

# TOWARDS SELF- RELIANCE

A PROGRAMME OF ACTION FOR REFUGEES  
IN EASTERN AND CENTRAL SUDAN

Report of the ILO/UNHCR Project on  
Income-Generating Activities for Refugees  
in Eastern and Central Sudan

Edited by Azita Berar-Awad



INTERNATIONAL LABOUR ORGANISATION  
UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES

INTERNATIONAL LABOUR OFFICE GENEVA

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To the refugees in Eastern and Central Sudan without whose involvement and generous advice this project would have never been completed; hoping that it goes some way towards fulfilling their aspirations.



## FOREWORD

"... the immediate response of the international community to a major influx of refugees must take account of the ultimate aim of promoting a durable solution to the problem. This requires that the response both encourages the self-sufficiency of the refugees and avoids prolonged dependency on outside relief."

UNHCR Handbook of Emergencies

The world refugee population, exceeding 10 million persons, has presented the international community with a tremendous challenge. Unlike the post Second World War refugees in Europe, the massive displacements of population in the 1970s have been overwhelmingly concentrated in developing countries in Africa, Asia and Latin America. Internal conflicts and border disputes on the background of economic crises have particularly affected the African continent.

Sudan is an illustrative case of the current refugee phenomenon, where one of the world's poorest countries has to face a disproportionate burden. The problem in Sudan is also one of the oldest in Africa. In fact, since 1965, Sudan has attracted successive waves of refugees from four of its neighbouring countries: Zaïre, Ethiopia, Chad and Uganda. The outcome of the refugee influx throughout the last seventeen years, is the presence of 690,000 refugees in the East and South the country, constituting the second largest community in Africa.

The majority of refugees (over 484,000) came from Ethiopia as a result of the conflict in Eritrea, the internal turmoil after the 1974 Revolution and the widespread droughts the country has known. Having crossed the border, they have settled in Eastern and Central Sudan i.e. Red Sea, Kassala, Blue Nile and Khartoum provinces.

Although the government policy is to accommodate as many refugees as possible in organised settlements, so far approximately 100,000 refugees have settled in two basic types of settlements:

- (a) Land settlements: established for refugees supposedly with a rural background, each family being allotted 5 to 10 feddans of land for cultivation of dura (sorghum) and sesame, in the semi-arid rainfed areas.
- (b) Wage-earning settlements: established on the principle that refugees will provide wage-labour to economic activities in the urban markets or in the agricultural irrigated schemes in the vicinity of the settlements.

The majority of refugees have nevertheless spontaneously settled in large urban centres, constituting up to 25 per cent of the population in Gedaref, Kassala and Port Sudan, where their main source of income is casual employment especially in services and the informal sector.

The rapidly increasing number of refugees, in the second half of the seventies, combined with the deterioration of economic conditions in Sudan has put tremendous strains on the resources and fragile infrastructure of the country of asylum. The responses of the international community to this problem based on the conventional approaches of relief assistance and resettlement in third countries have proved to be inadequate.

At the request of the Government of Sudan a joint ILO/UNHCR Mission on Employment, Income Generation and Training of Refugees visited Sudan in order to propose a viable plan of action (November-December 1981). The findings of the mission represented a response to a growing consciousness that the problem of refugees is no longer a transient one, and therefore, immediate and long-term solutions are called for which enable refugees to attain a self-reliant existence. Moreover, the mission findings emphasised the need for solutions that answer the problems of refugee-affected areas, i.e. problems of both refugees and Sudanese, to the extent possible. As a result, the ILO/UNHCR Project on Income Generating Activities was launched. The present report is the outcome of extensive field surveys and research studies carried out within this Project over the period of August 1982-March 1983. The major findings of the Project were presented and widely discussed in a national workshop in Khartoum in April 1983, attended by the Sudanese Government, UN and voluntary agencies, scholars and representatives of refugees. Upon the approval of the report, a Memorandum of Understanding was signed in May 1983 between the Government of Sudan, the UNHCR and the ILO launching a package of Income Generating Projects.

The project on Income-Generating Activities began from a typology of problems which were identified by the mission. These were:

- (a) Though Sudan is a land-abundant country, water remains a major constraint on opening new lands. Land settlements suffer from inadequacy and low productivity of land allotted to them. The main source of income is rainfed agriculture which is highly seasonal. Household income reaches a low ebb during the slack season, and alternative employment opportunities are not easily available;
- (b) In wage-earning settlements, the major problem is also seasonality of both employment and income, as well as the inadequacy of income for the household;
- (c) Spontaneously-settled refugees create tremendous pressures on the fragile infrastructure. They lead a precarious life due to the constraints of their entry into the labour market;

- (d) The structure of the refugee population is in many cases characterised by the absence of family structure and predominance of youth and the aged who require special programmes. An important target group which requires specific attention is the female-headed households, often with several children present, living on petty jobs such as domestic service, and some on prostitution;
- (e) The refugee population possesses skills that can be upgraded through imaginative and low-cost training schemes with quick returns.

This catalogue of problems led to the unavoidable conclusion that self-reliance for the refugees can only be attained through the introduction of income-generating activities and the integration of the refugee labour force into the Sudanese labour market. Thus work on the project proceeded on four fronts:

(a) An overview of recent developments of the Sudanese economy

Here an attempt was made to briefly survey the developments of the economy during the 70s and early 80s. Particular emphasis was put on the challenge that faces the Sudanese economy at present; a challenge resulting from a combination of general stagnation in the main productive sectors of the economy together with a skill and brain drain (due to emigration) and a rapid rate of inflation. The major question was how can such an economy, operating under severe constraints of foreign exchange, absorb the influx of refugees.

(b) The labour market and refugees

The starting point in creating income for many categories of the refugee population is to find them a place in the local labour markets. Thus it was essential, given the lacuna of studies on the Sudanese labour market, to understand the characteristics of recent developments of the major labour markets in the Sudan. This was all the more important in view of two factors:

- (i) the precarious life of many sections of the refugee labour force and the difficulties they face entering the labour markets; and
- (ii) the seasonal character of income-earning patterns of most refugee households who depend largely on employment in Sudanese agriculture during peak seasons.

Thus three studies of the major labour markets (urban areas, rainfed agriculture and irrigated schemes) were carried out on the basis of household and macro surveys. The results are published in a separate volume entitled "Labour Markets in Sudan". Highlights of the major findings in relation to the refugee problem are included in the present report. The picture that emerges from these surveys is one of labour markets in transition. This results from a combination of a number of factors: on the one hand, the massive emigration of

Sudanese to Saudi Arabia and the Gulf (estimates vary but they are never below 15 per cent of the labour force) has created a shortage of skilled and, to a lesser extent, unskilled labour; stagnation of the traditional sectors of the economy both in agriculture and industry contrasted with an expansion of the services sector catering for the demand created mainly by remittances; and the lack of a consistent set of policies for intervention in the labour markets. In this situation the studies regard the availability of the refugee labour force in the Sudan as a potential asset for the country's development and hence the recommendation for the development of this valuable human resource through engagement in production and through training.

(c) Skill and socio-economic survey

The design of self-help and income-generating activities for refugees is dependent on a clear understanding of the socio-economic characteristics and skill acquisition by those refugees. No systematic study of that type was available. Surveys were carried out covering a representative sample of both settlements and urban areas. The results of these surveys highlight two main aspects:

- (i) a profile of the refugee household; the demographic characteristics, age and sex structure; sources of income, based on present patterns of skill use and actual employment patterns;
- (ii) the basis of the settlement's economy and the viability of these economies.

This study fills a gap in our knowledge and provides an essential data base for future planning of income-generating activities and settlement creation. A review of existing self-help activities and self-employment of refugees was also organised in order to assess the bottlenecks and major problems facing refugees in their attempts of setting up small-scale activities.

(d) The conditions of the Sudanese economy and the opportunities in the labour markets provided the starting point in the attempt to propose a number of viable projects using the existing skills among the refugee population and aiming at achieving self-reliance for refugees over the medium run.

Within this global approach, three lines of action are proposed:

- (1) Integration of refugees in the local labour markets suffering from acute shortages due to the emigration of skilled Sudanese;
- (2) Establishment of a Revolving Fund to finance collective and individual small-scale ventures in the refugee-affected areas of Eastern and Central Sudan;
- (3) Introduction of pilot income generating activities in the rural and urban areas.



In the present report there are 17 project proposals covering this programme of action. A number of observations may be made on the proposed Income Generating Activities:

- (i) the projects were conceived to fulfil needs at different levels. Thus there are projects which aim at satisfying the demands of the refugee community itself and there are others which go beyond that to cater for the demand generated by the Sudanese economy at large;
- (ii) these projects can be divided by type of activity into three categories: agricultural projects, non-agricultural projects and projects specifically designed for a particular target group - female headed households; and
- (iii) in proposing these projects, however, an attempt was made to provide a feasibility study covering the costs and benefits of each project, the size of the target group benefiting from the project, the location of the project, the viability of the project especially from the point of view of the market potential for its products, as well as the cultural and religious acceptability of the project and its products.

