

Save the Children (UK)

Agricultural Support Project
Belet Weyne District,
Hiran Region, Somalia

Mid-Term Review



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"Why do you think that it is important to learn agriculture in School?"

I got the answer from Ahmed Mohammed Ali, *"When I go out of the school I help my parents look after the animals so its good that I learn what to do properly. When I grow up I will be a herder, so from school I will get the knowledge to do it well"*

I asked the whole class (boys and girls), *"How many of you help your parents with the livestock?"* they laughed and said together, *"We all do"*.

On an earlier field visit to the north of the district in Kabzahney Primary School (an irrigation area) similar questioning brought the same answers, *"We like to help our parents planting and harvesting crops so it is good we are learning what to do in school"*.

In Belet Weyne District, education is an essential part of agriculture for both children and adults and, agriculture is an essential part of education. It is both their culture and livelihood. The two cannot be separated.

Abbreviations

ASP	Agriculture Support Project
CARE	Campaign For American Relief Everywhere
CPC	Community Pump Caretakers
CTC	Child to Child
CYMMET	International Maize and Wheat Improvement Centre
EU	European Union Somalia Office
FFW	Food For Work
FSAU	Food Security Assessment Unit
HHFE	HouseHold Food Economy
HIV/ AIDS	Human Immunodeficiency Virus/ Acquired Immuno Deficiency Syndrome
ICRISAT	International Crop Research Centre for the Semi-Arid tropics
ICRAF	International Centre for Research in Agro-Forestry
IDP	Internally Displaced People
INGO	International Non Governmental Organisation
HHFE	Household Food Economy
MTR	Mid-Term Review
MUAC	Mid Upper Arm Circumference
TNG	Transitional National Government
USC	United Somali Congress
VEWs	Village Extension Workers
VICs	Village Irrigation Committees
VWSC	Village Water and Sanitation Committee
Wat san	Water and Sanitation
WFP	World Food Programme

Executive Summary

Save the Children UK has been operational in Belet Weyne since 1992 implementing emergency relief, rehabilitation and development programmes in both rural and urban areas. Riverine farming and pastoral livestock production have been the main economic activity in the area for centuries. As well as the recent history of conflict and insecurity there have been a series of droughts and floods in the last 10 years, which have disrupted the economy and food security of the people leading to dislocation of families and increased poverty.

The EU supported SC-UK to implement an earlier first phase of the Agricultural Support Project (ASP) that identified a number of improved varieties of maize, sorghum and pigeon pea that are suited to the area and identified the key use of small mobile and inexpensive pumps as a means to rapidly increase the grain and vegetable production of the area. The EU has continued to support this phase two designed to disseminate the knowledge and techniques developed earlier to a target group of 1185 families living in 29 villages identified through a baseline survey as the most vulnerable and food insecure in the district.

SC-UK is implementing what amounts to an integrated development programme that includes the ASP, a Water and Sanitation Project (Watsan) and a newly established Education Project. Both the ASP and Watsan projects link in with and contribute to the Education Project. The ASP project is designed to address directly the need to improve family capacities to access irrigation water through a cost sharing arrangement where communities contribute 20% of the cost of a pump. Extension workers from the villages are trained on land (loaned freely to the community) in the cultivation and husbandry practices learned in phase 1. They gain access to improved seed varieties (grain, vegetables and fruit seedlings) so that they can replicate them on their own farms. The project has also introduced an agriculture training curriculum into local schools.

The impact of the ASP community mobilisation approaches is clearly visible within the target communities and is having an increased influence on farming families outside the target group in that increased numbers of other farmers are either hiring or buying their own pumps and becoming engaged in irrigated grain, fruit and vegetables. Most notable is the increasing numbers of youth around Belet Weyne town who are engaging in vegetable production for sale in both Belet Weyne and more distant markets (Mogadishu, Galkacyo and Bossasso).

The Mid-Term Review took place during harvest time at the end of a very dry season and the project area gave the impression of an extremely dynamic trading area. The volume of fodder being harvested and sold in the markets is both high and rapid, and there is good supply and high demand (because of the long dry period).

There are 142 villages in Belet Weyne District and the Baseline Study of the district gathered data on all of them. It is estimated that there are some 9,023 farming families in these villages. The project is focussing on 1,870 of the poorest of these in 29 villages representing the target group (21% of the total). Some 500 individuals have been involved in training courses, are aware of the techniques, and are practicing them and generating improved seeds for further replication. This represents some 27% of the target group. From observation and discussion on field visits it is thought the number may be higher than this and may be around 30%-40%.

The ASP should be seen as an integrated process, which is working with families and their socio-economic system. The project is acting as a catalyst for encouraging other parts of the

community beyond the target group to come into production with the potential to lift the area to a more stable level of food security. The project is helping parents to be better parents, helping to create peace and stability, and to improve family food security and livelihoods (four out of six of the core areas of SC-UK global programme strategy). If for policy reasons SC-UK is not going to engage in agriculture projects in the future, that is a strategic decision but ASP is a project that SC-UK agreed to commit to in earlier circumstances and was a sound and right decision at the time. Having made that decision, SC-UK staff and their partners are involved in a serious effort to make it succeed. However, once engaged in such a process-oriented project it is extremely important to allow it time to succeed, particularly in an area where children are considered to be living in especially difficult circumstances. ASP had an initial phase of two years where basic ideas and different seed varieties were tried out. The growth and development of the project is tied to the agricultural seasons. This second phase is about expanding the ideas being developed through training and direct implementation. If SC-UK withdraws from ASP at the end of this phase, it will not have had time to reach a stage where the impetus already created will be sustainable and much of the good work carried out so far will be lost because there isn't a sufficient critical mass for it to become sustainable amongst the poorest communities.

Recommendations

- 1 The basic tasks of Phase 2 are well under way but in order for the outcome of the project to become sustainable it would be a mistake to close the project at the end of this phase (nine months remaining). Rather it would make better sense to develop a new project within the framework of food security whilst retaining some of the key ASP activities at a reducing level for a further period of twelve to eighteen months. During this period the project would directly address some of the sustainability issues such as helping the VICs to establish revolving funds for the purchase of additional new pump-sets to increase the stock.
- 2 At present ASP employs three mechanics to train CPCs and to provide maintenance support to farmers but ways should be found to help these people off the SC-UK pay role and into private business providing the same services to the communities.
- 3 The nurseries that are currently run by SC-UK should also be helped to become self-supporting as private businesses producing quality maize, sorghum and vegetable and fruit seedlings for sale to producers.
- 4 SC-UK staff should continue to provide training on demand for communities who request it so that the whole of the target group has the chance to benefit (out of the 9,000 families these 1870 families were considered the poorest and least able to take care of themselves).
- 5 More emphasis should be given to those communities that would benefit from the run-off sites. ASP could help to design the schemes and to support the groups through training and technical support.
- 6 In order to contribute to sustainability of the target communities, the project should increase the number of pump-sets to the poorest families. This would require at least an additional 13 pump-sets.
- 7 SC-UK should consider in more depth the synergistic links between the different projects and strengthen the collaborative aspects of a holistic programme.
- 8 ~~The HIFE Impact study~~ of 2000 should be regarded as a baseline study for this phase and should be repeated as part of the final evaluation.

- 9 The kind of capacity building training being used in both the ASP and Watsan projects – promoting group organisation and leadership training – should be continued and strengthened as an important contribution to improved governance and peace building.
- 10 Further support should be given to teachers implementing the agricultural teaching programme, through:
 - a. A review workshop to get feed back on their experiences in using the teaching guidelines. This should be recorded with suggestions on how to improve the guidelines.
 - b. Short training workshops (twice per year) on improved teaching methods including use of the kitchen gardens.
- 11 A joint field visit should be organised between SC-UK Nairobi staff and EU Somalia in order to improve communications and to clarify key implementation issues.
- 12 Within the framework of capacity building, future activities should incorporate conflict management training as a management tool.

Future Directions

- 13 Community based food security project should be designed and implemented, which seeks to involve local village management structures in developing a drought early warning and response system based on the increasing productive capacity of local communities.
- 14 Integrated within the food security system, the project would continue to support the growth of local food production using schools as the focal point in spreading knowledge on better production methods.

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1 Relevance

(The appropriateness of project objectives to the problems that it is supposed to address, and to physical and policy environment within which it operates.)

1.1 Identification and Formulation Process

Save the Children UK (SC-UK) has been operational in Belet Weyne since 1992 implementing emergency relief, rehabilitation and development programmes in the rural and urban areas. Farming and herding forms the main economic activity for over 90% of the population of the district

Apart from the recent history of insecurity there have been several events of droughts and floods in the district that totally undermined the food security of the people leading to the dislocation of families as the male heads of households and elder children went to other parts of the country and to Ethiopia in search of work and income earning opportunities. A major income earning activity during periods of crop failure is to cut construction poles from forest areas in Ethiopia and ship them down the river to Belet Weyne. This takes working groups of about 9-10 men some 15 days per month to carry out. The women and younger children are left behind and are supported by relief interventions. The impact on these families is destructive as it involves extended separation, poor communication and vulnerability for the women and children left behind. As a response SC-UK initiated the Agricultural Support Project (ASP) in order to help re-establish agricultural production, to restart the local economy, to increase the possibility of reuniting families and to improve food security in the area.

The EU funded SC-UK to implement the first phase of the ASP from March 1998 to April 2000 and is funding the present second phase, April 2000 – March 2002. The financing agreement with the EU was delayed and in fact the project was not initiated until October 2000. So the effective dates are October 2000 – September 2002.

As preparation for Phase 2 of the project, the ASP Team conducted a village mapping exercise in order to identify the most needy communities and the set sites that would be developed. They used criteria agreed with the communities as follows:

1. Vulnerability (most food insecure);
2. Least support from any other agency;
3. Political/ Clan balance;
4. Willingness to participate;
5. Set site suitability;
6. Population size.

After agreements were made on the set sites, VICs and VEWs were selected and discussion was held to identify the priority issues regarding agricultural production and the following were agreed:

- shortage of water for irrigation (limited access to water pumps);
- lack of agricultural infrastructure;
- poor crop and varietal diversity;
- poor soil fertility;
- pest/disease attacks;
- weed infestations;

- lack of agriculture inputs;
- limited opportunities for the development/improvement of agriculture in the district.

On the basis of these discussions the proposal was developed and agreed upon which essentially seeks to introduce a technology package into the area of small-scale irrigation pumps, improved seed varieties, cultivation and husbandry practices.

1.2 Coherence and Realism of Project Design

The dominating features of Somali life since the collapse of government are the absence of law and order, and random sporadic outbreaks of violence. Although Belet Weyne District and Hiran Region appear to be becoming more stable in the last 12-18 months, this has been the case. In the October-December Project Quarterly Report, 2000, it is observed that instability throughout the country was increasing due to opposition to the new Transitional National Government (TNG) in its attempts to gain control of the country. In Belet Weyne there was a series of revenge killings, which the local chiefs (Ugas's) were unable to resolve.

Within this context, SC-UK has developed what amounts to an integrated development Programme consisting of three specific projects – Educational Support, Rural Water and Sanitation, and the ASP. Both the Water and Sanitation and the ASP make direct inputs into the Education Project in very real and practical ways. All three projects address real and felt needs of the families of the district and operate in a way that can expand in area and intensity or reduce and maintain a presence in accordance with the security status. SC-UK is the only INGO which operates a full programme on the ground. There are other agencies that are mainly concerned with food security, and curative medicine, but they operate on a 'drop and pick' basis with no effective presence on the ground. Within the Somali cultural context, presence, commitment and understanding the situation are key elements in terms of gaining respect and being accepted. All organisations and individuals from outside are regarded as being either 'with us' or as being just guests to be respected but of no real value. In this respect SC-UK either by careful choice or by luck have core local staff that are technically competent, locally respected and that fully understand the day-to-day issues that are taking place and how to deal with them. They are the core of the programme. A small but competent international technical team that are the link with the SC-UK office in Nairobi supports them. This structure allows the whole programme to continue in what is an otherwise tenuous situation.

The original concept of the ASP focuses directly on the most fundamental issue of the area. If families cannot produce enough food to maintain their families throughout the year and in good years and bad years then they cannot stay where they are and either they would need to become IDPs/ refugees or they would have to split up as families – as they have been doing in many cases. Their greatest desire is to be at home and to stay together. The ASP is directly addressing this concern. The key elements of the project are to make available appropriate irrigation and crop protection technology in a way that local food production can be increased sustainably and can lead to improved trade in the area in order to improve food security. By achieving this, families can stay together and other development priorities such as good nutrition for children and women, the capacity to pay for regular education for children and improved health for children and women can be achieved.

2 Project Preparation and Design

(The logic and completeness of the project planning process, and the internal logic and coherence of the project design.)

2.1 General Context

In the late nineteenth century, Somalia was divided between Britain, who occupied the North and Italy who occupied the land to the South bordering the Indian Ocean. In 1960, at the time of independence, the country was reunited. In 1969 a military coup brought Mohammed Siad Barre to power. The Barre era was marked by civil war initiated by an uprising in the Northwest in 1988, which subsequently spread south and led to his overthrow in 1991. A power struggle within the United Somali Congress (USC) resulted in the complete collapse of Somali State infrastructure. Subsequently, a number of national reconciliation conferences have taken place, but external involvement in conflict resolution has always tended to strengthen and legitimise warlord factions and certainly not brought peace to Somalia.

