands plus carrying capacity, so as to avoid water depletion, population concentrations and overgrazing. Boreholes result in settlements surrounding the boreholes. For this reason, boreholes in prime grazing lands would result in settlement encroachment. Whereas boreholes could provide vital water source, the long-term implications must be considered carefully for such an intervention.

**Nutrition Education**

6.9 Poor nutrition (and sanitation) knowledge contributes to malnutrition. Media access is limited, particularly for pastoralists. Periodic radio broadcasts covering nutrition education would save lives. Radio broadcast capacity in Somaliland, Puntland and SouthCentral needs boosting and educational programmes in local language should be developed. In schools, an hour a month on nutrition and sanitation education should be dedicated.

**Early Warning and Disaster Mitigation**

6.10 Increasing number of rain gauges, water level meters on rivers and ground truthing sites would support the early warning agencies such as FEWSNET and LEWIS. River and canal desilting would contribute to flood damage mitigation. Rangeland management and land use planning resulting in drought and seasonal reserves would be suitable interventions for disaster mitigation.

**7.0 Institutional Arrangements**

Somaliland and Puntland

A land use planning department within the Planning ministry would be established. The department would function under the following mandate:

- Advise and inform the government on land use issues and priorities
- Prepare land use plan for each district taking into account regional and inter-district priorities, current demands and potential land uses
- Ensure plans account for grazing lands including drought and seasonal reserves
- Seek inputs from ministries of Agriculture; Rural Development, Environment and Wildlife, Water department, NERAD (Somaliland) and HADMA (Puntland)
- Establish guidelines on land use priorities
- Maintain and update land use information
- Provide managerial and technical supervision to district land use planning and enforcement authorities
The Ministry of Agriculture would establish a department of Water Harvest with the following mandate:

- Identify locations suitable for rainwater harvesting structures
- Raise initial expense for structures from government, aid agencies and communities
- Mobilize communities to build and maintain structures
- Supervise construction and monitor maintenance

The Ministry of Rural Development would establish a Roads Department with the following mandate:

- Construct and maintain rural roads

SouthCentral

The Ministry of Agriculture would organize farmer cooperatives to plan and execute desilting activities twice a year on both Juba and Shabelle rivers. The Ministry would tax farmers to arrange for aerial sprays along the river banks to eradicate tse-tse fly.