It would be an exaggeration to claim that if these projects were carried out self-reliance for refugees will be achieved overnight. The objective is less ambitious: to provide a package of income-generating projects on a pilot basis which represents the beginning of an approach towards self-reliance of refugees. Once the success of these projects is proved, they can easily be replicated in other settlements and refugee communities.

An important feature of the project proposals is that they should be taken as a package and not as a scattered number of activities. That is why the project concerned with the overall organisational set up provides for the creation of a decentralised structure as an organisational framework for the income-generating activities.

A striking observation emerging from the field work and the analysis is the tremendous potential of such an approach based on self-reliance for improving the standards of living of the refugees. Two prerequisites for the success of this approach are imperative: firstly, the will to mitigate the obstacles, institutional or otherwise, in the way of creating income-generating activities for refugees and, secondly, the will to accept the popular participation by the refugees in making the decisions that will eventually affect their lives. Naturally this approach is no substitute for the return of refugees, the treasured hope of the majority of them. But it modestly aims at making the life of the refugees in the host country productive and dignified and at increasing their skill acquisition so that they add to the human capital of their country on return.

Samir Radwan  
Project Manager  
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## ACKNOWLEDGEMENTS

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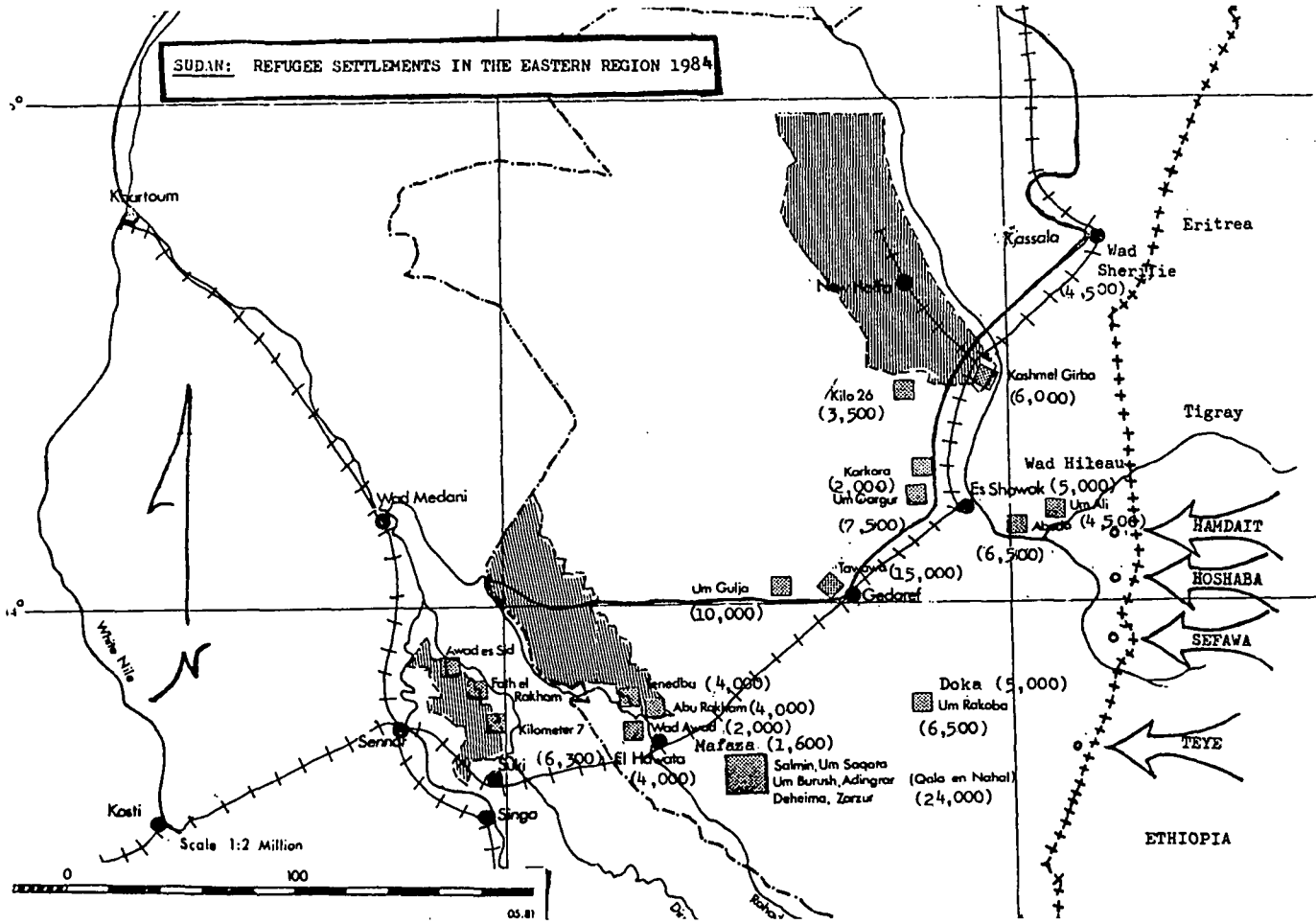
At the UNDP Office in Khartoum, our great appreciation goes to the Resident Representative, Mr. Garth Ap Rees, his deputy Mr. Dragoslav Zdravkovic, and their staff, Mr. Nagm El din A. El Sadiq, Mr. Aman Beito, Mr. Bakri H. Hussein and Mr. Abbas E. Mohammed. Mr. Donald S. Pearson, Chief Planning and Development Adviser and Dr. Mohammed A. El-Shinnawy, Senior Manpower Planning Adviser, Ministry of Finance and Economic Planning, were kind enough to give us very useful advice and comments on our work.

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**SUDAN: REFUGEE SETTLEMENTS IN THE EASTERN REGION 1984**



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PART I:

THE SETTING

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\*Chapter 2 is an abstract of the study on "Labour Markets in Sudan" carried out within the framework of the Project on Income Generating Activities and published in a separate volume.



## CHAPTER 1

### Recent Developments of the Sudanese Economy:

#### An Overview

The Sudan is the largest country in Africa, with an area of over 2.5 million sq. km. In spite of its relatively small population (18.8 million), extremely favourable manland ratio (7 persons per sq. km. and 55 per sq. km. of arable land),<sup>1</sup> one of the world's largest areas of hitherto untapped potentially arable land,<sup>2</sup> recently discovered oil reserves and other natural wealth, the country remains one of the world's most economically under-developed and poor. The following tables on population, GDP and agricultural production, and the graph on industrial production, give some idea of the behaviour of the economy in recent years.

At present the Sudanese economy operates within a number of important constraints, the most important of which is foreign exchange. Current deficits have grown rapidly since the mid 1970s, and have been associated with increasing reliance on foreign

Table 1.1: Projected population in 1982 (000s)

	<u>Rural</u>	<u>Urban</u>	<u>All Sudan</u>
Male	7,006	2,499	9,505
Female	<u>7,049</u>	<u>2,198</u>	<u>9,247</u>
Total	14,055	4,697	18,752

Source: Statistical Abstract of Sudan, 1981  
(Projections based on the 1973 Census)

borrowing, mostly on hard terms. The level of external debt in 1981 was estimated at nearly US\$5 million (World Bank Report on the Sudan, 1982). Trade deficits are now augmented by the massive interest payments that are necessary: the debt-service ratio (debt payments to exports) could be as high as 70 per cent in 1983. Another constraint is the shortage of skilled labour, primarily related to the large-scale labour export since 1978, but also associated with the structure of education and training in the Sudan. The general situation of the economy has been one of stagnation for the last few years (with an average rate of growth of 3.5 per cent which is not much higher than that of population), and the most challenging task facing the country now is to break this vicious circle.

It is apparent from tables 1.1 and 1.2 that agriculture remains the dominant activity of the working population as well as the mainstay of the economy. Around three-fourths of the country's population and labour force are rural, and primary production (of which agriculture is overwhelmingly the major part) has been a significant proportion of GDP in recent years. The decline in its role since 1975 (evident from table 1.2) stems largely from the declining production of the country's major export crop - cotton.

In fact, in recent years output of agriculture has remained almost constant or increased by only a small percentage, as table 1.3 indicates. Cotton, wheat and sesame production have fallen significantly over the decade; dura output has increased somewhat, along with millet; but the only major increase has been in sugarcane production, largely due to the setting up of the Kenana plantation.

Industrial production indices similarly show general stagnation and sometimes decline. Graph 1 shows the movement of index numbers of the major items of industrial production. Sugar and vegetable oils are the only goods that show an increase in production in 1979-80 over the 1970-71 levels, while textiles show a substantial decline from 1977-78.