Since then, Somali people (particularly in the south and central Zones continue to live in a country wrecked for a decade by factionalism and subsequent dissolution of public infrastructure. This crisis is reflected by the increasing poverty through livelihood vulnerability, disease, civil strife, insecurity and displacement and no opportunity for sustainable development. Population estimates for Somalia range from 5.4 million to 6.6 million which is subject to an annual growth of 3%, however this is difficult to substantiate as a significant proportion of Somalis now reside outside the country. Kenya, Ethiopia and Djibouti and the Gulf of Aden and Indian Oceans border the greater area of Somalia, which is divided into Somalia (including the autonomous region of Puntland) and the Republic of Somaliland each with a population of 4.7 million and 1.4 million people respectively.

2.2 Specific Context



Aerial view of the Shabelle river Belet Weyne town is on the right hand edge of the photograph

Belet Weyne District is one of five districts in the Region. The District is divided by the river Shabelle, which emanates from Hararge/Oromiya Regions in the Ethiopian Highlands. Population estimates for the district range from 56-63,000 and 30-45,000 for the town (FSAU/WFP 1998). The district is heterogeneous in terms of clans. The 5 main sub-clans are Hawadle, Galjele, Jejele, Makane (Bantu) and five other 'priestly' clans known as Shanta Culumu. Belet Weyne town is the centre and the seat of the Regional and District administration headed by the District Commissioner, District Council and Governor. Village committees form the active administrations in the rural areas, headed by village chairmen. Despite the fluid political and security situation in the district, conditions have remained considerably more stable in the last few years compared with many other parts of Southern Somalia, creating a suitable environment for rehabilitation and medium term development.

Farming forms the main economic activity for over 90% of the population in the district. Three main groups exist in the following proportions: agro-pastoralists 50-60%, pastoralists 20-30% and riverine farmers 20-10%. The urban population represents about 10% of the total.

Agro-pastoralists rear camels, cattle, goats and sheep. They may practice rain fed farming and mainly cultivate crops using the run-off, which is gathered from nearby mountains through gullies, and wadis, which eventually deliver the water into the river. Riverine farmers depend on rain fed and to a limited extent irrigated sorghum and maize, cowpeas and sesame in the 5-8 km band either side of the river.

Pastoralists are nomadic and utilise both the riverine areas in the dry season and the range grasses and depression water storage during the wet season. There is a high degree of family linkage between the families who live in the town, those that are riverine farming, the agro-pastoralists and the nomadic pastoralists. The local economy is therefore highly integrated, each component supporting and depending on the others.

Belet Weyne town is a vibrant commercial centre – due to the relative security, and trade links with Mogadishu in the South, Galkacyo and Bossasso to the North, Ethiopia in the North West, Hudur and Tiye glow in the West. Agro-pastoralists are the main suppliers of meat, milk and other livestock products and purchasers of grain, sugar, tea and clothes.

With the introduction of sustainable irrigation technology, improved seed varieties and the use of improved cultivation and husbandry techniques, there is a good opportunity to become self-sustaining and a net exporter to other parts of the country. With a stable and growing economy there is an increased likelihood of sustainable peace enabling families to provide a secure and healthy environment for their children to grow up in. Increased productivity will improve the livelihoods of the families and their capacity to develop a stable education system where their children can learn the skills they need for their own future livelihoods.

2.3 Organisation/ Country Strategy¹

Global Level

The basis of all the work of SC-UK is a framework of child rights, which leads to a particular concern for the most advantaged, promotes involvement of children and insures inclusion, rigorous assessment and a holistic approach. Approaches such as child focus, livelihoods, children and economics and social policy help with both analysis and advocacy or are tools but *are not separate areas of the programme work.*

Six core areas have been identified:

F. Social Protection, Welfare and Inclusion

To achieve greater protection, care and social inclusion for the most marginalized children we ~~will concentrate on four main areas:~~

- *Separated children and their reunification and reintegration;*
- *Children at risk of abuse and inappropriate institutionalisation;*
- *Children suffering exploitation, abuse, violence and exclusion;*
- *Children in conflict with the law.*

2. Education

To ~~secure the~~ rights to quality and relevant education we will focus on:

- *Relevant education;*
- *The particular needs of marginalized children;*
- *The quality and purpose of education.*

¹ Drawn from, Programmes Strategic Plan, 2000-2004, Save the Children UK

3. Health

To secure all children and young people's rights to quality health care we will highlight:

- *The need for increased resources for essential health services;*
- *Equal access to quality health services;*
- *The need for health care provision to be appropriate and sensitive to the needs of children and women;*
- *Health care and protection of children in emergencies.*

4. Food Security and nutrition

To secure the access of all children to enough food for their proper growth and development we will promote:

- *Better assessment of the difficulties in obtaining food;*
- Stronger action at national level as a result of this work;
- A more adequate international response;
- A stronger response to malnutrition emergencies;
- Child rights in relation to infant feeding;
- Nutritional policy and practice which is more appropriate to children.

5. HIV/ AIDS

To minimise the vulnerability of children and young people to HIV/AIDS and to maximise their ability to cope with its consequences.

6. Children at work

- *Reduction of children's need to work.*

The statement above is drawn from the SC-UK Global Strategic Plan and is not complete. It illustrates the main strategic areas and the points of special relevance to the children of Belet Weyne (*through the italicised points*). These strategic issues will be discussed as they arise in the report.

2.4 Programme Strategy² and Overall Approach

Strategic issues for children in Somalia:

Health

2.1.2 The main Health risks affecting women and children in Somalia are:

- Endemic diseases: diarrhoeal diseases, respiratory infections, malaria in particular; these are main killers of this group, together accounting for more than half of all child deaths;
- Birth-related problems: still births, neonatal deaths, maternal deaths and disabilities; and,
- Nutritional deficiencies: Anaemia and Vitamin A deficiency mainly.

2.1.4 Inadequate access to safe water and/or absence of sanitation facilities compound the problems relating to hygiene.

² Drawn from the Country Strategy Paper. Somalia and Somaliland, 2000-2004, SCF UK.

Food Insecurity and Malnutrition

- In more stable areas of the country, rates of malnutrition are generally low (less than 10%) although they typically rise a little among pastoral communities at the end of the dry season and amongst subsistence farming communities before the harvest.
- Moderate to high levels of malnutrition (10-25%) are found among the urban poor and subsistence farming families in much of southern and central Somalia during and after periods of drought, flood and conflict. In early 2000, global malnutrition rates were estimated as high as 17% in Belet Weyne.
- Malnutrition (wasting) rates are highest amongst young children, 12-24 months of age.

Education

- Only 10% of school-aged children are enrolled in primary schools of which 38% are girls; the proportion of these children actually attending school is even lower.
- 56% of primary school teachers have never been trained.
- Of those trained approximately 44% will have received no in-service or refresher training over the last 10 years.
- Female teachers represent 15% of all teachers and 4% of head teachers.
- Only 1% of nomadic children aged 6-14 are enrolled in primary schools.

2.5 Comments on Strategy

The overall approach of ASP is highly focussed on the strategic goals of SC-UK and specifically relevant to the needs of Belet Weyne families.

Separated children and their reunification and reintegration

Ten years ago the families of Belet Weyne were scattered in other parts of the country or in other countries and no agricultural production was taking place. Now they are back, they are together and they are focussed on production.

Relevant education

Through discussions with children in their classrooms their view is that education in agriculture, livestock, environment and nutrition directly affects their future in that when they grow up they will be better farmers and better livestock keepers. In one discussion, when asked this question, the spontaneous reaction of all the children was a loud “of course it is valuable to us”. The reaction came not only in words but in the glow in their eyes and their wide smiles of both boys and girls.

The particular needs of marginalized children

These children were marginalized and are living in abject poverty. Today they are active participants in united families.

The quality and purpose of education

The whole rural community are farmers and herders. Their lives and livelihoods are based on farming. Integrating farming knowledge into the teaching curriculum was a masterstroke as it increased the interest of parents in the schools' revitalisation and is making them the centre of community attention.

Better assessment of the difficulties in obtaining food

This assessment was done some years ago and led to the present programme and its growing success. Its affect has been not just access to food but the rebuilding of a community.

Reduction of children's need to work

There are many parts of the world where children are used as cheap labour in manufacturing and production systems. This is not the case in Belet Weyne. Children do help their parents at times of peak labour needs and the school curriculum is adapted to this cycle. It would be difficult to call it child labour though, quite clearly they love it.

The combination of the Education, Water and Sanitation and the ASP is highly relevant as the ASP is directly contributing to the rehabilitation of the local economy which is enabling families and communities to come together, promoting better household stability and reduced conflict. These directly impact on providing a more secure environment for children, improved food security, better nutrition and increased demand for better health and education services.

Within SC-UK project reporting the integrated and synergistic aspects of these three components are not particularly recognised and they tend to be seen as isolated sectoral projects. Where they do come together most visibly is the contribution the ASP and Watsan projects are making to the fledgling Education Project directly impacting on the education and lives of the children and their families.

3 Efficiency

(The cost, speed and management efficiency with which inputs and activities are being converted into results, and the quality of results achieved).

3.1 Means and Costs

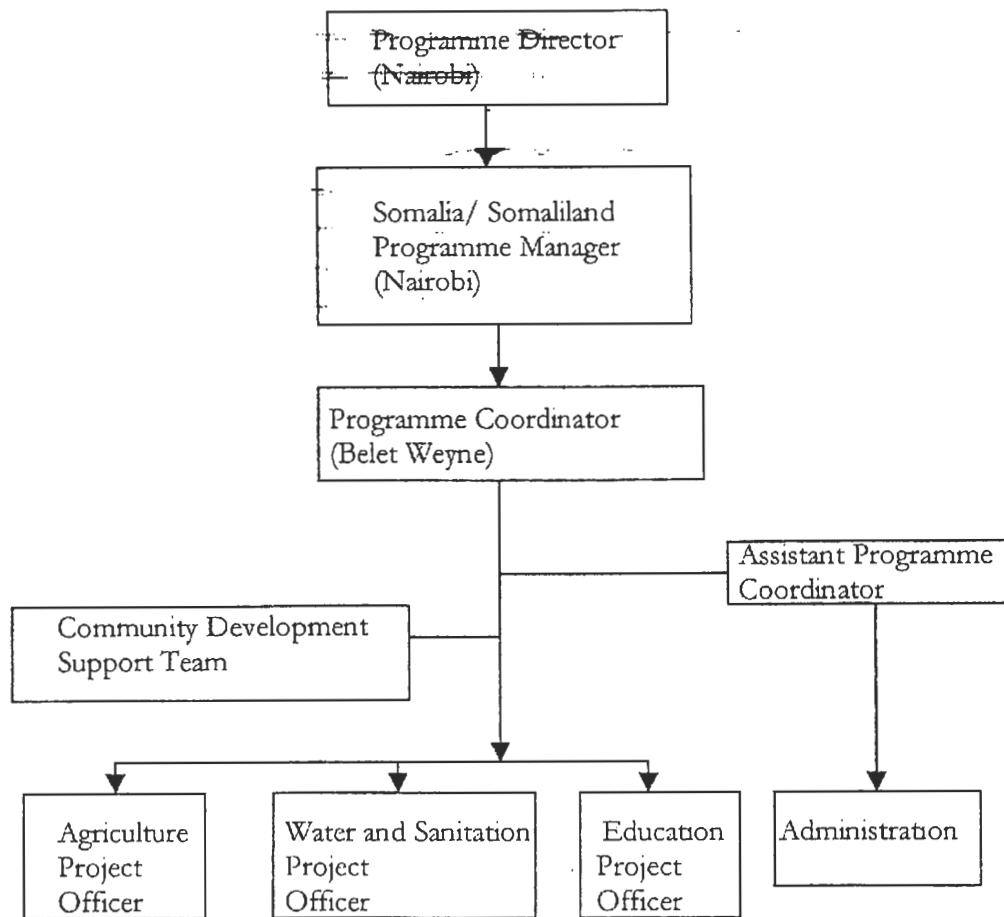
The EU Somalia office adequately funds the project with co-financing from SC-UK. Expenditure is largely going according to plan. There has been a need for a budget amendment due to lessons learnt in Phase 1, which identified the importance of using small, low cost, mobile irrigation pump-sets which fall within the capacity of communities to manage, maintain and purchase. Earlier schemes had used large volume fixed pumps all of which are now out of use. This technical change has meant that more pumps (13 small compared with eight larger pumps) have been bought and are in use.

The general success of the project so far has led to more families wishing to engage in irrigated crop production and an increased request for assistance in canal preparation. There are also requests for the project to be more involved in run-off farming sites, which involves providing assistance in catchment development. This will require some project investment but relatively small amounts compared to the potential gains in terms of increased production and improved environmental protection.

3.2 Organisation, Management and Monitoring

The programme lies within the mainstream SC-UK organisational structure as shown in the chart below.

The ASP and Education Project Officers, Community Development, Deputy Programme Coordinator and Administration positions are all local with the Water and Sanitation and Programme Coordinator positions filled by international staff.



The agricultural team has well-trained and experienced personnel both in technical extension and social mobilisation staff. The level of communication and cooperation with the participating communities could not be better. It is very clear that the people feel very much that this is their project and that SC-UK is a close ally in their long fight against conflict and climatic adversity. The ASP system being developed is based on two interlocking concepts, one technical the other socio-cultural. In order to understand what is happening in Belet Weyne it is important to interpret the ASP as a process not as a blue- print project. It would be a mistake simply to look at the log frame activities and results and ask "how much has been done so far?"

An essential element of the project design is to build the capacity of village structures through a network of Village Irrigation Committees (VICs), Village Extension Workers (VEWs), Village Education Committees (VECs) and Village Water and Sanitation Committees (VWSCs). In practice there is a lot of interaction between each committee because of the traditional village management structures. Typically this is highly participatory and a model of democratic process (perhaps some of the conflict is rooted in the possibility that there is too much democracy and not enough hierarchical structure in place). Nevertheless, the growth and development of committees focussed on agricultural production, education and water and sanitation seems to be building cohesion in these villages helping them to stabilise social stability. SC-UK staff are using participatory methodologies and blending these with traditional means of communication that everyone understands and feels comfortable with.

Project Methodology

First step

The technical process involves two or three neighbouring villages agreeing to cooperate in a 'farmers participatory research' exercise. At the start of the process a piece of land is loaned for the establishment of a 'set' which is a demonstration site (usually owned by an individual farmer). Each village selects farmers who will be trained as VEWs by the SC-UK facilitating team and establishes a Village Irrigation Committee (VIC). Each set is provided with a mobile irrigation pump for which the participants contribute 20% of the cost and a stilling basin is constructed. The participants contribute the labour both for the stilling basin and the canal network according to local conditions. The initial training package involves the introduction of several new varieties of maize and sorghum that have been provided by ICRISAT, CYMMET and FAO. Discussion is held with the trainees to agree on the selection criteria for desirable traits in such seeds. It is explained that planting the seeds alone will not be sufficient but will need to be done using a package cultivation and husbandry techniques that will together produce the best results. This package incorporates cultivation and husbandry methods such as across the slope ploughing, row planting and spacing, appropriate crop density, early weeding and thinning, composting and the use of organic manure, crop rotation, intercropping and fallowing, canal maintenance and the use of natural pesticides.

Following on from the training, the VEWs plant the new varieties using the newly learned techniques and are responsible for the management of the crops until harvest. Throughout the growing season farmer's field days are held to instruct them in the husbandry of the crop during the different stages of growth. During harvest farmers are invited to inspect the crop and comment on the best varieties according to the criteria they had earlier defined and comparing them to them to the local varieties they are familiar with. The yields are measured and discussions held about the merits of one variety or another using criteria identified by the ~~farmers during initial training~~. The criteria used are:

- Insect disease resistance;
- ~~Plant height (fodder production);~~
- Yield;
- Speed of maturity;
- Taste (affects market price);
- Market price;
- ...

Second step.

The yield of the introduced seeds is divided between villages and families according to the amount of work that has been contributed. The VEWs in particular plant the new varieties using the techniques they have learned on their own land (all the VEWs are farmers from within the villages) and advice other farmers on planting their new material.

Third step

The following step is to spread both techniques and seed to all farmers. In order to do this efficiently will require developing a sustainable way of providing additional water pumps into the ~~system and ways to~~ augment the seed supply until all farmers who want seed and irrigation capacity can access them.

Within the work done so far, Step 2 is well under way and it is important that the project thinks ~~through how the third step will be achieved~~ if the initiative gained so far is not to be lost.

Regular quarterly reports are produced which narrate the progress of the project towards meeting Activity to Result level progress. Basic financial reporting is done at project level and passed on to Nairobi for more comprehensive report development.

In May 2000, SC-UK carried out a Household Food Economy Based Impact Assessment in an attempt to demonstrate impact of the project as a result of Phase 1 of the project. Much of Phase 1, however, concentrated on nursery base trials of a range of new seed varieties obtained from ICRICAT and CYMMT (8 improved varieties of sorghum plus 1 local variety; 5 improved maize varieties plus one local variety and cow peas and cow peas). Given this it would have been strange if the impact study had been able to demonstrate such impact and in fact the outcome was that no clear impact could be discerned. The methodology used was the normal SC-UK approach to HHFE but the study did not in fact try to characterise household food security patterns in Belet Weyne.

The diagram below illustrates the way the project is disseminating the technology package throughout the farming community.



3.3 Activities Analysis

(An assessment of the contribution made by activities to results)

The project had a six-month delay at the outset due to delays in funding availability, which has pushed the whole timetable back by six months. An analysis of the progress in carrying out activities is included as Annex C. Basically most of the activities have been carried out according to the original work plan. In a few cases more has been done than was planned. In other cases there have been some delays such as the introduction of children to set sites but these are not major delays and are due to the schools absorbing the agricultural curriculum into their timeframe and in some cases because of lack of access to water in the schools. In the case of El Ali School this was overcome by support from the Watsan Project where a shallow well with hand pump is providing both clean domestic water and water for irrigating the school demonstration garden.

Training Package for farmers

Demonstration Plots (Village Set sites)

The organisational arrangements for set location are excellent; the training topics are both relevant and appropriate. Discussions with farmers in their fields make it clear that they understood the topics and are beginning to practice them. An important factor, which is not included in the training and would warrant additional focussed training sessions concern the fact that many farmers are cultivating up to the riverbanks. As many bank areas are unstable it is important to negotiate and establish a rule that no cultivation of annual crops should be practiced within 50 meters of the bank. This bank strips should be farmed with productive ground and tree cover. They can be planted with multi purpose trees that provide bank stability, fruit, fodder, mulch and firewood. The trees can be intercropped with fodder grasses.

Level of utilisation of training content

As described elsewhere, the VEWs and VICs promote an active dissemination process which is based on visual observation by other farmers and dialogue as to the value of the seeds and practices.

Methodology and systems employed to deliver the training and information

The methods of communication and training are extremely good and effective. There might be some improvement through closer cooperation with the watsan team and their focus on group dynamics and leadership training otherwise there are no other suggestions for improvement.



The ASP team have developed picture codes with different themes that they use for discussion with farmers on specific topics

The level of participation of women and youth in demonstration plot activities

It is clear that a concentrated effort to include women and youth is relatively new (a few months). The inclusion of female technical staff into the programme is clearly having a positive impact and is enabling women's inclusion in demonstration and training activities. To some extent this is due to the increasing activity in irrigated vegetable production because traditionally women are not major players in grain production. Particularly around Belet Weyne town there is a growing involvement by young men in irrigated vegetable and fruit production for market sale. It would be valuable if SC-UK Country/Regional office were to carry out training in gender analysis in order to improve staff skills in gender-balanced development (for all projects).

Village Extension Worker Groups

The VEW system is growing and increasing in effectiveness. Issues of sustainability are discussed elsewhere.

Level of uptake of agricultural methods

The level of uptake of the methods being promoted is increasing rapidly now. In this kind of approach uptake by farmers is usually quite slow, almost negligible to begin with. Over time the process accelerates as understanding is developed in a geometric pattern. This is the case in Belet Weyne.

Nursery

The training topics and materials used

The training topics and materials used are appropriate and relevant it would be valuable to start encouraging individual families to take up nursery production as a speciality to sell the produce, especially fruit and other trees and to privatise the SC-UK over time.

Training and information dissemination

Again the methods being used are good. Any improvement would be in the area of making stronger connections with research institutions and importing other varieties and plant species that are salt and drought tolerant and to engage in trailing these and demonstrating them to farmers.

Involvement of women and youth

This perhaps is the greatest area of interest for both women and youth. However, because the nursery is in the town it is disproportionate in its value to town-based (better off) and village-based clients. Bringing groups to the town and carrying out periodic training for VEWs and others is not enough to provide the same level of expertise and source of raw materials for the rural villages. It would be worth trying to establish village-based nurseries on a commercial basis to try to even out the imbalance.

Uptake of agricultural methods

The uptake is increasing geometrically Discussion on how to increase this is detailed elsewhere in the report.

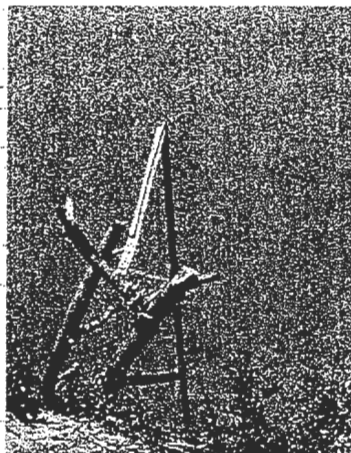
Set sites/ Irrigation infrastructure

Condition and quality of irrigation infrastructure

The canals, stilling basins and culverts constructed or rehabilitated are simple, well constructed and are being maintained by the owners. The designs and structures are appropriate to the needs of the farmers. There is obviously some pressure coming from the communities to increase this aspect of work and indeed the volume of rehabilitation is below where it should be at this stage. The ASP team is aware of this and are negotiating a budget amendment in order to be able to increase investment in additional structures. Some of the demand is as a result of the training programme and the activities of other farmers.

Appropriateness of physical systems

The level of technology involved in building the current structures is appropriate for the level of activity in Belet Weyne. It could be improved using simple measuring (levelling, slope management). Water efficiency is probably not as high as it could be and such issues could be



Tree seedlings in the training nursery

River height measurement at the nursery monitoring river flow. Information is fed to

discussed with farmers at this stage. The priority so far has been to get water on fields and

increase production. Farmers are acutely aware of the costs of irrigation so efforts to improve efficiency and reduce costs would be well received.

Capacity of communities to effectively manage irrigation systems including pump maintenance, canal and stilling basin maintenance and crop irrigation

The basic capacity of these communities to absorb, adapt and utilise the skills on irrigation practice, canal and stilling basin maintenance is high and the response to good training is very quick and long lasting. The critical thing is the canal structures are designed with them in a way that they can understand and manage; the mobile pump technology they can cope with. Basic pump-set maintenance will take longer than other aspects and it is unlikely that they would have the equipment and knowledge to carry out major repairs themselves in the long term. However there are mechanics on the SC-UK payroll that are already performing that service. If they were assisted to become private service providers that would be satisfactory all round.

In irrigation technology terms, there is another level to which the process could, over time, be taken. The individual canal structures could be strengthened into a network of more major canals that would make more water available and be more efficient over time. However it is too soon for this to happen. It is better that the current process reaches its maximum first and that inter-VIC training and dialogue develops better operation and management structures at some time in the future.



Gully development forming at Deefon. Run-off harvesting bunds would help to prevent this getting worse

Wadi/rainwater harvesting restoration and development

The management of wadi and rainwater catchment systems is something that the target communities and the ASP team have an innate understanding of. The natural catchments in the area are tending to street and gully erosion and work in this area would help both to improve production/ food security and protect the environment. The amount of work done

so far is limited but what has been done is good and effective. The SC-UK Belet Weyne team are rather discouraged on promoting these issues (even though they are part of project activities) because the EU is demanding detailed engineering drawings in advance of the development work and has refused to fund activities related to the development of such work. Basically, the production of detailed technical drawings in these circumstances is counterproductive because it would require careful surveying and mapping. The cost of this would be greater than the budget available. Also these schemes need to be developed with close community involvement and evolved a bit at a time. It would be valuable to discuss with the EU team (better if EU staff visited the sites to see for themselves) the practicalities of taking this work forward. It certainly would require some flexibility in the process and cannot be achieved with a more rigid administrative approach. The maintenance of such schemes, if developed, would certainly be manageable by the communities.

Training Package for SC-UK supported schools

Training topics and materials

The training guidelines are comprehensively designed covering crop, livestock, environmental management and nutritional material. The guidelines are written in Somali language, which is highly appropriate. The schools have been using the guidelines for only 6-9 months are developing their teaching schedules to incorporate them into their curriculum. At least two schools have separated their Science curriculum into two separate parts – general science and science for agriculture, because of the importance of the subject (As we were told by teachers and parents).

It is too soon to comment on any improvements to the guidelines. This would be better done after a full year of use by the teachers and by using a revision workshop to get their comments and update the guidelines based on this.

Effectiveness of school gardens

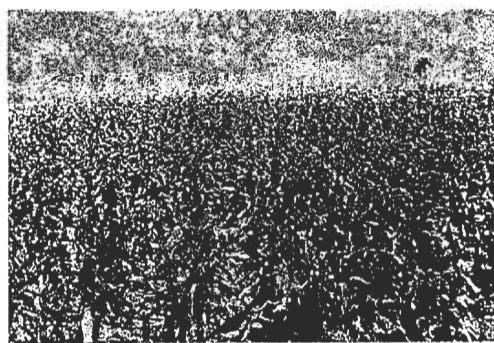
The demonstration sites are newly established but the enthusiasm from teachers, parents and children is very clear. In El Ali some parents are digging their own wells and starting their own well irrigation gardens. There seems to be a link between what is happening in the classroom and what is happening outside.

Sustainability/exit strategy

An exit strategy document has been developed which more or less says that discussions will be held with the communities to tell them the project is closing down. The handover strategies are sound but the document fails to point that the capacity building suggested cannot be practically achieved within the rest of this phase. No detailed framework is laid out as to how this closure phase will be accomplished and there is no timetable. Basically exit strategies should be designed at the start of a project and 'honest discussions with the community' should be started from the beginning and be realistic in its expectations of making the project sustainable



Farmers selecting preferred varieties in Belet Amin farmers training day



Set demonstration showing the difference in green matter between local and introduced varieties of maize

4 Effectiveness

(An assessment of the contribution made by Results to achievement of the Project Purpose.)

The Purpose of the project is that:

Farmers improve their agricultural production through local access to quality seeds, the use of adapted quality seed production and management techniques, appropriate agricultural practices and irrigation methods in 10 villages of Belet Weyne District.

This is to be achieved through four related Results:

- A training package for farmers in appropriate seed production and management is designed, implemented and adapted to local needs.
- A training package for farmers in relevant agricultural techniques is designed, implemented and adapted to local needs.
- Farm irrigation systems in the project area will be rehabilitated and maintained with the active collaboration of the families in the project area.
- A training package in basic farming techniques and methods of agricultural production for school children will be designed, implemented and adapted to children's needs.