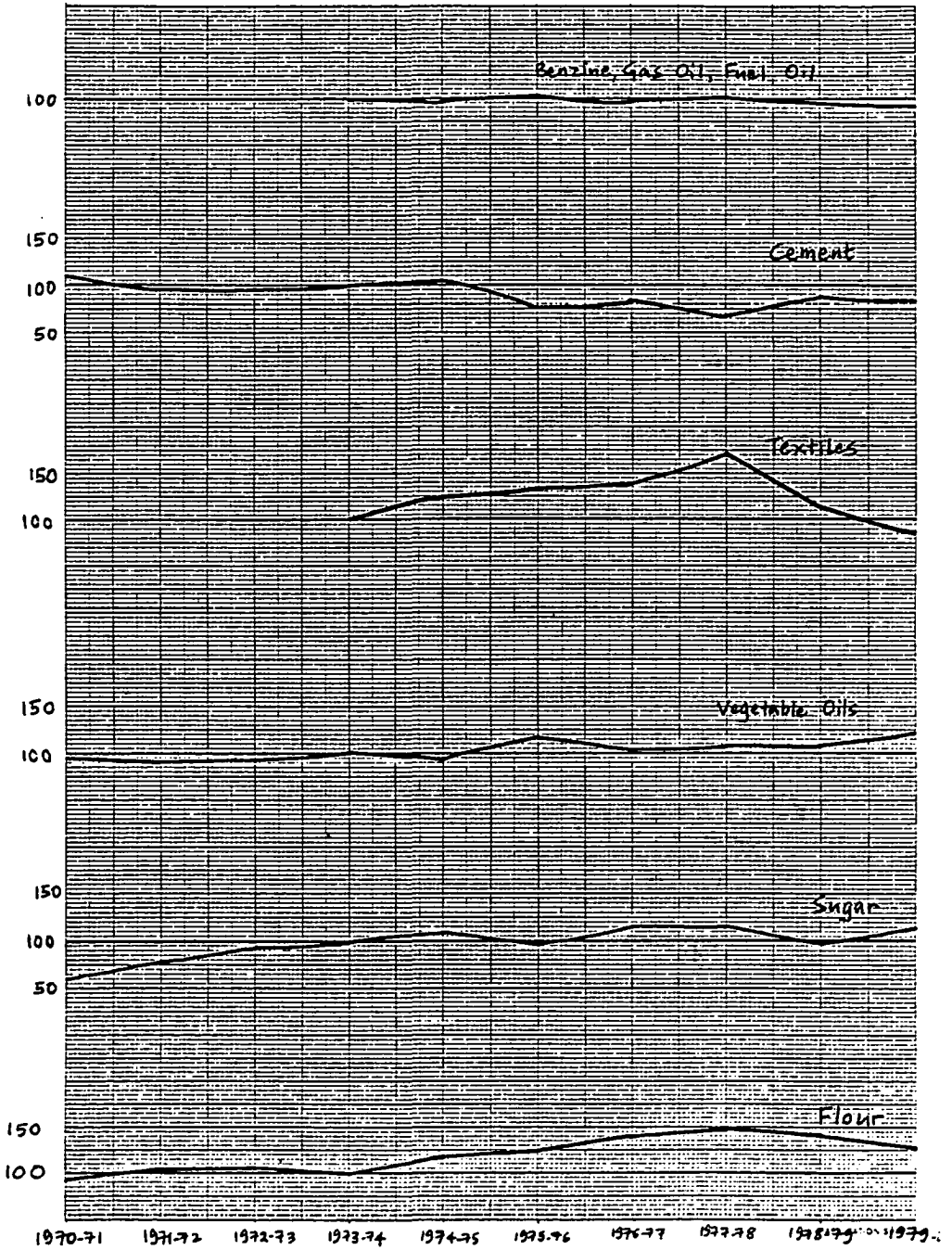
**Table 1.2: Gross domestic product at factor cost**  
(£S millions, 1978 prices)

	GDP at factor cost	Annual growth rates	% Contribution of Primary      Secondary production    production	
1969-70	1790.7	-	43.2	14.6
1970-71	1911.8	+7.0	44.5	13.6
1971-72	1857.1	-3.0	45.3	13.1
1972-73	1724.8	-8.10	43.9	13.0
1973-74	1940.3	+12.40	48.7	14.1
1974-75	2064.8	+6.40	43.6	13.4
1975-76	2237.7	+8.3	38.7	13.8
1976-77	2437.4	+8.9	39.3	12.9
1977-78	2577.3	+5.7	40.5	11.8
1978-79	2545.7	-1.2	38.7	12.3
1979-80	2531.7	-0.5	37.7	13.4
Average growth rate		3.5		
<u>Source:</u>	IBRD (1982)			

**Table 1.3: Agricultural production (major crops)**  
(000 mt)

	1970/71 to 1975/76 (Average)	1976/77 to 1980/81 (Average)	1980/81 (Estimate)
Cotton	657	414	281
Wheat	188	247	145
Sugarcane	1,024	1,420	2,848
Groundnut	309	497	548
Sorghum	1,297	1,734	1,914
Sesame	281	227	211
Millet	381	438	492
<u>Source:</u>	IBRD (1982)		

Graph 1: Behaviour of Industrial Production (Index Numbers)  
Selected Commodities





Within the rural economy crop production can be divided into three subsectors covering irrigated, mechanised and traditional farming systems. The highest productivity per land unit is to be found in the irrigated subsector, as appears from table 1.4. This is in spite of the fact that the irrigated schemes have been characterised by the falling productivity of land, particularly with respect to cotton output. Investment in agriculture has been primarily through the extension of land cultivated under large-scale holdings in the rain-fed areas. About 80 per cent of the mechanised farms are in the Eastern region, with the rest in Habila in Southern Kordofan. The traditional agricultural subsector shows the lowest level of development: while approximately 80 per cent of the rural population (around 11.5 million people) depend for their livelihood on such farming, they control only 44.3 per cent of the total land area under major crops and contribute only 14.3 per cent of agricultural production.

In the traditional farming subsector the average size of holdings is small, varying from 2 to 20 feddans.<sup>3</sup> The main staple crop is dura, in addition to which some millet, groundnuts and sesame may be grown. In the western regions gum arabic is an important item of production. Most of the output is destined for household production but small quantities are marketed. Farm incomes tend to be low and may be supplemented by wage employment, trading or crafts.

In recent years, both the traditional farming sector and the nomadic pastoralist sector have been affected adversely by encroachment on land by the mechanised large-scale rainfed sector. This sector accounts for the major part of dura and sesame exports, and most of its output is marketed domestically or abroad. The current scheme, based on 1,000 or 1,500 feddans production units, was established in 1954.<sup>4</sup> On average, mechanised farmers cultivate three schemes each, although there are some who farm between 10,000 - 35,000 feddans. In general, the Sudan, and the Eastern

region in particular, is marked by striking inequalities in landholdings, and these have been exacerbated in recent times by the rapid expansion of area under large-scale mechanised farms.

The irrigated areas play a central role in the economy by virtue of producing cotton. The most important of these is the Gezira Scheme, which produces about 75 per cent of all Sudanese cotton. This in turn accounts for about 60 per cent of the country's foreign exchange earnings. The other major schemes are the Rahad and Suki, of more recent origin, as well as some small schemes along the Nile.<sup>5</sup> While the Gezira Scheme is based on a "partnership" (crop share) contract between the Gezira Board and the tenants, the other two schemes function according to a system of water charges, which are fixed rates varying by crop. All the schemes are marked by the control of the cropping pattern and land use by the Boards - thus the area under cotton is strictly specified for all tenants. Nevertheless, the schemes do allow farmers to grow some dura, in addition to groundnuts and fodder as cash crops. Tenants in the Gezira and other schemes can be categorised into "surplus" and "deficit" (i.e. in debt to the Board or other creditors) - this in turn conditions their involvement in rural and urban labour markets.

Table 1.4: Percentage share of different production sectors  
in area and production of major crops  
(Average for 1973-74 to 1975-76)

Production sector	Area	Population
Irrigated	18.5	50.3
Mechanised	37.2	35.4
Traditional	44.3	14.3

Source: Adapted from Six Year Plan 1977/78 - 1982/83  
Vol. 2, table 6, p. 20.

Another rural system of production is that of nomadic pastoralism. Nomadism is not really a self-contained system, nor does it consist solely of the rearing of animals. The migration patterns and animal cycles of the nomads imply quite considerable involvement with other sectors of production, notably in the sale of cattle, purchase of grain, cultivation of grain and sale of labour. These relations are not constant, but vary with the time of year and different environmental and economic circumstances. The pastoralists' demand for labour is positively correlated with the size of the animal population, while their supply of labour may be the result of adverse climatic or transhumance conditions which force nomads to supplement their already meagre way of life. The extension of mechanised rainfed farmland and development of the irrigated schemes have operated to encroach on the traditional grazing and transhumance lands of nomads, often forcing their entry (at least seasonally) into rural and urban labour markets. It also causes rather serious feuds and social tensions.