The project proposal gives the impression of four discrete elements of training, which it is hoped will lead to better local production. It does not give a sense of the 'process' nature of the project that is in fact taking place. The activities within each of the results take place within a very interesting social mobilisation framework led by the ASP but increasingly involving both the Water and Sanitation Project, the Education Project and the participants themselves. The social mobilisation process combines both the skills of SC-UK's local team, the traditional cultural system of the Somalis and the enthusiasm of the participants in the project.

This enthusiasm did not exist at the beginning of the ASP. In 1998 most of the families in the area were struggling to survive the combined impacts of social dislocation through civil strife and of extended droughts. Many male members (fathers and sons) were away from the area seeking work or cutting forest to sell leaving mothers to look after their children alone and to survive on relief. Food security was the most critical issue and there was little time to consider health and education issues so the initial response to ASP was not especially positive. In the first phase a lot of attention was focused on nursery level experiments, there were few trained extensionists and most farmers did not understand the process that the project has now put in place. Most farmers were relying on rain fed cropping; a few were able to hire small pumps and were able to succeed with irrigated cropping.

Virtually all the six core issues of SC-UK's Programme Strategy are relevant for the children of Belet Weyne – the reunification of families, relevant education, basic health care, food security, vulnerability to the effects of HIV/AIDS and reduction of the need for children to work.

Phase 2 of ASP is all about raising awareness amongst families and communities, implementing the seed, cultivation and husbandry practices training within the 10 sets and sharing the findings of the earlier variety trials within the set groups, increasing the irrigation capacity of the families involved, helping VEWs and other interested farmers to make decisions about what varieties and crops they will plant and advising them on specific problems that come up during the season. This Mid Term Review has been carried out at a very appropriate time. Even though this has been a very dry season many farmers have crops to harvest. Many of the rain fed crops have poor or no yield but those within the set system not only have a crop to harvest they are able to observe the different characteristics and performance of the new seeds and to make decisions

about how to plan their next cropping season. Leading these decisions are the VEWs who are farmers from the set communities.

During the MTR, meetings were held with the farmers of Belet Amin (South). This was to observe the farmers field day that was being held. Farmers moved through the fields of the set selecting different plants and making observations based on the criteria they had developed at the beginning of the season. Later we came together under the training tree and discussions were held about their observations. Both men and women were present and both joined in the discussion.

A similar visit to Belet Selama led to a meeting in which a VEW had brought two maize plants from the fields. He spoke first in the group and his point was rather obvious. One plant was of an improved variety and carried large healthy twin cobs; the second was of the local variety and had no cob at all. Another VEW said that one of the new variety sorghums he had planted had given him 2.5 times the yield of his local variety and he planned to cultivate an additional 5 tacabs (1 tacab = 0.1 ha) next season using the new variety. Another farmer commented on the value of using compost in reducing pests and helping to improve the quality of sorghum fodder (more of it and greener for longer).

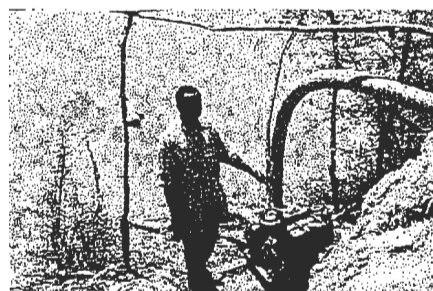
In another visit to Jeerey, a discussion in a trial field in a non set site (farmers who joined in the training courses and asked for improved seed) led to the question as to which varieties they would choose as priorities and why. The first farmer said he would choose 'gadam hamam', a sorghum, because it is quick growing and gives a good yield in dry periods and that he will always grow this because he has many children and this sorghum will ensure food for the children.

In all the sites visited discussions were held with farmers about their soil types about the merits of intercropping with cowpeas (such as maintaining land cover and continuing to produce after harvesting the grain. The use of 'neem' and tobacco solutions for pest management and the techniques and value of using compost in cost and husbandry terms were also discussed. We visited Kabhanley where there is an SC-UK supported school. The school has grades 1 to 4. We spoke with children in the classrooms and the teachers. Some discussion was held concerning the posters on the walls (provided by the project) depicting different types of external parasites on cattle. The discussions illustrated the close linkages between what the children learn in the classroom and what they experience at home (their parents are all farmers). We also visited the irrigated nursery beds, the basin irrigation sites and the demonstration compost pits. The parent's work with the children to set up the sites and practical lessons are carried out involving both parents and teachers.

Discussions were also held both in the field and at the SC-UK office with members of the ASP team about specific technical issues and these are commented on below.

Irriqation methods

~~Over the last 20-30 years so called 'small-scale' irrigation schemes were introduced in many parts of the Horn and Eastern Africa. Extensive and in-depth studies were carried out at great expense and technically well-designed schemes were implemented. They involved standard canal structures and large pumping units operated from one point in order to maximise command areas. However, all these schemes have since collapsed and none of them ever recovered the investment used to create them. There are a~~



The project uses small mobile pumps that can be bought, fuelled, maintained and shared amongst farmers

few schemes still functioning but for many years they have been subsidised by governments and are never likely to be profitable. Perhaps the main benefit of these past schemes is that they gave local farmers experience in practicing irrigated agriculture. Through discussion with the farmers the ASP decided to use small (6-7 Kw) pump-sets that are mobile, cheap to operate and maintain and within the management capacity of the farmer participants. Compatible with this is the canal structures that are small, have a command area that is compatible with the pumps and the capacity of farmers to maintain them.

There are many small schemes in the Horn that are now operating this way and are proving to be effective. In western technical terms they are too small and cannot be economic but in the eyes of the farmers this works for them and helps to improve their living in a sustainable way. As the network of farmer designed networks replicate, there may be a situation in the next year or two where the farmers could come together through the VICs and, with assistance, survey the land and farms as they develop. With the aid of this survey they could be helped to develop a larger scale management system with more efficient canal systems covering wider command areas. This will likely require larger pumps but would also need better established management capacity at a higher level than is now present.

The approach being used by ASP at present is the most appropriate for the circumstances of Belet Weyne.

Role of run-off/rain fed farming.

The rainfall regime in the area is low and erratic. A purely rain fed regime gives a reasonable subsistence crop only once in three years, not enough to sustain these communities. Nevertheless when the rain is good the yields that can be generated are significant. Even families that are involved in the ASP still plant some rain fed crops. However there is a third option that is known and being discussed by the communities and this is the untapped potential for rainwater or run-off farming. This is important for three reasons – technical, environmental and political.

Technically, there are sites, especially to the North and close to Ethiopia, where the landforms lend themselves to run-off irrigation. The mountain areas receive more reliable rainfall; the slopes concentrate the rainfall in streamlets and those into minor wadis that concentrate into bigger wadis before entering the river. The soils are rich wind-blown loess with some (estimated) 50% clay and 50% silt. The present system is rapidly leading to increased flood flows through the natural drainage channels that build up and create increased rates of erosion and gullying close to the river. The project has already helped to construct a main cut-off bund in Deefow to slow down flood flows, reduce erosion and to increase infiltration in the potential farming areas. The scheme would have benefited from the development of upper level bunds to slow the flow rate of the run-off and to increase infiltration in those areas prior to the development of the lower level bunds. This will need to be developed in a complex, step by step process with the families concerned as they gain experience in managing the water flows and cannot realistically be designed in detail in advance of the development. The cost of developing detailed engineering designs in advance would require significant time and cost, possibly greater than the investment cost of developing the site.

A wadi based run-off site at Ilkaadi involved the ASP in supporting the construction of a wadi training bank protection involving the use of a bulldozer. The cost of the exercise was around \$4,000. This season the community planted around 1,500 ha of local sorghum. The expected yield of this is likely to be around 0.3 Mt per ha or 450 Mt. At US\$5/ 50kg (US\$ 100/ Mt) that means a return of US\$ 45,000. The wadi bank has been constructed well and will gain in strength

as soil is deposited in future flows. If such a yield is generated once every two years (the water comes from Ethiopia) it is a sound investment, which more than justifies the cost of the wadi bank protection. The Deefow site has the potential of much more area (rough estimate 3,000-4,000 ha) and better yields because it is more fertile.



Typical stilling basin structures

The environmental justification for developing Deefow is that it would stop the development of naturally occurring gullies and the loss of fertile soil. It would be important to introduce tree and grass protection on the bunds as part of integral development of the site. The political reason for developing such sites is that not all families have access to the river and exclusion of the families with run-off farming potential could be the cause of future conflict if some families feel they are being ignored. The same argument would hold good for the use of irrigation pump-sets. As the existing sets become old and break down more often and the demand for pumps goes up this also would lead to conflict amongst cooperating families if there was no way of them replacing the sets they have now.

It will be important in the future for SC-UK and its partner communities to consider the growth of the farming system as a whole in order to maximise production, food security and the physical security aspects of the project. The communities are demonstrating their commitment and enthusiasm for crop production. They are demonstrating that they have understood and agree with the technology approach that SC-UK are promoting and are keen to go further. The key to the farming system development is pump driven irrigated agriculture. The wider this is developed the higher the grain, fruit and vegetable production output of the area, the more secure will be the livelihoods of the families involved. However, significant other benefits can be obtained through experimenting with run-off farming development and assisting with better rain fed agriculture. In years where rain fed is successful the productivity will be that much higher. If rain fed activities have access to better seeds and cultivation/husbandry practice this too will contribute to improved food (and physical) security.

Potential for developing VICs

One of the important aspects to illustrate is the role and function of the VICs in this whole process. Within each village they are the link between their own structure and the ASP. They, as well as the VEWs, CPCs and children from the schools are the recipients of direct training and technical support from the project. However through observation and discussion in the field they are also the 'public relations' organisation of the project and the means through which awareness and dissemination of information reaches the rest of the target population and all the farming families in the district. Through the ASP and the Water and Sanitation project these groups are not just being taught about new seeds and cultivation methods, they are being taught about team development and leadership methods. These skills have a direct bearing not only on improved production and food security but also on social organisation and governance. The ASP and Water and Sanitation projects are able to bring together groups of people from across the conflict divide (the green line or the West bank/ East bank divide) to discuss issues related to food production. Given time they will be able to discuss wider issues such as external marketing

of produce and the causes and resolution of conflicts. This institutional development plays a key part now in promoting food security and in future peace management.

Training in schools and links between Education, ASP and the Water and Sanitation Projects

The linkages between the ASP and the newly established Education Project are small at the moment but are occurring naturally between the different staff of SC-UK and the communities. The idea of developing an agriculture training package for schools and supporting practical training for children (as part of their science curriculum) and involving parents in the practical demonstrations is excellent and is occurring as a natural thing to do. The training package incorporates crop production, livestock production and environmental issues and has potential for considerable expansion for both teaching children and parents.

In a visit to El Ali School there was considerable discussion with both the children and the CEC (all parents) about the value of this type of education for the children and the community. El Ali is situated some 70km away from the river in a rangeland area. The soils are high in calcium sulphate (gypsum) and the village exists because there is considerable water available only 2-10 meters below the surface. The children like the livestock parts of the curriculum because their parents are nomadic camel pastoralists and from being very young they are involved in observing and helping with animal management. The school garden was constructed and established with a lot of involvement of the CEC and has prompted several parents (men) to dig their own shallow wells and to develop their own farms using information they are getting from the training manual (the school has only been teaching the subject for the last six months). There is a great deal of potential for SC-UK to begin to focus on promoting food security through this schools programme.



Chairman of the education committee – parents and teachers – discussing the development of the school demonstration garden, which is irrigated by a shallow well. (El Ali is 76 Km away from the river)



Schoolchildren at El Ali School



Parent watering family camels near to El Ali School

5 Impact

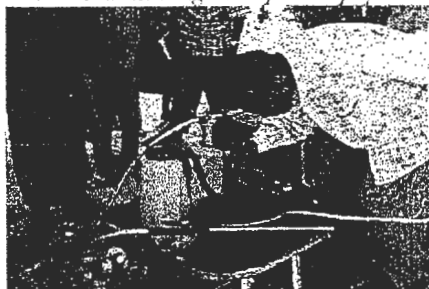
(The effect of the project on its wider environment, and its contribution to the wider sectoral objectives summarised in the projects Overall Objectives.)

The project is based on a sound analysis of the needs of the families and particularly women and children in Belet Weyne District today.

The methodology used is working extremely well. Basically this can be described as a farmer-to-farmer approach to awareness and dissemination. There are 142 villages in Belet Weyne District and the baseline study of the project has gathered data on all of them. It is estimated that the farming community includes 9,023 households within these 142 villages (estimated $9,023 \times 6 = 54,138$ men, women and children). The project could not cope with all of these together so the focus of the project was narrowed to 1,870 families that live in the 29 villages representing the project target group (21% of the District farming population). Within this target group 90 individuals making up 18 VICs of 5 individuals (including 18 women) plus 203 VEWs (29 villages \times 7 individuals) and 18 CPCs making a total of 311 individuals have had direct training and regular contact with the ASP Team. As well as this, some 185 other farmers in non-set sites have received training and have regular contact/support with the team.



VEW demonstrating 'neem' pesticide preparation



VEW demonstrating the difference in yield between high yielding and local varieties

It is estimated therefore that some 500 individuals can positively be confirmed as being aware and practicing crop production using new seeds and the associated cultivation and husbandry practices. This represents some 27% of the target population. From the field visits and through observation it is thought that the number is larger than this and lies within the region of 30-40%. It is also thought that the number of people now aware but not yet practicing the new methods is 100% of the target community. The main constraint now to increasing the spread of the methodology faster is shortage of pump-sets and shortage of new seed.