Although the urban population is a minority in the Sudan, the rates of growth are far higher than the national average. Rates of rural-urban migration have been very high in the past<sup>6</sup> and the declining rural situation would appear to indicate that this will continue in the near future. This growth in the urban population (about half of whom are concentrated in the two conurbations of Greater Khartoum and Port Sudan) has not been matched by a concomitant increase in industrial employment. Industrial investment has been limited and industrial production has remained virtually stagnant or rising slowly over the last decade.<sup>7</sup> Capacity utilisation is very low in most industries, often due to demand problems as well as supply constraints such as lack of fuel, electricity shortages, unavailability of imported spare parts and raw materials, and lack of foreign exchange in general.

The overall stagnation of agriculture and industry has occurred along with substantial price inflation in recent years. Thus, for example, the urban cost-of-living index increased by more than 300 per

cent between 1978 and 1981, and this is probably an underestimate.<sup>8</sup> Inflation currently runs at 40 per cent per year.<sup>9</sup> One of the elements casually related to such price increases is the effect of remittances from Sudanese working abroad. Since 1978, there has been a rapid rate of emigration of Sudanese, primarily to work in the oil-rich Arab countries, especially Saudi Arabia and Libya. The numbers are now estimated to be over 1 million (and possibly about 1.6 million) - around one-third of which is officially recorded. Such emigration clearly had direct implications for domestic labour markets (which will be discussed later). But they also indirectly affect labour through remittance income, which is not only inflationary but an important source of increase in effective demand.

The changed pattern of demand which results from such incomes implies that particular sectors of the economy tend to prosper, even boom, as a result of this impetus, while others stagnate. Within the urban economy, the following typology can be made:

- (1) Declining - those areas with shrinking demand, competition from imports, or need to compete in the export market: such as textiles and leather products.
- (2) Stagnating - those areas with no shortage of demand, but where supply constraints prevent full capacity utilisation: such as sugar, food processing and cement.
- (3) Expanding - those areas where the increase in demand is so great that operations are profitable in spite of supply constraints: such as construction, transport, hotels and restaurants and other services.

The behaviour of all the various sectors is conditioned by a basic fact: the growing involvement of the Sudan in the international economy. This is exemplified not only by the large volume of external debt (and consequent reliance on aid-giving bodies and nations) and by the massive labour emigration, but also by the pattern of (largely foreign) investment, mainly in agriculture.

The final point to be taken note of is the importance in the Sudan of large-scale population movements, both internal and external. These various movements, which have over time profoundly altered not only the social composition of the population but also the distribution of resources and labour processes in general, can be briefly summarised as follows:

(These refer primarily to the Eastern and Central regions of the country.)

- (a) The settlement of immigrants from other parts of the Sudan and West Africa displaced by tribal, civil and colonial wars or the enforcement of colonial political and military power.
- (b) The settlement of some nomadic tribes already living in the area and their increased involvement in sedentary agricultural production.
- (c) Government intervention from 1944 onwards to promote mechanised farming on hitherto unused land.
- (d) The phenomenon of seasonal migrant agricultural labour created by the rapid growth in demand for labour on the mechanised farming schemes and structural factors in the economies of the sending areas.
- (e) The growing tendency for rural-urban migration, mainly into Greater Khartoum. Such migration is usually permanent or long-term in nature, and not seasonal.
- (f) The phenomenon of labour emigration abroad, especially since 1978.
- (g) The influx of Ethiopian and Eritrean refugees which started as early as the mid 1960s and has considerably increased during the 1970s and early 1980s.



Footnotes

<sup>1</sup> IBRD (1982)

<sup>2</sup> The precise extent is not known, although it would appear that earlier estimates of 200 million feddans were over optimistic in ignoring both the needs of pastoralism or the exhaustion of sandy soils in the west. A recent FAO estimate was that agricultural land could be increased to 39 million feddans, but as the expense of forests and pastorage. FAO Rome (1973).

<sup>3</sup> 1 Feddan is 1.04 acres or 0.42 hectares.

<sup>4</sup> All the land in the Sudan belongs to the State. Thus holders of such farms pay a nominal rent of 25 piastres per feddan in the rainfed areas.

<sup>5</sup> The Gezira Scheme was started at the turn of the century by the British colonial administration, and covers 1.2 million feddans. Suki was started in 1970, and has an area of 84,000 feddans, while Rahad began in 1977/78 with a land area of around 300,000 feddans.

<sup>6</sup> Annually 4.27 per cent to Greater Khartoum between 1955/56 and 1973/74, according to MEFIT, Roma (1975) and Statistical Yearbook (1973), quoted in Oberai (1975).

<sup>7</sup> This was apparent in Graph 1 above.

<sup>8</sup> These statistics from the Department of Labour, Khartoum, use official prices only - but these tend to be substantially lower than the free market prices relevant for most urban consumers.

<sup>9</sup> Statistics from the Department of Labour, Khartoum.





## CHAPTER 2

### Labour Markets and Labour Processes in Sudan

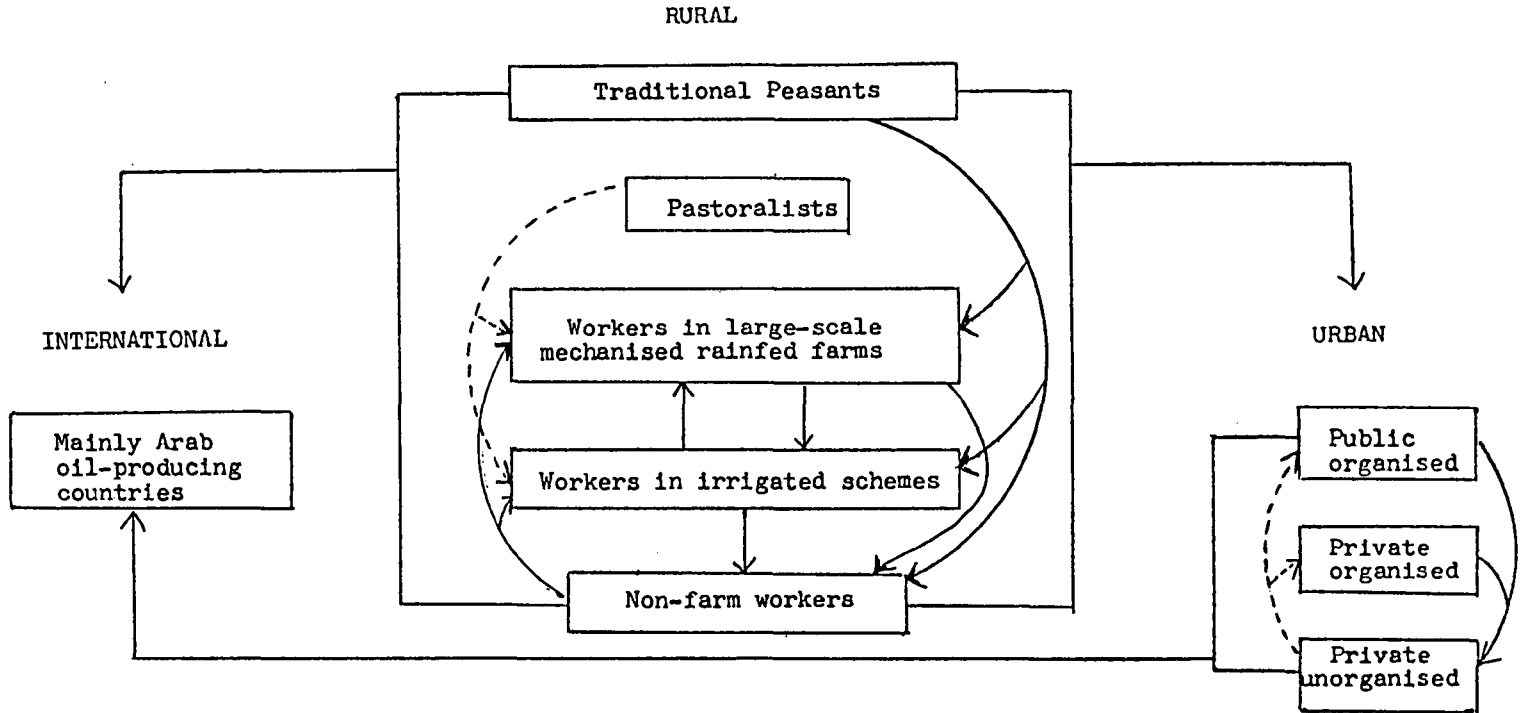
It emerges from the earlier discussion of the Sudanese economy that the strong linkages between sectors (in terms of population movements as well as economic factors) were major determinants of the labour processes within the sectors. Diagram 1 sets out the pattern of movement between the main labour markets. An attempt will be made in the following sections to describe briefly the nature of the labour markets in the various rural and urban sectors, and to analyse the impact of particular dynamic processes (labour emigration and the pattern of investment) on these markets.