The uptake of the project messages is following a geometrical pattern. It was very slow to begin with, with little visible impact, then over time messages are being spread replicating increasingly quickly. The activities of the project are having a considerable impact on non-target group families. There are significant numbers of better off families who are either hiring or buying pump-sets and engaging in intensive vegetable gardening. Especially around Belet Weyne there are increasing numbers of young men who live in the town but travel every day to the irrigation sites and are growing onions and tomatoes, bell peppers, chillies and fruit trees for sale both in

Belet Weyne and Bossasso and Mogadishu. There are also women who are irrigating inside the town within their homes providing for the same market. There is also very active market for growing sorghum purely for fodder and many of the set site farmers consider fodder value as a key characteristic in improved varieties.

The ASP influenced much of this activity although it would be extremely difficult to confirm this. Before the project it was difficult to get seeds in the town and the pumping capacity was small. The introduction of the cheap, mobile pumps has been picked up and is still replicating in the area (the pastoralists in El Ali are talking about buying pumps to irrigate from the shallow wells). There is little doubt the initial supply of seed and pumps came from the ASP.

6 Sustainability and Replicability

(The likelihood of a continuation in the stream of benefits produced by the project, particularly continuation of the projects activities and achievement of results.)

The SC-UK Programme in Belet Weyne should be seen as an integrated process which is working with families and their socio-economic system that have been seriously damaged by the breakdown of state structures and by conflict that has made them more vulnerable to droughts and floods than in the past. Over recent years they have been assisted, with difficulty, by international relief efforts that have sought to provide short-term emergency relief. More recently it has been possible to move to a rehabilitation and development approach, which is showing signs of positive progress. There are, however a number of issues which concern the ASP, SC-UK, the environment they are working in, and the activities of other agencies in the same area with regard to sustainability of the present project.

6.1 The Agricultural Support Project

Irrigation knowledge

The methods being used are basic but clearly do the job of getting water on to farms and producing crops. There are many comments that could be made about efficiency of water use, and better control of water that would be more efficient and more cost effective. If the basin construction were done more carefully, less water would be needed. With more careful management more crops could be grown with the same amount of water pumped but little attention is being paid to these aspects.

The basic process of participatory involvement with developing improved methods could be used to bring better awareness about water management. The set sites could be used for this but concentrating on water, and not seeds. It is possible to buy simple field potentiometers that measure soil moisture content at different soil depths. ASP could set up experiments that measure the soil moisture profile before planting and irrigation. Then putting water into plastic 100-200litre containers and pouring it by hand can put known amounts of water into specific basins. The infiltration rate can be measured (the time taken for water to be absorbed into the soil). After the irrigation twice daily measurements of the potentiometers should be monitored in order to observe and record the patterns of wetting. This will give an indication of how long the irrigation interval (period of time between irrigations) and this can be compared with current practice. Basic information regarding crop irrigation needs for different crops, in different soils and evapo-transpiration conditions can be obtained in the FAO Irrigation and Drainage Paper No. 24.

Irrigation Equipment

Clearly the access to pumping equipment is a vital element in sustaining and replicating the current system. The pumps are relatively new and adequate training in operation and maintenance is being given. The communities have been asked to pay 20% towards their purchase and people pay for the fuel to use them. This is a good start because the principal is accepted. However this process needs to go much further. There needs to be a much bigger stock of pumps in the system and ultimately a stock which is being totally paid for by the users. The process that has been begun needs to be privatised in such a way that farmers will buy their own pump-sets through private businessmen in the future and maintenance is either carried out ~~on farm or by private workshops in the area with the capacity to provide such services.~~ Clearly this cannot be done overnight. In areas where a community has already bought a subsidised

pump-set through ASP consideration should be given to providing others on a 50% subsidy. Further assistance should be given to VICs to help them to develop the funds they accumulate from pump-set use into revolving loans funds. Funds held by the VICs could be used for loaning to families (groups of families) to buy their own pump-sets on the open market, initially with a 50% subsidy from SC-UK but eventually at market rates. It is very important that this is done because there is not yet a critical mass of pumps in the area for the whole process to be sustainable and if it is not generated then the system is unlikely to become sustainable.

Cultivation methods

The principle cultivation practice of using organic matter from composting is already well understood and valued by the core practitioners but they still all use hand cultivation, which takes up considerable labour time and energy. Some attempts have been made to use donkeys but without much success. Elsewhere camels are used to good effect but there is no such tradition in this area. It is worth trying but it would be advisable to get someone who knows how to do it, especially the initial training of the camels, to try it with the local farmers as an experiment. Camel traction would open up the possibility of furrow irrigation, which is more water efficient than basin irrigation.

Husbandry practices

The package of husbandry practices including use of 'necm' solutions for pest control is well taught and well understood. Perhaps more consideration would need to be taken of using mulches to reduce soil moisture loss through evaporation although the crop residues are in high demand for fodder and the farmers would have to make the trade offs involved.

Many farmers are cultivating and planting right up to the riverbank. This very quickly will lead to loss of topsoil and bank erosion. It is very important to introduce a system of maintaining a 20 metre band of no annual cultivation along the banks and to encourage the planting of fruit, fodder and firewood trees as well as grasses along these bank protection strips. The products would be marketable and would also introduce a measure of environmental management. There was some mention of using agro-forestry techniques in the project proposal. Although this would have been ambitious in earlier parts of the project it would be prudent to start thinking of these interventions at this stage and perhaps getting some advice and planting material from ICRAF or other sources of such knowledge on how to start.

Uptake and maintenance of new seeds

The value of the new seeds is now increasingly being understood and will spread to other parts of the farming community. However there is already evidence from the present harvests of mixing with the local varieties. Whilst this is inevitable it would be valuable to initiate a system of ensuring new seeds come into the area but it shouldn't be done through SC-UK. Some system of accessing new seed in appropriate packages from ICRISAT/CYMMET to the local traders so that seed can be sold on the market needs to be encouraged.

The introduction of fruit and vegetable seeds in the area is generating considerable interest and should be continued and strengthened particularly in relationship with the schools training and with the well sites of the Water and Sanitation Project. The promotion of kitchen gardens using household wastewater is already being carried out in some places and should be given more emphasis. It would be worth experimenting with using drip irrigation lines fed by an elevated bucket to encourage intensive household production of vegetables and fruit for both marketing and household nutrition improvement purposes. This would be especially valuable in places like El Ali where water is saline due to the soils. Drip lines allow the possibility of using more saline

waters. It would also be valuable to investigate plant varieties that are more salt tolerant for use in such areas.

6.2 Save the Children UK

SC-UK has been engaged in a major organisational exercise to review its goals and objectives to develop strategies and policies, which will lead towards those goals at global and local levels. The strategies developed are rightly concerned with child-focussed issues and, as a major theme, agricultural development doesn't specifically relate to child rights at a global or country level. However, in places such as Belet Weyne and specifically for the children of Belet Weyne it was exactly the right thing to do to focus on a project that seeks to rebuild the economy of their home district. The ASP is helping their parents to be better parents, helping to create peace and stability, and to improve family food security and livelihoods (four out of six of the core areas of global programme strategy). If SC-UK is not going to engage in agriculture projects in the future, that is an organizational decision, but ASP is a project that SC-UK made a commitment to in earlier circumstances and was a sound and right decision at the time. Having made that decision, SC-UK staff and their partners are making a serious effort to make it succeed. However, once engaged in such a process-oriented project it is extremely important to allow it time to succeed, particularly in an area where children are considered to be living in especially difficult circumstances. ASP had an initial phase of two years where basic ideas and different seed varieties were tried out. This second phase is about expanding these ideas through training and direct implementation. If SC-UK withdraws from ASP at the end of this phase it will not have reached a stage where the impetus already created will be sustainable and much of the good work carried out so far will be lost because there isn't a sufficient critical mass for it to become sustainable.

Beyond the remaining part of this phase it needs a third phase of consolidation, replication and privatisation during which SC-UK can steadily withdraw from direct implementation and it can be reasonably hoped that the knowledge transfers taking place and the technology being used will become sustainable. The present situation is that the ASP is the core project within a programme that involves Education and Water and Sanitation. As the ASP comes to a natural conclusion these projects will grow in strength and continue to provide focussed support to the children and parents of Belet Weyne. If the ASP is cut short, nobody in Belet Weyne will understand why SC-UK wanted to pull out of such a successful intervention and this will have negative effects on the remaining projects as well as the livelihoods and food security of the project area.

6.3 Collaboration with other Organisations

SC-UK plays a particularly important role in Belet Weyne by being present on the ground all the time. Other organisations mainly concerned with relief and health are not well represented and are not locally considered as full partners in development. Various organisations gather information on food security status and feed it back to their Head Offices in Nairobi. There is little or no feedback from this process either between organisations or to the people of the area. The value of data gathering is not really understood locally. There is a large communication gap between what happens in Belet Weyne District and the remote meetings of the SACB in Nairobi. There seems to be a lack of communication between SC-UK and the EU Somalia office, which is causing some delays in implementation. It would be most valuable for a joint field visit to be held between SC-UK and the EU Somalia office to clarify the issues concerned.

6.4 Environment

The conflict and economic collapse of the last few years has had devastating effects on the natural environment. Without a stable agricultural production system, many families have cut down trees to sell as construction material, firewood and to make charcoal and lime. This trend is still continuing, partly because of the demand for such material in Belet Weyne town, partly because of the continued need to expand better livelihood opportunities to more families. The involvement of the ASP in creating awareness through extension and through schools is in a small way beginning to address the issue of environmental degradation. A third and final phase of the current project would need to put much more emphasis on sustainable food production approaches through biological environmental protection measures (agro-forestry, bank protection) and through increased production of multi-purpose species (grasses and fast growing trees) that protect the environment and have a commercial sale value as fuel, fodder, mulch and manure.

7. Conclusions and Recommendations

7.1 Overall Outcome to Date

Conclusions

The need for this intervention was clearly defined through dialogue and planning with the families of the Belet Weyne farming community. The project was well designed and is being implemented in a way sensitive to the needs of the area. The planned strategy of training community extension workers, allowing people to make their own decisions about irrigation technology, planting material and farming practice, introducing agriculture into schools, is showing remarkable results within the framework of the project plan. The whole target population (1,870 families) is aware of the project and what it can do for them. This is creating an increased demand for services and involvement in the process. Somewhere between 30-40% of the target population are utilising the knowledge being promoted and using the improved planting material and this should continue to increase beyond the 50% level by the end of the phase. Increase in yield at district level is becoming increasingly visible as the proportion of farmers engaging in irrigated and/or run-off farming increases and as other farmers not engaged directly in the project are coming into the farming sector. However, sustainable increases will require more people to have the capacity to irrigate because of the continuing risk of rain failure. The introduction of agricultural education into schools including crops, livestock and nutrition is very sound particularly as it makes children aware of the different production systems (crops and nomadic pastoral production) and their cultural links with these systems. The children of Belet Weyne live in a crop/livestock production economy and many of them will become farmers themselves so the double opportunity of in-school and out-of-school learning is of direct benefit to their future.

Recommendations

1. The basic tasks of Phase 2 are well under way but in order for the outcome of the project to become sustainable it would be a mistake to close the project at the end of this phase (nine months remaining). Rather it would make better sense to develop a new project within the framework of food security whilst retaining some of the key ASP activities at a reducing level for a further period of twelve to eighteen months. During this period the project would directly address some of the sustainability issues such as helping the VICs to establish revolving funds for the purchase of additional new pump-sets to increase the stock.
2. At present ASP employs three mechanics to train CPCs and to provide maintenance support to farmers but ways should be found to help these people off the SC-UK pay role and into private business providing the same services to the communities.
3. The nurseries that are currently run by SC-UK should also be helped to become self-supporting as private businesses producing quality maize, sorghum and vegetable and fruit seedlings for sale to producers.
4. SC-UK staff should continue to provide training on demand for communities who request it so that the whole of the target group has the chance to benefit (out of the 9,000 families these 1870 families were considered the poorest and least able to take care of themselves).

5. More emphasis should be given to those communities that would benefit from the run-off sites. ASP could help to design the schemes and to support the groups through training and technical support.
6. In order to contribute to sustainability of the target communities the project should increase the number of pump-sets to the poorest families.
7. SC-UK should consider in more depth the synergistic links between the different projects and strengthen the collaborative aspects of a holistic programme.
8. The HHFE Impact study of 2000 should be regarded as a baseline study for this phase and should be repeated as part of the Final Evaluation.
9. The kind of capacity building training being used in both the ASP and Watsan projects promoting group organisation and leadership training should be continued and strengthened as an important contribution to improved governance and peace building.
10. Further support should be given to teachers implementing the agricultural teaching programme, through:
 - a. A review workshop to get feed back on their experiences in using the teaching guidelines. This should be recorded with suggestions on how to improve the guidelines.
 - b. Short training workshops (twice per year) on improved teaching methods including use of the kitchen gardens.
11. A joint field visit should be organised between SC-UK Nairobi staff and EU Somalia in order to improve communications and to clarify key implementation issues.
12. Within the framework of capacity building future activities should incorporate conflict management training as a management tool.

7.2 Future Developments

Conclusions

A new phase needs to be developed that moves on from the basic agriculture approach and begins to focus on the wider issues of food security at a district level. This would incorporate the introduction of a community-based food security system, including the development of a drought/flood management system incorporating an early warning system, promotion of a district production and marketing system and the development of a drought contingency response plan.

The current schools agriculture activities should be continued within the framework of the Education Project and involve the Water and Sanitation Project in promoting hand-dug well-based fruit tree and vegetable production in non- riverine areas.

The present market price information gathering involves SC-UK handing data on to FSAU. Both FSAU and WFP have a data gathering system but this is not the same as an early warning system. The data is collected by each organisation and sent back to Head Offices in Nairobi. ~~At present there is no effective way that individual farmers and villages can monitor drought status and to make collective response plans at a local level. The present system relies on outside agencies deciding when the circumstances are severe enough to bring in emergency relief. A~~



community based early warning and response system would allow local farmers to develop their own production in ways to plan and respond to drought conditions in order to prevent emergencies occurring.

Similarly there is no way that local people can make optimal decisions about what to grow in order to improve food security. At present current production will lead to 'booms and busts' of maize and sorghum in response to drought cycles. However, through the medium of the VIC network it would be valuable to try to develop a production and price information and marketing network.

The early warning system would monitor three types of indicators – environmental, economic and social-welfare indicators. Each of these three types of indicator would measure drought onset at different levels. The environmental indicators (such as rainfall) give the earliest warning; economic changes (such as market prices) the next level and social-welfare (such as MUAC – malnutrition in under five children). The whole purpose of the system would be to avoid emergencies. The objective would be to develop a locally managed system that allows effective local responses to droughts and floods and reduces the dependence on outside agencies.

Recommendations

13. A community based food security project should be designed and implemented which seeks to involve local Village management structures in developing a drought early warning and response system based on the increasing productive capacity of local communities.
14. Integrated with the food security system the project would continue to support the growth of local food production using schools as the focal point in spreading knowledge on better production methods.

8 Lessons Learnt

1. The vital role of effective participatory community mobilisation;
2. The value of having a gender balanced staff and the importance of involving women in the planning, growth and development of the project;
3. The importance of technology being appropriate such as mobile pump-sets and simple canal systems that can be managed and understood by farmers;
4. The role of NGOs in facilitating processes that can lead to private sector development;
5. The importance of listening to farmers own knowledge and experience when introducing new technologies;
6. The importance of recognising local decision making structures and working with them when introducing change;
7. The use of Project Cycle Management and allowing enough time for projects to become sustainable.

Annex A Logframe

	Intervention logic	Objectively verifiable indicators	Progress/Achievements	Source of verification	Comments
Overall objective	To improve household food security in rural Betsi Weyne				
Project purpose	<p>Farmers increase their agricultural production, and local access to seeds through the use of adapted quality seed production and management techniques, and through appropriate agriculture practices and irrigation methods in 10 seed multiplication sets in Betsi Weyne district</p>	<p>Increase in seed and crop production by 30% in the 10 village sets by 2002</p> <p>Quantity of seeds distributed free to farmers in village sets decreased by 75% by 2002</p>	<p>10 sets established, 8 rice and 2 mung-bean</p> <p>To date no project assessment has been conducted. Baseline information has been collected to facilitate future assessments</p>	<p>Project evaluation report</p> <p>FSAU/SC (UK) crop assessment</p>	<p>100% of sets have been established</p>
Requites	<p>Training package for farmers in appropriate seed production (quality/quantity) and management (storage and selection techniques) designed, implemented and adapted to local needs.</p>	<p>Proportion of target farmers aware of good seed production and management techniques is equal to: 50% by April 2001 80% by April 2002</p> <p>Proportion of target farmers applying on their farms the seed production and management techniques disseminated is equal to: 50% by April 2001 70% by April 2002</p> <p>Seed production increased in target area by 30% by April 2002</p> <p>The number of farmers receiving free seed distribution is zero from second planting season</p> <p>Proportion of women involved in training activities is equal to: 20% April 2001 30% by April 2002</p>	<p>The baseline data for the 10 sets and the participating villages in the set activities has been collected. VEWs and VICs have been established at set site locations as well as non-set site locations and training is on-going</p> <p>Results from the Mid-term evaluation planned for January will provide clarification.</p>	<p>Training reports KAP survey reports</p> <p>Project mid term evaluation report, quarterly reports, field visit reports</p> <p>SC (UK)/FSAU seed production reports, final evaluation report</p> <p>Seed market price data, SC (UK) seasonal crop assessment reports</p> <p>Activity reports Project evaluation reports</p>	<p>TOR is developed and mid-term evaluation scheduled for January 02</p>
			<p>Baseline information is collected for use in future impact assessment)</p> <p>No farmers have received any seed distribution since the project began.</p> <p>No women are involved in CPC training as this is perceived as a male only role</p> <p>34% of nursery demo day participants last quarter were female</p> <p>37% of this quarter's nursery demo day were female</p> <p>37% of vegetable and fruit producer groups are female</p> <p>20% of VIC members are female</p> <p>29% of VEWs are female</p>		

Intervention theme	Objective/verifiable indicators	Progress/Achievements	Source of verification	Comments
<p>Training package for Farmers in relevant agricultural techniques (land management, soil protection, and irrigation infrastructure) implemented and adapted to local farmers needs.</p>	<p>Proportion of target farmers aware of good agricultural practices is equal to: 50% by April 2001 70% by April 2002</p> <p>Proportion of target farmers applying on their own farms agricultural techniques disseminated is equal to: 40% by April 2001 60% by April 2002</p> <p>Yield per ha increased in target area by 30% by April 2002</p>	<p>Mid term evaluation planned in January will give the clarification.</p>	<p>Quarterly reports Field visit reports</p>	
<p>Farm irrigation systems rehabilitated and maintained with the active collaboration of communities in project area.</p>	<p>At least 8 canals, 8 stilling basin, 10 culverts rehabilitated and maintained in riverine areas by April 2002</p> <p>Water pumps/riverine set provided by April 2001.</p> <p>2 water harvesting systems in rainfed areas rehabilitated by April 2001</p> <p>Systems for management of irrigation infrastructures designed, implemented and adapted with stakeholders by April 2001</p>	<p>This quarter 3 stilling basins were constructed/rehabilitated, no canal development has taken place. Phase two total to date: 15 canals and 10 stilling basins.</p> <p>This quarter 9 water pumps have been distributed. Phase two total to date: 13 water pumps.</p> <p>Two water harvesting system (rain fed areas) rehabilitated.</p> <p>8 VICs have been established (one at each riverine set). Further training was given concerning irrigation system management & the roles & responsibility of VICs. Another 10 VICs were formed at the villages where irrigation system improvements have been carried out</p>	<p>Seasonal crop assessment reports by SC (UK)/FSALU</p> <p>Evaluation reports</p> <p>Logistic and financial records</p> <p>Logistic and financial records</p> <p>VIC records</p> <p>Quarterly reports</p> <p>VIC records</p> <p>Training reports</p> <p>Activity reports</p>	<p>Locations of the canals are: Tawakal, B/Salama, Qarsooni west, Maclow, B/amin south, Jaddie, Qoolow, Dhagayyo Weyn, 5 at Booco and 2 at Daayow.</p> <p>Villages that have received pumps: Tawakal, Darsad, B/Salama, Qarsooni west, Maclow, Jaddie, B/raaxo and B/Amin.</p> <p>Two water harvesting has been rehabilitated at Ikade and De-low west sets.</p>
	<p>Indicators for operations of irrigation systems committees developed with stakeholders by October 2000.</p> <p>2 community pump maintenance workers trained in each riverine set by April 2002</p>	<p>8 VIC established & functioning another 10 are established & received training</p> <p>Management training given and indicators developed</p> <p>14 pump operators from 12 different villages have been trained this quarter. The total number trained to date: 27 of which 16 are from the 8 riverine sets, 11 from other communities</p>		

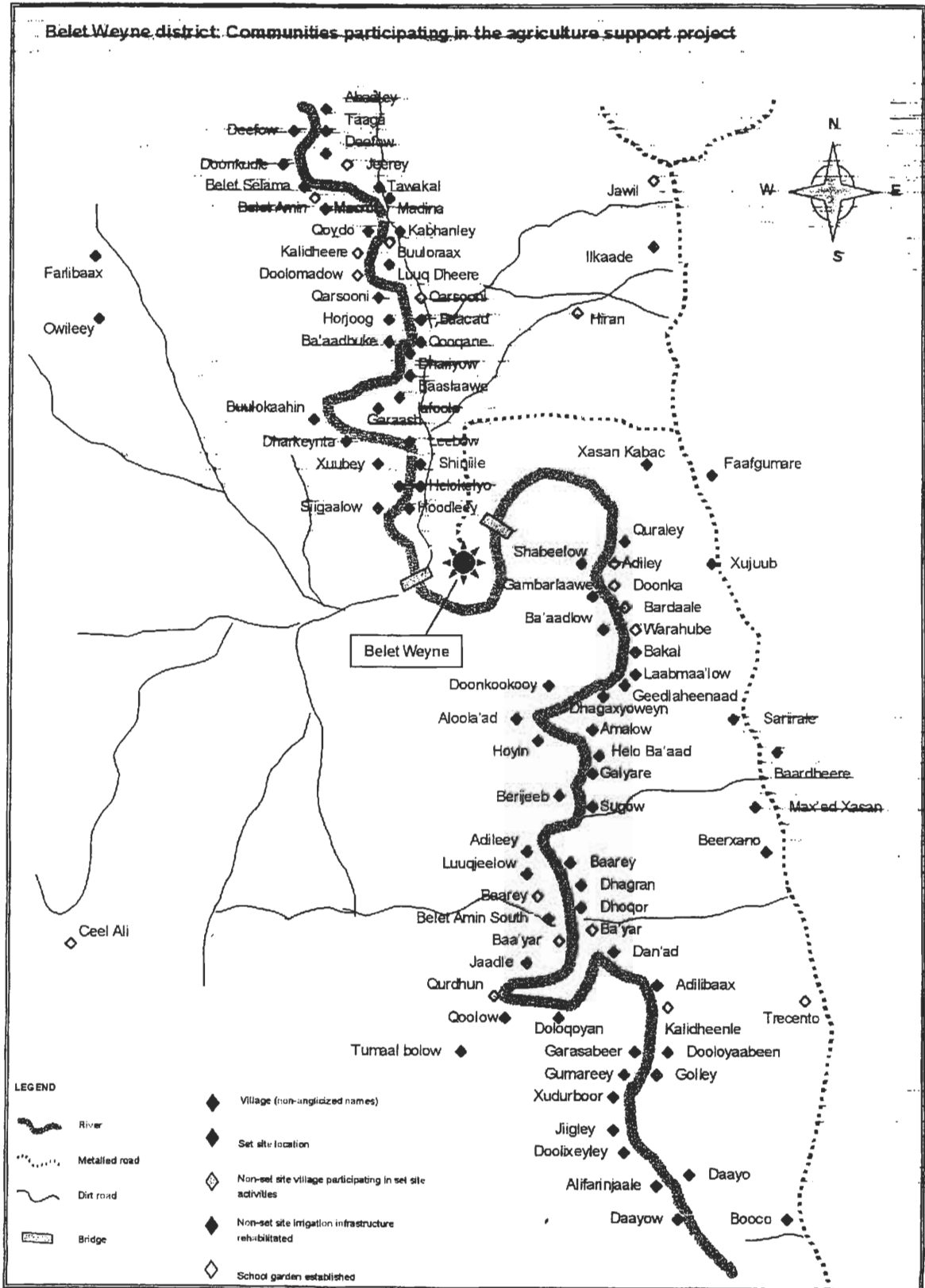
	Intervention Logic	Objectively verifiable indicators	Progress/Achievements	Source of Verification	Comments
	<p>Training package in basic farming techniques and methods of agriculture production for school children designed, implemented and adapted to children's needs</p>	<p>Vegetable garden established in the 6 schools supported by SCF by April 2002</p>	<p>3 veg Gardens established (Tereceto, El Ali and Kabxanley Schools). Tree planting conducted at Beccaxano school. Assessments have been made at new locations and work to further develop the gardens and continued tree-planting will start next quarter.</p>	<p>Observation Quarterly reports School records</p>	<p>Schools are Tereceto, Boco, Faribax, Beccaxano, El Ali and Kabxanley</p>
	<p>Appropriate agriculture education materials designed and disseminated in each school by April 2001</p>	<p>Proportion of trained pupils aware of farming techniques and methods of agriculture production is equal to: 50% by April 2001 80% by April 2002</p>	<p>The second phase agriculture training course was given to 12 teachers from 6 schools. 2 draft copies of teachers' guidebook were provided to the teachers from each school. Accompanying posters were also given to the 6 schools. Review of the agrt. Manual is going.</p>	<p>Education material Activity reports KAP survey reports Project evaluation reports</p>	
	<p>Baseline survey carried out (written examination grades 4 & 5) the average mark was 25%. Monitoring & assessment will be conducted using revised questionnaire next quarter.</p>	<p>9 demo plots at set sites (8 everine & 1 rain fed) fully implemented & demo activities were carried out. 2 additional demo plots (non-set sites) farmers from 2 non-set site villages conducted crop trials.</p>	<p>The agronomists for the 10 established sets were developed, discussed and signed.</p>	<p>Source of Verification SC (UK) Quarterly report, Agreement documents</p>	<p>Comments</p>
<p>Activities linked with Result 1</p>	<p>Intervention Logic Establishment of 10 seed multiplication sets (8 everine and 2 rainfed sets) Establishment of 10 village sets committees and signature of agreement with each sets Provision of tools for hand preparation 10 Village sets Provision of seeds for first planting season in each set Training material for seed management and production activities developed and disseminated to farmers Set visits, field days and village visits by SC (UK) for technical support and training purposes Crop trials in nursery to establish high yielding resistant varieties</p>	<p>Tools provided for canal rehabilitation and training purposes Improved seeds from the nursery and local seeds from the market were provided to the sets for training purpose Tools & equipment for training were given to the farmers at the set sites, farmers participating in set activities (non-set sites) and vegetable growers Regular set site visits and village visits conducted. On farm training of VEW & VIC was conducted at 5 old and 4 new demo plots. Training activities ongoing. Trials for maize, sorghum, pigeon pea using seed provided by CIMMYT and ICRISAT are at on farm trial stage.</p>	<p>Source of Verification SC (UK) Quarterly report, Agreement documents Logistics and financial statements VSC records Training material reports and training document SC (UK) activity report and field visit reports Nursery records</p>	<p>Comments Donor not providing funding for seeds 2 varieties of maize, 3 of sorghum and 2 of pigeon pea</p>	