#### I. Rainfed agriculture

The rural rainfed sector is characterised by two distinct farming systems, which vary principally according to size of farm units and patterns of input use. One is the traditional farming subsector, which is widespread in the Northern and Western regions as well as large areas of the Eastern region. The other is the mechanised large-scale farming subsector, which relies on the extensive cultivation of large areas (at fairly low levels of productivity per feddan) using mechanised techniques for some operations and relying on seasonal labour for other operations. In the Eastern region, the basic differentiating factor between the two systems arises from the technology of cultivation. Production of the major crop - dura - is characterised by low inputs and low yields. In the absence of high-yielding dura seed varieties with good fertilizer response rates, output can be increased only by expanding substantially the cropped area.

This also has the implication that, with low productivity levels, small holdings (under 20 feddans) would not generate surplus sufficient to reinvest in extending the area under cultivation. Thus

DIAGRAM 1: Movements Between the Main Labour Markets



1. The arrows indicate the movement of labour.
2. The dotted lines show quantitatively weaker relationships.

the poor are caught in an impasse. Large holders typically accumulate their capital in non-farming activities (trading, sheil or moneylending, sale of livestock, etc.) and further add to their income from farming through vertical integration into foodgrain trading and transport activities.<sup>1</sup>

The high risks and seasonality of work in rainfed agriculture imply that most smallholder cultivators must diversify their sources of income, both to increase income and to ensure economic survival. While richer groups have other forms of investment as described above, for poorer farmers this implies wage labour in large-scale farms or irrigated schemes, or craft work. To some extent gifts and remittances from migrant members of rural households supplement the income of the rural poor,<sup>2</sup> but wage labour remains the dominant alternative source of income for small traditional farmers, particularly in the Eastern region.<sup>3</sup> Rural-urban migration (usually permanent or long-term rather than seasonal) by some members of traditional farming households, is another important means of economic survival.

The two systems of farming in the rainfed areas are thus both antagonistic (through competition for arable land) and inter-dependent (through the labour market). On the one hand, low returns in the subsistence sector force peasants to enter the labour market on large-scale farms. On the other hand, the large-scale mechanised system relies primarily for seasonal labour requirements on the work of poor traditional farmers, and only secondarily on migrant labourers.

The main demand for labour from the large-scale farms is in the two peak periods of sesame and dura weeding (August - September) and dura harvesting (November - December). The total labour demand during the weeding period is estimated at 6.6 million workdays over a period of four months.<sup>4</sup> A substantial proportion of this labour is carried out by migrant labour from the west and south. Recently, the influx of refugees from Ethiopia has increased the supply of labour available locally.

Migration from the west and south results primarily from the low level of development of these areas.<sup>5</sup> Most of the migrant workers interviewed in a small survey in the Gedaref area were small-land holders with an overriding need for cash.<sup>6</sup> Male migration from the west and south for seasonal agricultural work is made possible by the system of family farming and the important role women play in agriculture, particularly in harvesting and threshing operations.

Contractors play a declining role in the recruitment process - most contracts are negotiated directly between the employer or his agent, and groups of labourers. There are no fixed daily or piece rates: the payment (in cash and kind) for each task is negotiated for the group as a whole. The conditions of the contract are fairly onerous for the labourers, who are very vulnerable to exploitation by large farmers. Table 2.1 presents the average daily wages by crop and operation in 1981 and 1982 - it is apparent that a relative surplus of labour in 1982<sup>7</sup> had a major effect even on nominal wage rates.

Table 2.1: Average daily cash wages by crop

Crop	Operation	<u>ES daily wage</u>	
		1981	1982
Dura	Weeding	6.02	5.80
Dura	Harvesting	5.13	n.a
Sesame	Weeding	6.10	4.73
Sesame	Harvesting	5.05	n.a
Cotton	Harvesting	4.88	n.a.
Gum Arabic	Harvesting	3.76	n.a.

Source: Dey, Elbagir and Wagner (1983).

It is interesting to note that small farmers are involved in the labour market not only as suppliers of labour but also as employers. The survey found that a substantial percentage of farmers holding less than 20 feddans hired in labour, mainly for harvesting but also for weeding and threshing. To some extent this is related to the pattern of labour use: the number of workdays required per feddan was found to increase as the size of the landholding declined, and the increase was inversely related to the use of mechanised techniques. Thus small farmers require more human labour per feddan than large farmers. The non-homogeneity of agricultural labour as well as the seasonality of operations may be compelling forces behind the demand for labour emanating from smallholders. Added to this is the decreasing control of household and village elders over the young, which implies that "unpaid" household labour by young men in particular can no longer be relied upon.<sup>8</sup> This problem is exacerbated by the possibilities open to young men for migration to the cities or abroad in search of work.

The hiring of labour by small farmers creates problems of liquidity because of the need to pay labour in advance of marketing the crops. Large farmers can finance this through their own resources or bank loans, but small farmers with low credit worthiness may be forced to rely on sheil, with its effectively high real rates of interest.

Markets for labour in the rural rainfed agricultural sector are thus largely determined by the growth and labour requirements of traditional smallholder production and large-scale mechanised schemes. The influx of seasonal labour adds to the labour supply from smallholder households, who display a dual involvement in labour markets. While superficially dissimilar to the situation in the irrigated schemes, many of the basic relations of labour exchange bear a close relation to the markets described below.

## II. The irrigated schemes

Labour markets in the irrigated schemes are circumscribed by the pattern of production of the major crop - cotton. As was mentioned earlier, most of the schemes<sup>9</sup> have been marked by the falling productivity of the land area under cotton, and plagued by the declining prices of cotton internationally. Control over land use by the Boards means that a significant proportion of the 10-feddan tenant holdings must be devoted to cotton cultivation. In many cases this results in the continuing indebtedness of the tenants to the Boards, to banks or to other sources of credit. Shortage of liquidity also affects the tenants' ability to hire in labour, especially in periods of peak demand.

Under the production organisation of the irrigated schemes, tenants are expected to provide the labour input. The resource position of the household determines the ability of households to hire in labour. The need to hire in labour is determined by the availability of labour within the tenant household, in relation to the requirement. The periods of peak demand are August - end November (weeding) and February - April (harvesting). Most labour is hired in for operations connected with cotton cultivation, although there are often contracts (sometimes share produce contracts) for dura and groundnut cultivation as well. Share produce contracts provide one response to the liquidity/labour crises faced by tenants with few assets. In these cases the relation is one of a "production syndicate" with the sharecropper.

The peak labour demand periods can be identified as "stress periods" for those tenant farmers with low asset levels. They are caught in a scissors problem whereby they are able only to hire labour on the basis of credit obtained at high cost; they use more family labour than the other groups because they are unable to demand as much hired labour as they might require; at the same time, they are compelled to engage themselves as hired labourers to other farmers in order to finance their subsistence needs and to repay their debts. In

this manner, "deficit tenants", or those with a low level of assets, display a dual involvement in the labour market similar to the smallholder traditional farmers described in the earlier section.

Thus, the hiring in of labour, the choice of contract and the types of labour chosen reflect the different economic and social circumstances of the individual tenant household, and in particular their specific set of social and financial resources. The relationship between an employer and the labourer need not be a purely market relationship. Factors of kinship, friendship and patronage also enter into the transaction.

There are four broad categories of labour available, for example, to Gezira tenants: paid labour (mainly fellata) living outside the village in the labour settlements; migrant labourers from villages outside the scheme, usually from rainfed agricultural areas (some of these would include members of traditional farming households as discussed in Section I; labourers resident in the Gezira villages; and household labour.

The relationship between these groups is an interesting one. In effect, there exists a culturally divided labour force on the one hand (local dwellers vs. migrant labourers); and a status divided, although culturally similar and often kinship related, labour force on the other hand (tenants vs. village labourers). These distinctions do not affect the nature of wage contracts, however - both types of contracts (which are predominantly for task or piece work, as in the large-scale mechanised farms) and the level of payment tend to be uniform across the various categories. Average household incomes do differ - labourers in the labour camps tend to be the poorest, while tenant households providing some labour are the best off of all the labouring groups.

The survey of the labour market in the irrigated areas found the imputed daily wages (in terms of tenants' payments) to be £1.86 for men and £1.27 for women, for cotton picking labour. These are

very low in comparison to the daily wages in the mechanised farm sector (see table 2.1), especially for work that is known to be difficult and tedious. The imputed wages for all operations by crop in the Gezira Scheme are presented in table 2.2 below.