Intervention Logic	Progress / Achievements	Source of Verification	Comments
<p>Demonstration days for farmers, school and women group in tet and nursery</p> <p>Collection of market prices and rainfall data on monthly basis and dissemination to other partners</p> <p>Seasonal crop assessment on sets and on farmers farms</p> <p>Attendance to relevant coordination meetings in BW and NBI on monthly basis</p> <p>Capacity building of SC (UK) project staff in PCM and HH food economy survey and analysis methods</p> <p>Mid-term and final evaluation</p> <p>Dissemination/and demonstration of land management and soil protection techniques to farmers on sets.</p> <p>Propagation of fruit trees and tree seedling in nursey</p> <p>Training material for land management and soil protection activities designed and disseminated</p> <p>SC (UK) visits to farmers on set and in villages for training and technical support purposes</p> <p>Identification of irrigation infrastructure to be rehabilitated in project area carried out jointly with stakeholders</p> <p>Establishment of Village Irrigation Committees add signature of agreement including cost-sharing details for rehabilitation purposes details on future maintenance and ownership of systems)</p>	<p>1 demo day carried out at nursery (Nov 15, 01), another 4 demo days were carried out this quarter at new set sites. 4 field days planned during the next quarter one at each of the 4 new set sites</p> <p>Information collected and disseminated (to FSAU) for each month of the quarter</p> <p>Crop establishment of Deyr 2001 have been conducted. Harvest/ yield assessment will conduct next quarter and recorded for reference.</p> <p>No local agric. Sector but inter-agency meetings have been resumed</p> <p>No workshops were held at B/Weyne or Nairobi this quarter. Staff development issues were discussed during programme review meeting.</p> <p>Planned for January 02.</p> <p>9 sets are established, and demo activities/training are ongoing.</p> <p>8.8 Kg of vegetable seeds and 408 fruit trees seedling distributed from the nursery to farmers, women/youth groups (this quarter)</p> <p>Material adapted from phase 1 and tools and equipment are used in both nursery and set sites</p> <p>Established VIEVs and VICs were given training. 4 training sessions were conducted this quarter.</p> <p>The locations of irrigation infrastructures to be rehabilitated in project area have been identified</p> <p>8 irrigation committees established at riverine set sites. All of them have signed agreements.</p>	<p>SC (UK) demo days record</p> <p>Rainfall data records and market prices data records (SC (UK) / FSAU)</p> <p>Seasonal crop assessment data, quarterly reports (SC (UK) / FSAU)</p> <p>Minutes of meetings held in BW and NBI</p> <p>Internal training records</p> <p>Financials statement</p> <p>Project activity report</p> <p>Project activity report</p> <p>Project activity report</p> <p>Project activity report</p> <p>VICs records</p> <p>Agreement forms</p>	<p>30 people attended of which 11 were women (Nov 15/ 01). During this quarter 144 farmers attended demo day training of which 11 were women.</p> <p>Market prices for quarter and attached as annex to this report</p> <p>Meetings are resumed and continue on monthly basis.</p> <p>Production of seeds and fruit trees saplings in the nursery ongoing.</p>
<p>Activity linked with Result 2</p>			

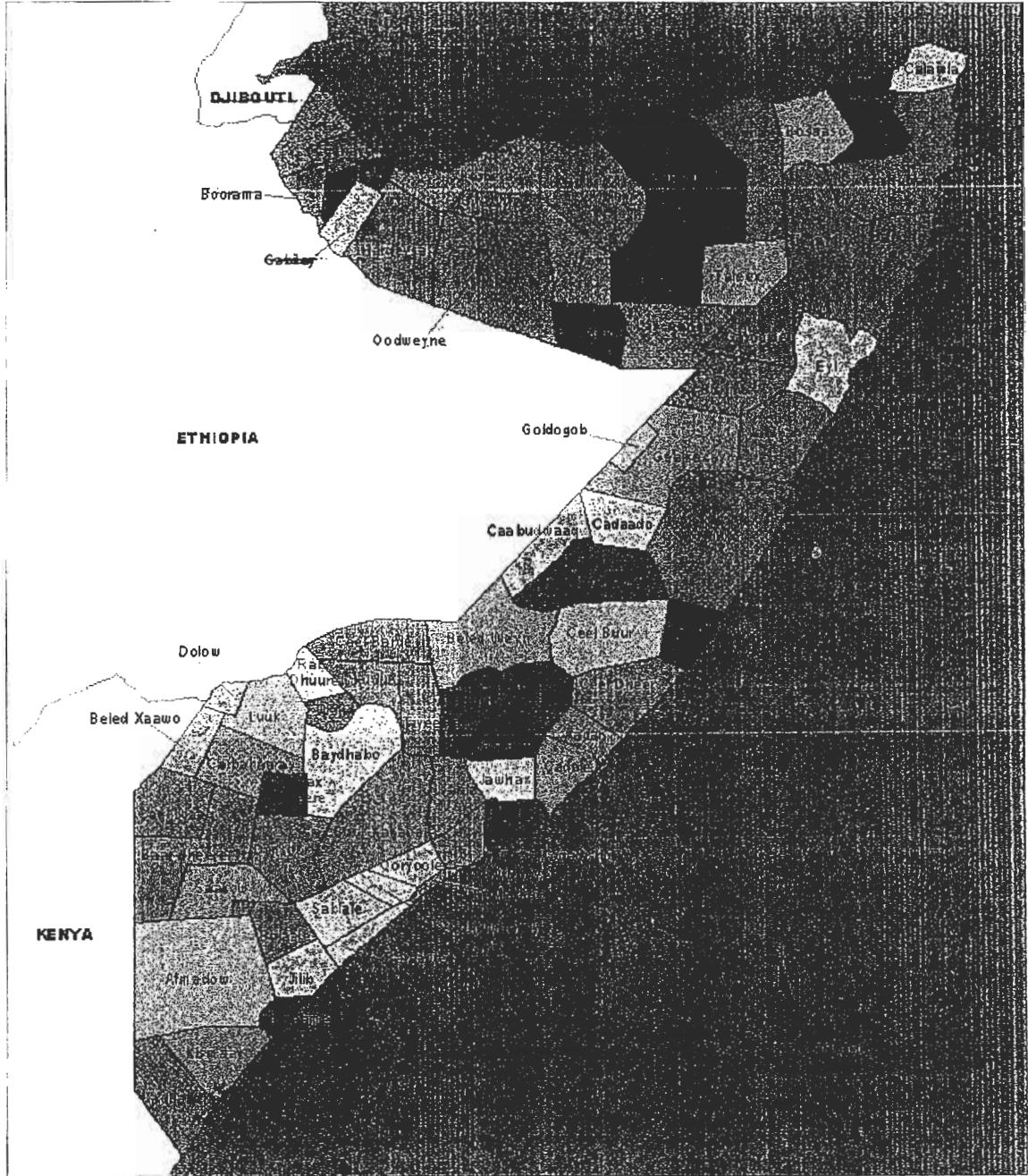
	Intervention Logic	Progress / Achievements	Source of Verification	Comments
Activity linked with Result 3	<p>Training of VTCs in planning, management, monitoring, book keeping</p> <p>Rehabilitation of selected irrigation sites using community participation</p> <p>Provision of tools to farmers for minor rehabilitation of irrigation infrastructures</p> <p>Identification and training of 2 community pump maintenance workers on each set</p>	<p>18 village irrigation committees trained and regular monitoring visits are conducted</p> <p>Ongoing in the next quarter</p> <p>Tools & equipment distributed for training are also be used for rehabilitation activities</p> <p>27 CPCs trained. Follow up visits were made this quarter. It is planned to continue follow up visits during the next quarter.</p>	<p>Training records</p> <p>Field visit reports</p> <p>Project activity reports</p> <p>Logistics and financial statement</p> <p>Logistic and financial statement</p>	<p>See report narrative</p> <p>Community participation includes provision of labour, monitoring and 20% of pump cost where applicable</p> <p>Training courses will be continued</p>
	<p>Provision of 1 water pump in each rice/irrigation set with financial contribution from farmers</p> <p>Irrigation support (fuel) to rice/irrigation sets for 1st season</p> <p>Support for repair of pump/systems as required during project duration period</p> <p>Supervision visits by project staff and technical support by SC (UK) Water and Sanitation project team</p>	<p>13 water pumps have been distributed (set sites). Community agreed to cover 20% of the cost and have paid 2 instalments of 3 for the first group and 1 instalment of 3 for the second group.</p> <p>Fuel support for irrigation was given to communities at the set sites.</p> <p>Support agreed with the 8 sets. Other rice/irrigation villages throughout the district benefit from the presence of SC (UK) pump mechanics</p> <p>Visits made as appropriate</p>	<p>Logistic and financial records</p> <p>Activity records</p> <p>Activity records</p> <p>Activity report</p>	<p>The remaining 1 instalment for the first group will be paid after the coming Deyr harvest and the 2 instalments for the second group after the next 2 harvests.</p>
	<p>Training of SD/UK project staff in CTC approaches and methodologies</p> <p>Development of locally appropriate teaching materials</p> <p>Identification of pupils in schools and planning of teaching activities with teachers/CBC</p>	<p>Training given in phase one. Follow up training planned</p> <p>Posters and agriculture manual developed</p> <p>Activities planned, pupils identified (grades 4-5)</p> <p>Children's training started and is going on.</p>	<p>Training material</p> <p>School activity records</p> <p>Project activity record</p> <p>Training records</p>	<p>Teacher's guidebook is completed (first draft) and distributed and review is going on.</p>
Activity linked with Result 4	<p>Training of children in 6 schools supported by SC (UK) in project area</p> <p>Establishment of vegetable garden in each of the targeted schools</p>	<p>3 vegetable gardens established at Tereenio, El All and Kabxanley. Tree planting supplemented at Beexaano school.</p>	<p>Observation</p> <p>Activity report</p>	<p>The vegetable seeds planted include Onions, tomatoes, sweet pepper, hot pepper, carrots, radish etc. The tree seedlings include neem, citrus</p>

Annex B

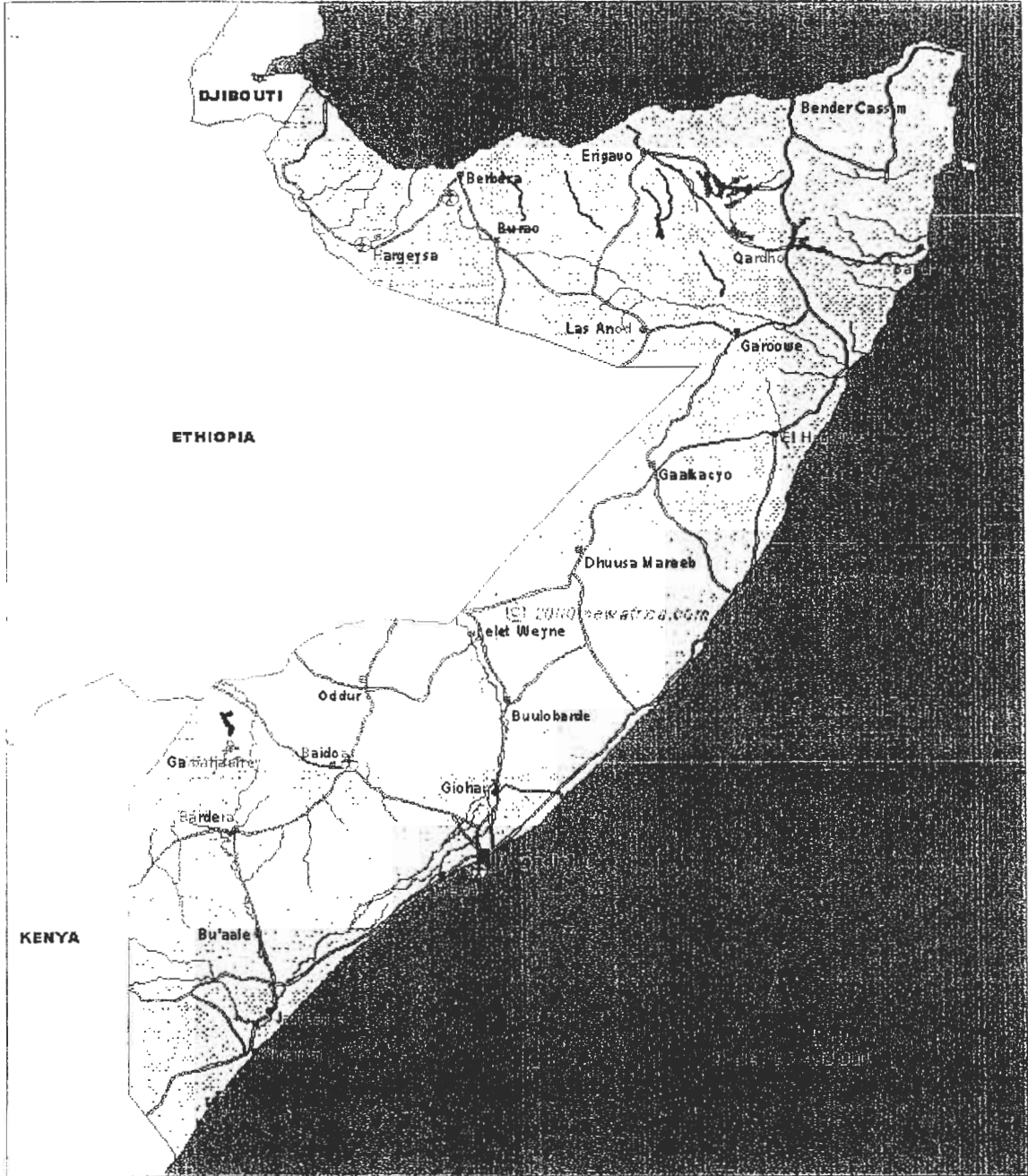
Maps of the Area



SOMALIA ADMINISTRATIVE MAP



SOMALIA OVERVIEW MAP



Terms of Reference

SAVE THE CHILDREN (UK)
SOMALIA COUNTRY PROGRAMME
AGRICULTURAL SUPPORT PROJECT
TERMS OF REFERENCE FOR MID TERM EVALUATION

1. BACKGROUND:

SCUK has been working in Belet Weyene District, Somalia since 1992. Through the implementation of agriculture and water and sanitation projects in rural areas, SCUK has developed along the years close relationships with the communities, elders and community representatives.