Table 2.2: Mean imputed wages by crop  
(£S daily wage)

	Men	Women
Cotton	2.18	1.60
Dura	2.17	1.28
Groundnuts	1.95	1.75

Source: Barnett (1983)

While the table shows the predictable discrepancy between male and female wages, the substantial difference between these wages and those given in table 2.1 are worth comment. Both the irrigated areas and the rainfed large farms in the eastern region share at least one period of peak labour demand (August - September) during the weeding operations. However, the payment for dura weeding in the rainfed mechanised sector was found to be 176 per cent higher than wages for dura weeding in the irrigated schemes. Some of this difference may arise from the manner of data collection.<sup>10</sup> Nevertheless the difference is too significant to be attributed merely to this, and calls for further analysis. In particular, we need to know if there are any impediments to the mobility of labour between these areas, how the labour contracts differ in the two regions and whether other payments are made besides the nominal wage.



It has been argued<sup>11</sup> that the prevailing wage rates in the Gezira scheme (and possibly in the other irrigated schemes as well) are too low to "clear" the market, and result in an excess demand for labour, especially in certain peak periods. The low wages may be related to the financial difficulties faced by tenants who thus attempt to cut labour costs; clearly they do inhibit the free availability of labour (whether local, migrant or refugee) over the agricultural production cycle.

Although the irrigated schemes and large mechanised farms differ in important ways, they share some important characteristics. They both rely on labour supply resulting from the squeeze on traditional rainfed agriculturalists and poor tenants in irrigated areas. They also both use migrant labour, predominantly from the western and southern regions but also from within the central-eastern regions. However, while in the irrigated areas the demand for labour (especially for cotton cultivation) may be tapering off given the prevailing economic and agronomic conditions, no such tendency is evident in the large-scale rainfed sector. Rather, the patterns of investment and expansion of mechanised agriculture serve to increase the demand for labour somewhat. Increasing mechanisation and greater reliance on labour-displacing techniques (for operations such as weeding) may reverse this trend in the medium-term.

### III. Urban labour markets

These encompass the following major sectors: The Government and public sector, the organised private sector and the unorganised private sector. Within each of these there is segmentation by skill (professionals, white collar workers, skilled workers, semi-skilled and unskilled workers), sex, region of origin, type of industry or activity.

The Government and public sector are the main urban employers, and here the pay structure and working conditions are not determined by market forces but institutionally. Until recently, the pattern of

public sector employment set the tone for the urban private sector as well. However, recent tendencies such as the growing emigration of labour and consequent shortages of skills as well as the growth of particular urban activities while other stagnate or decline, have forced a change in this situation. Remuneration for work in the urban economies of the Sudan is now related far more directly than before to supply and demand forces. A major implication has been the closing of the gap between the wages of white collar and skilled manual work. Employment in the private unorganised sector reflects most directly particular tendencies at work in the economy: the ranks are swelled by rural-urban migration, and economically expanding sectors such as transport, construction, restaurants and cafés and other services speedily find labour.

Labour markets in the urban areas are greatly affected not only by the patterns of internal migration and rural push into the cities, but also by the substantial volume of labour export in recent years, primarily to the Arab oil-exporting countries. The dimensions of such emigration for work were described briefly earlier. More than absolute numbers, however, the problem is that of skilled labour departing. This creates shortages of particular skills, particularly in urban areas - which in turn affects not only remuneration for such skills but also the productivity of industry. They lead to cutbacks in production operations as well as increased costs, which ultimately affect productivity and industrial investment and employment in the next period.

There are certain occupations where domestic skill shortages are particularly acute and obvious. For organised industry, there is a lack of engineers, accountants and technicians. In all areas there is a growing shortage of teachers. Other major shortages are of mechanics, electricians, plumbers, welders, carpenters and artisans generally, drivers (of cars as well as trucks and buses), book-keepers and typists. All these shortages are not confined to the formal organised sector, but extend to small-scale industries and the informal sector.

The existence of such shortages (which were found by the various labour market surveys to be far more acute in urban areas than in rural areas) has important implications for the placement of refugees. The Skill Survey of refugees found that a substantial proportion of refugees (many of whom were of urban origin) possessed skills presently in scarce supply in urban Sudan. Often the conditions, particularly in rural and wage settlements, in which they lived, did not allow them to practise these occupations. Policy measures aimed at freeing and facilitating refugee mobility, especially into urban areas, could benefit the urban economy of the Sudan as well as improve the situation of skilled refugees.

Markets for unskilled labour in the cities are affected by the major flows of rural-urban migration. Some of this is due to rural push factors as discussed above, but pull factors are also important. Wage or income differentials between rural and urban areas remain significant (as comparison of table 2.3 with tables 2.1 and 2.2 would indicate) and possibilities for emigration abroad create a pull to the major cities as a first step.

Some of the crucial features of unskilled urban labour markets are: the fall in real wages (especially since 1979) of most unskilled occupations in the organised sector; the very high rates of labour turnover in most private organised sector companies; the growing importance of private employment, especially in the "informal" sector; the mobility of labour, both skilled and unskilled, between formal and informal sectors; the very high rates of remuneration for some unskilled private occupations (see table 2.3); and the growth of secondary occupations. All of these phenomena are closely linked and in some sense causally related.

The stagnation or decline of particular industries and the institutional nature of public sector pay structures imply that organised sector wages for unskilled workers do not keep pace with inflation. At the same time the growth of particular sectors

Table 2.3: Mean wage rates for particular occupations  
in Khartoum and Port Sudan  
 (£S per year)

Occupation	Mean wage	Occupation	Mean wage
<b>Professional:</b>		<b>Unskilled:</b>	
Manager	6,600	Production worker	1,045
Engineer	3,764	Spinner	905
Accountant	6,401	Bricklayer	1,310
		Tanner	1,100
<b>White collar:</b>		Own trade	3,038
Teacher	2,093	Waiter	626
Clerk/book-keeper	1,349	Messenger	1,074
Secretary/typist	1,428	Guard	796
Government	1,644	Carwasher	1,343
		Shoe polisher	1,439
<b>Skilled Manual:</b>		Porter	1,260
Technician	2,274	Salesman	819
Mechanic	2,117	Cartpuller	1,855
Carpenter	1,675	Auctioneer	2,520
Blacksmith	1,378	Laundry	2,145
Electrician	2,163	Own caff	5,800
Plumber/Welder	1,319	Gardener	642
Driver (car)	2,115		
Driver (rail, truck, bus)	2,147		
Tailor	1,339		

Source: Ghosh (1983)

(resulting from the demand impetus from remittances from abroad and the growing wealth of the domestic trading community) implies increasing remuneration rates even for unskilled work in these activities (particularly construction, transport, services). This creates incentives for the mobility of labour between these activities, while simultaneously increasing the relative importance of private employment. The mobility of labour is sometimes complete (in the sense of complete transfer to different sectors/occupations) but often partial (through the growing reliance on "secondary" occupations to supplement income).

While urban labour markets, by their very nature, reflect particular macro-economic processes directly, the latter also determine the functioning of rural labour markets. Some of the aspects of such determination are set out in the next section.

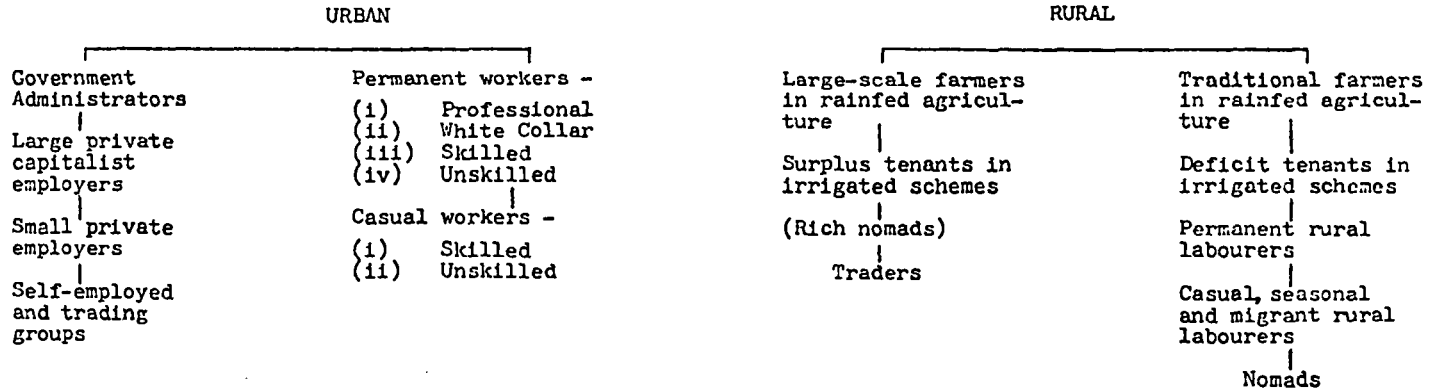
#### IV. Macro-economic influences on labour markets

The preceding discussion enables us to set forth a rough typology of the major classes in the Sudan. Diagram 2 presents this, and divides the urban and rural classes broadly into employers (on the left branch) and employees (on the right branch). The dual nature of traditional rainfed farmers and deficit tenants does not appear from this chart - the assumption (admittedly a strong one, but not crucial to the argument) is that these groups are net suppliers of labour.

These classes have been affected in recent times by three major macro-economic tendencies: (1) the phenomenon of labour emigration (2) a shift in income distribution, partly due to remittances and partly to the growing importance of trading groups (3) the pattern of investment in the whole economy. These phenomena are inter-related.

Labour emigration has caused shortages of particular skills (primarily in urban areas but also to some extent rurally) and changed the nature of urban wage determination. It has also resulted in an added pull to the cities, and created problems of loss of household

DIAGRAM 2: TYPOLOGY OF CLASSES IN SUDAN



labour especially for traditional agriculturalists. Such emigration has also resulted in remittances, which imply both inflation and a changing structure of demand. Much of the remittance income is directed towards house construction (predominantly in urban areas, even by migrants of rural origin) imported consumer durables and expenditure on services. The latter both raises remuneration for such activities and indirectly increases the demand for foodgrain. This in turn increases profit margins of those who market foodgrain, and provides incentives for the vertical integration of large-scale farming and foodgrain marketing activities. (These may further be combined with other profitable activities such as transport businesses and sheil, for those with capital.)

Within this situation, the Government's main policy variable is investment. However, the pattern of investment, both public and private, has been such as to exacerbate existing problems. Recent investment in the Sudan (with very rare exceptions) has been both regionally imbalanced and sectorally skewed. The western and southern regions have been largely ignored by both agricultural and industrial investment,<sup>12</sup> and this has contributed in large measure to the high rates of seasonal and permanent migration from these regions. At the same time traditional farming has also been neglected by investment, which has generally concentrated on the extension of mechanised rainfed farming schemes and the rehabilitation of irrigated schemes. Within the latter, investment has shown relative rigidity, with the heavy emphasis on cotton cultivation being unchanged by the trends in international demand. Similar rigidities are evident in the "declining" industries in urban areas, notably textiles. Further, there is very little industrial investment in the aggregate, which implies a continued reliance of agriculture and other sectors on imported machinery and spare parts and various items of consumption.

All these forces may lead to a continued worsening of the economic situation in the Sudan. What is clear is that they will definitely reinforce the patterns of labour processes in the various sectors, that have been described above.

V. Policy proposals

1. The picture that has emerged is one of an economy with substantial imbalances in regional and sectoral development. One feature that appears crucial is that of the urgent need to develop the Western and Southern regions through both agricultural and industrial investment. The precise mode of such investment is not clear, however: the immediate requirement is further agronomic research into the potentials for growth in these areas.

2. The expansion of mechanised farmland has been shown to have some adverse effects on traditional agriculturalists as well as pastoralists. The Government has been encouraging such expansion, primarily because of its preoccupation with revenue. It is worth investigating the possibilities for (a) linking nomadic populations with the development of such farms (b) ensuring that such farms are developed with the minimum negative impact on other groups.

3. In the rural areas (both irrigated schemes and rainfed zones) the existence of the sheil system lowers the returns to the direct cultivators and affects production conditions. This brings out the urgent need to reform rural credit systems, and set up more co-operative banks, etc., in the countryside.

4. In both the irrigated schemes and in the mechanised rainfed farms, it is necessary to extend the Sudanese Labour Laws to cover agricultural workers, in order to protect their interests and improve their bargaining position. This would also imply the enactment of a minimum wage legislation for rural labourers. The implementation of such policies would be aided by:

- (a) a system of labour inspection
- (b) ratification of ILO Convention 129 concerning labour inspection in agriculture
- (c) establishment of organisations of agricultural workers, where possible. (ILO Convention 141 and Recommendation 149 on Rural Workers' Organisations.)



5. Within some of the irrigated schemes (particularly the Gezira and Suki) it may be possible to revise the existing pattern of land use in order to maximise the gains of the tenants as well as the economy as a whole. Such a package could include

- (a) the zoning of the schemes into those areas where cotton should be grown and where it should not, with respect to soils and ease of watering
- (b) encouraging the cultivation of other crops on lands unsuitable for cotton; in particular, groundnuts and vegetables for export and dura for food security
- (c) the development of agro-industries such as food processing and packaging based on the cultivation of vegetables and groundnuts.

6. In the urban areas labour legislation should be extended to cover casual workers in organised industry as well as workers in small-scale industries and services. This entails a more broadbased system of labour market information as well as more inspection by labour officers. In addition, the minimum wage should be index-linked to the cost-of-living so as not to be speedily outdated in times of rapid price-rise.

7. A more developed system than at present exists, of monitoring movements in the labour markets, is required. The data base on urban and rural labour processes in the Sudan is extremely weak, although the potential for expanding it exists. Guidelines for methods of data collection and research should be laid down, and labour officers should be trained to regard this as an integral part of their duties.



Footnotes

<sup>1</sup> This was apparent from the Rural Rainfed Agricultural Labour Market Survey, which showed that farming as a proportion of all occupations declined from a high of 50 per cent of the men and 21 per cent of the women in the poor category to only 29 per cent of the men and 4 per cent of the women in the rich category.

<sup>2</sup> The Survey found that nearly one-fifth of the total household income of poorer groups came in the form of remittances or zakat.

<sup>3</sup> The following table shows the importance of the diversification of occupations:

Percentage of Working Population with Occupation

<u>Income Group</u>	<u>Male</u>	<u>Female</u>
Rich ( £S10,000)	29	8
Medium (£S1,500 - 9,999)	57	20
Poor ( £S1,500)	60	33

Source: Dey, Elbagir and Wagner (1983).

<sup>4</sup> Dey, Elbagir and Wagner (1983).

<sup>5</sup> There is a historical pattern to such migration - however, its continuing importance relates to the absence of alternative income opportunities in these areas. Thus, the survey found that, from the west, migrants from Southern Kordofan were few in number, primarily because the Habila Scheme is an important employer in that region.

<sup>6</sup> Nearly half cultivated no land, and only 11 per cent of the sample farmed more than 20 feddans.

<sup>7</sup> Largely related to a diminished labour demand because of a fall in dura acreage resulting from delayed rains.

<sup>8</sup> This is a phenomenon also observed in the Gezira by Barnett (1983).

<sup>9</sup> Particularly the Gezira and Suki Schemes.

<sup>10</sup> The survey in the rainfed sector relied on information from the workers themselves to arrive at these figures, while that in the Gezira Scheme used tenants' replies on wage payments made out as the reference. They were also carried out in slightly different time periods (August-September in the rainfed zones and October in the Gezira).

<sup>11</sup> Ali Abdel Gadir Ali (1983).

<sup>12</sup> The Habila Mechanised Farming Scheme in Southern Kordofan is an exception to this, but its size is relatively small compared to schemes in the Eastern Region.

PART II:

ECONOMIC AND SOCIAL BACKGROUND OF REFUGEES  
IN EASTERN AND CENTRAL SUDAN

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Review of Existing Self-  
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Self-Employment of  
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Female-Headed Households:  
A Profile



## CHAPTER 3

### Socio-Economic and Skill Survey of Refugees

#### I. Objectives and methodology

The following sections summarise the major findings of the socio-economic and skill survey which was carried out in Sudan from August to October 1982. The objective of the study is twofold:

(a) To facilitate the entry of the refugees in the Sudanese labour market by providing information on the skill profile of the refugees, their occupation structure, and the employment opportunities available in the refugee-affected areas.

(b) To generate up-to-date data on the skills and socio-economic conditions of the refugees for the preparation of income-generating projects.

#### Methodology

##### Questionnaire design

Two questionnaires were specially designed for the survey, one to be administered at the household level and the other to collect data at the settlement level.

##### (a) Household questionnaire

The household questionnaire was designed to generate data on the socio-economic characteristics and skill profile of the refugees. Thus the first task was to generate information on the demographic characteristics and composition of the refugee households. Secondly, the questionnaire provides data on the skills and employment patterns

of the refugees; the incomes from employment; the remittances from outside the settlement and the seasonal fluctuations of both employment and income. Finally, the questionnaire generates data on the felt needs and attitudes of the refugees.

(b) Macro-questionnaire

The macro-questionnaire complemented the household questionnaire. The objective was to obtain information at the settlement level about the facilities and services available, the general standard of living of the refugee population in the settlements.

In urban areas the focus was more on the pressures produced by the influx of refugees on the infrastructure and services. The macro-questionnaire was supplemented by interviews, discussions and collection of data available from different government officials and departments whose services are affected by the presence of refugees.