From April 1998 to June 2000, SC (UK) carried out Phase 1 of an agricultural support project aimed at improving food security in Belet Weyne District. Supported by the EC, the project consisted chiefly of establishing village set sites for demonstration, training and crop production purposes, nursery seed and sapling production for distribution, training of Village Extension Workers (VEWs), farmers and women and youth groups, rehabilitation/construction of irrigation infrastructure and irrigation support.

Following the evaluation of Phase 1 of the project in September 1999, SC (UK) prepared a Phase 2 proposal for submission to donors. Submitted in March 2,000, the proposal was accepted by the EC Somalia Unit for commencement on October 1st, 2,000. At the end of Phase 1 of the project (March 2,000 if no-cost extension not included) a household food economy based impact assessment was undertaken by the programme for purposes of reporting and further evaluating the success of the project in meeting its objectives. Based on the findings, approaches to Phase 2, were fundamentally the same, however, certain elements of the project were adjusted.

The project objective is to improve household food security in Belet Weyne district.

The purpose of the project is that, farmers increase their agricultural production, and local access to quality seeds, through the use of adapted quality seed production and management techniques, as well as through appropriate agriculture practices and irrigation methods in 10 village sets in Belet Weyne District.

The project focuses on supporting to the 10 village set sites and six SC (UK) supported schools in the Belet weyne district. The project aims to strengthen community ability to cope with food deficits arising from the erratic and unpredictable climatic conditions that prevail in the district. It also aims to develop and build capacity of extension institutions (village committees, village irrigation committees, village extension workers and community pump caretakers. The intervention aims to improve the irrigation systems of the village set sites. In addition, training activities in basic agriculture techniques have been conducted with schoolteachers and women and youth groups in the district. This has included the provision of training materials.

Four main results are envisaged that will lead to improved agricultural production and access to good quality seed in the district.

- A training package for farmers in appropriate seed production and management is designed, implemented and adapted to local needs
- A training package for farmers in relevant agriculture techniques is designed, implemented and adapted to local needs
- Farm irrigation systems in project area will be rehabilitated and maintained with the active collaboration of the community in the project area
- A training package in basic farming techniques and methods of agricultural production for school children will be designed, implemented and adapted to children's needs. The benefit for children will involve improved awareness in essential life skills

2. PURPOSE:

The purpose of the mid term evaluation is to assess the progress towards achievement of the results foreseen in the project proposal and also against the aims outlined in the SC (UK) Somalia country strategy.

OUTPUT:

A comprehensive report, with action oriented recommendations geared at improving the food security interventions in Belet Weyene in general and mainstream the implementation of the project and the exit strategy.

3. TASKS:

I. *Training package for farmers*

a) *Demonstration plots (village set sites)*

- Assess whether the training topics and materials used are relevant and appropriate to the farmers, identify any gaps and advise on improvements.
- Assess the level of utilisation of training content by farmers.
- Assess the effectiveness of the methodology and systems employed to deliver the training and information and advise on any possible improvements.
- Assess the level of participation of women and youth in demonstration plot activities and training and recommend methods for increasing their involvement
- Assess the effectiveness and sustainability of Village extension worker groups (VEWs)
- Assess the level of uptake of agriculture methods included in the training package among participating communities and identify methods to improve uptake.

b) *Nursery*

- Assess whether the training topics and materials used are relevant and appropriate to the producers, identify any gaps and advise on improvements.
- Assess the effectiveness of the methodology and systems employed to deliver the training and information and advise on any possible improvements.
- Assess the level of participation of women and youth in training activities conducted at the nursery and recommend methods for increasing their involvement.
- Assess the level of uptake of agriculture methods included in the training package among participating communities and identify methods to improve uptake.

II. *Set sites/irrigation infrastructure*

- Assess the condition and quality of irrigation infrastructure that has been rehabilitated/constructed at set sites and non-set sites (primary canals, stilling basins and culverts)
- Assessment of the physical systems that have been developed for crop irrigation (effectiveness, appropriateness and sustainability)
- Assessment of the capacity of communities to effectively manage irrigation systems including, pump maintenance, canal and stilling basin maintenance and crop irrigation (village irrigation committees and community pump caretakers)
- Assess the effectiveness of wadi (seasonal river) maintenance/restoration activities

III. *Training package for SC (UK) supported schools*

- Assess whether the training topics and materials used are relevant and appropriate to the pupils and teachers, identify any gaps and advise on improvements.
- Assess the effectiveness of school gardens as a method of providing practical instruction relating to agriculture for school pupils and advise on any improvements required

IV. *Sustainability/exit strategy*

- Assess the capacity of participating communities to continue to manage, effectively, irrigation systems and agricultural development without further support from SC-UK (SC (UK) agriculture exit strategy)

4. STUDY METHODOLOGY:

The consultant should develop a research methodology plan that take into consideration an application of ~~participatory approaches, mechanism to ensure that children views~~ listen to, heard and incorporated in the research findings and that literature review is made and informed the way the research is carried out. This plan should be submitted prior to starting of the study.

5. TIME FRAME:

15 working days total

(i) *Preparation (Nairobi) 2 days*

- Meet with HE Advisor, Programme Director and Programme manager of Somalia/Somaliland.
- Meet with key partners EU Technical Advisors, Selected NGOs, and FAO...
- Conduct literature review.

(ii) *Field work (Belet Weyene District) 11 days*

- Meet SCUK staff in Belet Weyene.
- Visit 11 village set sites.
- Visit the nursery.
- Visits two project schools and non-set sites.
- Meet with farmers and village-based institutions.
- Observe training activities.
- Write the draft report.
- Conduct a feedback workshop for SCUK and project partners.

(iii) *Report Finalisation (Nairobi) 2days*

- Receive and compilation of comments.
- Production of the final report.

6. MANAGEMENT AND SUPERVISION:

- The consultant will report to the programme manager Somalia/Somaliland.
- The consultant will liaise with the EU Technical 'Food Security' at all stages of the work.
- Day to day supervision/ support within Belet Weyene will be provided by the programme co-ordinator.

7. TERMS AND CONDITIONS:

- Rate of pay US \$200/working day.
- Travel (Nairobi/Belet Weyene/Nairobi), travel within Belet Weyene district and accommodation will be paid by SC (UK).
- Travel to and from JKIA and airport tax will be paid by SC (UK).
- The consultant shall be responsible for his/her tax income and/or social insurance.
- SC (UK) will not be held liable/responsible for any health and/or security implication as a result of the consultant being engaged in this piece of work.
- A member of SC (UK) who is involve in similar projects 'Outside Somalia country programme' will participate in this evaluation to provide comparative analysis.

8. EXPERTISE REQUIRED:

- University degree in an agricultural subject, rural development or relevant social science
- Extensive experience in farming systems – experience in the Horn of Africa is an advantage.
- Practical experience in assessments, planning and implementation of interventions.
- Knowledge of project cycle management in regard of EC format.
- Fluent in English, both writing and reading.

Annex D

Activities Analysis

	Planned	Achieved	Performance Conclusion			
			A	B	C	D
Result 1 Activities	Establishment of 10 seed multiplication sets (8 riverine and 2 rainfed sets)	Done		B		
	Agreements for 10 Village set sites prepared and agreed	Done		B		
	Provide Tools for canal rehabilitation and training purpose	Done		B		
	Improved seeds from the nursery and local seeds from the market to be provided to the sets for training purposes	Original sites Done, expansion continuing		B		
	Training material for seed management and production activities developed and disseminated to farmers	Done		B		
	Set sites field days and village visits by ASP team	Being done regularly and on time		B		
	Crop trials in nursery to establish high yielding, resistant varieties	Now moved from nurseries to set sites and farmers fields		B		
	Demonstration days for farmers, schools and women's groups carried out in sets and nursery	PPP				
	Collection of seed market prices and rainfall data and dissemination to other partners	Done on weekly basis		B		
	Seasonal Crop assessment on set and on own farms	Done seasonally, 2 crop establishment and 2 harvest assessments		B		
	Attend relevant coordination meetings in Baita Weyne and Nairobi on Monthly basis	When meetings are called SCF attends but sometimes delayed or cancelled		B		
	Capacity Building of SCF Project Staff in PCM and HHFE survey and analysis methods.	Two staff received training in PCM and HHFE in Nairobi and Baidoa. More to follow		B		
	Mid-Term Evaluation	This report		B		
	Final Evaluation	Not Yet		B		
Activities linked with Result 2	Dissemination and demonstration of land management and soil protection techniques to farmers on sets	Done according to Workplan		B		
	Propagation of fruit trees and tree seedlings in nursery	Being done on a regular basis		B		
	Training material for land management and soil protection activities designed and disseminated	Done and in use		B		
	ASP visits to farmers on set and in villages for training and technical support	All sets and farmer groups visited twice within a month Minimum		B		
Activities related to Result 3	Identification of irrigation infrastructure to be rehabilitated	30 identified		B		
	Establishment of Village irrigation Committees and agreements signed	18 VICs formed		B		
	Training of VIC in planning, management, monitoring and book keeping	All 18 trained		B		
	Rehabilitation of selected irrigation sites	30 canals planned, 15 done 15 stilling basins planned, 10 done		B		
	Provision of tools to farmers for minor rehabilitation	Given to 29 villages in set sites		B		
	Identification and training of 2 community pump caretakers/ set site	27 CPC's trained	A			
	Provision of 1 water pump-set in each riverine set with financial contribution from farmers	5 villages x 2 pumps = 10 3 villages x 1 = 3 Total pump-sets 13		B		

	Irrigation support (fuel) to riverine sets for first season.	Done		B		
	Support for repair of pump-sets as needed during project period	Done for target group and other community groups (Community pay for spares)	A			
	Supervision visits by ASP staff and technical support by Watson team	Done Regularly. Two way collaboration between Watson / ASP in training	A			
Activities linked to Result 4	Training of SCF project Staff in CTC approaches and methodologies	ASP staff had previously CTC training. In ASP not carried out				D
	Development of locally appropriate teaching materials	Teaching manual developed for schools in Somali Language for grades 4-8		B		
	Identification of pupils in schools and planning of teaching activities with teachers /CEC's in 5 schools	Carried out training courses for teachers and pupils in use of manual in 6 schools	A			
	Training of children in 5 schools supported by SCF in project area	Science for agriculture adopted for grade 4-6 classes established.		B		
		Carried out by trained Science teachers		B		
	Establishment of vegetable gardens in each of the schools	Vegetable gardens established in 3 schools. 1 school tree planting programme operating Delayed because of water problems				E
	Demonstration visits On sets and nursery	Not yet done				C

Annex E

Evaluation Itinerary

Date	Activity	Comments
January Monday 14 th	Echo Flight Nairobi Belet Weyne	
Tuesday 15 th	Meeting with whole SCF Team Visit Belet Amin (south) village set site Baarey West Baac yac West Included a farmers field day and training session	Neem and tobacco Pesticide Crop variety selection
Wednesday 16 th	North to Deefow Belet Salama set site, meeting with farmers Parsoni – compost smeo sites	run-off farming site
Thursday 17 th	Ilkaade, Wadi irrigation -1,500 ha of run-off grown sorghum Kabxhanley – primary school, demonstration site, compost sites. Discussion with children and with teachers. Jeeryey- non set site	
Friday 18 th	Document reading, report writing	Friday is weekend in Belet Weyne
Saturday 19 th	Morning- meeting with ASP team - meeting with Education and Watsan Teams - afternoon report writing	
Sunday 20 th	Document review Report writing	
Monday 21 st	Field visit to vegetable irrigation schemes around Belet Weyne SC-UK Nursery and training centre Visit to women's irrigation sites in Belet Weyne Town	
Tuesday 22 nd	Visit el Ali- Pastoral area. Visit to Primary School, Discussion with children, teachers, CEC members. Visit to private farms.	
Wednesday 23 rd	Discussions/ Report writing	
Thursday 24 th	Fly Belet Weyne - Nairobi	

Annex F

Irrigation Infrastructure