Sample of settlements and towns

The Skill and Socio-Economic Survey was carried out in a sample of nine organised rural settlements and three towns where large concentrations of spontaneously-settled refugees are to be found.

(a) Urban areas

Official Government estimates indicated that the following numbers of spontaneously-settled refugees were to be found in the three selected urban areas:

Gedaref	30,000
Khashm el Girba town	10,000
Kassala	<u>30,000</u>
Total refugee population	<u>70,000</u>



(b) Settlements

There are 23 organised refugee settlements in Eastern and Central Sudan. In consultation with the Sudanese authorities and the UNHCR, nine settlements were chosen on the basis of three criteria: origin of the refugees and type of settlements. This led to the following stratification:

Refugee Settlement Stratification

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Refugee origin	Year of establishment	Settlements
Tigray	1980	Um Rakoba, <u>Tenedba</u>
Tigray	1980	<u>Tawawa</u>
Eritrea	1978	Khashm el Girba, Awad es Sid, <u>Fath el Rahman</u> , Um Gulga, <u>Kilo 26</u>
Eritrea	1976	Um Gargur, Qala el Nahal, Karkora
Eritrea	1980	<u>Wad Awad</u> , Abu Rakham
Eritrea	1981	Um Ali, <u>Abuda</u> , Hawata

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The nine settlements underlined were chosen on a stratified random basis.

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A random sample of 1,607 households was drawn from the three urban areas and nine settlements representing 7.5 per cent of refugee households in each settlement and urban area. It was assumed that a refugee household consists of five persons. This was based on the findings of studies carried out in Tawawa, Port Sudan and the Suki settlements. The sample size, generating data on 8,339 refugees, allows a high degree of confidence in the results.

The estimates of population and the household sample taken from the three urban areas and nine settlements are as follows:

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Settlements chosen	Population	Estimated households	Household sample
Khashm el Girba	6,000	1,200	90
Tenedba	3,600	720	54
Kilo 26	4,000	800	65
Tawawa	10,000	2,000	151
Um Gargur	5,000	1,000	75
Wad Awad	2,000	400	30
Fath el Rahman	1,600	320	25
Um Ali	4,000	800	60
Abuda	5,000	1,000	75
<u>Total Settlements</u>	41,200	8,240	625
<u>Three urban areas:</u>			
Gedaref	30,000	6,000	454
Khashm el Girba	10,000	2,000	76
Kassala	30,000	6,000	452
<u>Total urban</u>	70,000	14,000	982
TOTAL (urban and settlements)	111,200	22,240	1,607

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## II. Demographic and household characteristics

The necessity for refugees to survive in an alien environment has brought many changes and adjustments in the structure of the family and the network of relationships prevalent in the traditional society. In their original communities the refugees were integrated into a community with an extended family structure where socio-economic activities were regulated by kinship. The land tenure system and the pattern of inheritance, for example, were based predominantly either on communal and village or family ownership.

As a consequence of fleeing their homeland this situation changed radically resulting in the breakdown of the family structure and the dislocation of the traditional community based on kinship. Living in an alien environment, many of the refugees suffer from a loss of cultural identity and from not belonging to any form of social organisation, be it the family, the tribe, the village or other forms of social relationships. Isolated and uprooted from their cultural environment, the refugees generally suffer from a state of shock, fear and disorientation, with a tendency to project their fears and past experience on to settlement life.

Generally the refugees find themselves living as nuclear families or as isolated individuals, either in organised settlements or "spontaneously settled" in urban areas. The nuclear family has become the reference point for most situations such as in the allocation of huts, food rations and the management of the settlement in general. However, it is common that even a nuclear family structure is missing. The household in these circumstances is no more than a place of abode constituted by a collection of individuals bonded together by their fate as refugees, or common cultural heritage and similar political affiliations. This situation is common among young male refugees.

### Age structure

The age structure of the total population and that of the settlements surveyed are depicted in table 3.1 while table 3.2 shows the distribution of the refugee population by sex and age-groups. These tables indicate the following important demographic characteristics. Forty-one per cent of the refugees are less than 15 years old, 51 per cent are in the prime working age group - i.e. 15 - 44, and 8 per cent are more than 45 years old. Only 3 per cent reaches the age of 54 years. This is not very different from the country of origin or the country of asylum where life expectancy at birth is respectively 39 years and 46 years.

The age structure indicates also that the refugee population consists mostly of young adults and children. Table 3.3 shows that 29 per cent of the refugees are less than 10, and 14 per cent are under 5 years of age. With the exception of Tawawa settlement, the percentage of the population constituted by young children is more important in the organised settlements than among spontaneously settled refugees in the urban areas. Most of those children (table 3.4) were born in the Sudan as a result of the refugees' prolonged stay in their country of asylum which accounts for 16 per cent of the refugee population.

The large number of children under 15 years of age among the refugee population implies a high dependency ratio contributing to the low standard of living of the refugees. This young population will make special demands on the health, education and training facilities available in the settlements and urban areas.

Table 3.1: Age groups by settlement

	15		15-44		45+		Total
	No.	%	No.	%	No	%	
Tawawa	224	28	550	68	40	5	814
Khashm el Girba	248	45	237	43	65	12	548
Kilo 26	211	50	171	41	38	9	420
Fath el Rahman (Suki)	90	51	65	37	21	12	176
Um Gargur	239	52	162	35	61	13	462
Abuda	188	45	194	46	37	9	419
Um Ali	187	51	146	39	37	10	370
Wad Awad	93	54	65	38	14	8	172
Tenedba	95	41	121	53	14	6	230
Gedaref	785	36	1,224	57	157	7	2,166
Khashm el Girba	87	41	110	52	13	6	210
Kassala	960	41	1,203	51	189	8	2,352
<b>Total sample</b>	<b>3,405</b>	<b>41</b>	<b>4,248</b>	<b>51</b>	<b>686</b>	<b>8</b>	<b>8,339</b>

Table 3.2: Population by age and sex

	Male		Female		Total	
	No.	%	No.	%	No.	%.
5	631	8	554	7	1,185	14
5-9	641	8	625	7	1,266	15
10-14	498	6	455	5	954	11
15	1,770	21	1,635	20	3,405	41
15-24	909	11	875	10	1,784	21
25-34	920	11	698	8	1,618	19
35-44	477	6	369	4	846	10
15-44	2,306	28	1,942	23	4,248	51
45-54	272	3	170	2	442	5
55-59	61	1	27	-	88	1
60+	97	1	59	1	156	2
45+	430	5	256	3	686	8
Total	4,506	54	3,833	46	8,339	100

Table 3.3: Children less than ten ( 10) and five ( 5) years old

	10		5	
	No.	%	No.	%
Tawawa	176	22	89	11
Khashm el Girba (S)	168	31	78	14
Kilo 26	143	34	55	13
Fath el Rahman	55	31	27	15
Wage earning	542	28	249	13
Um Gargur	162	35	67	15
Abuda	143	34	66	16
Um Ali	144	39	65	18
Wad Awad	65	38	27	16
Tenedba	74	32	40	17
Land	588	36	265	16
Gedaref	599	28	319	15
Khashm el Girba	71	34	46	22
Kassala	651	28	306	13
Urban	1,351	29	671	14
Total	2,451	29	1,185	14

Table 3.4: Refugees born in Sudan 15

	No.	% of refugee population	% of 15 age group
Tawawa	84	10	38
Khashm el Girba (Settle)	75	14	30
Kilo 26	57	14	27
Um Gargur	114	25	48
Abuda	86	21	46
Um Ali	111	30	59
Wad Awad	31	18	33
Tenedba	41	18	43
Fath el Rahman	40	23	44
Gedaref	342	16	44
Khashm el Girba (Town)	53	25	61
Kassala	318	14	33
Total	1,352	16	40



Sex distribution

The survey data indicates a biased male - female ratio. This is found both in urban and rural settlements as well as in every age group. 54 per cent of the total population are males and 46 per cent females (table 3.5). In the under - 15 age group 52 per cent of the refugees are male and 48 per cent female, 54 per cent of the prime working age (15 - 44) are men and 46 per cent women, while 63 per cent of those more than 45 years old are men and 37 per cent women. Fifty one per cent of the male population are in the prime working age group, 39 per cent are less than 15, and 10 per cent are more than 40 years old. Like the male population, 51 per cent of women are in the 15 - 44 age group. In contrast, however, 43 per cent of the female population are less than 15, and 7 per cent older than 45 years old. It is only in the Tenedba and Fath el Rahman settlements and in Khashm el Girba town that the survey results indicate a greater number of women than men.

Table 3.5: Sex distribution by age groups

	Total		Male			Female		
	No.	%	No.	% age group	% males	No.	% age group	% females
15	3,405	41	1,770	52	39	1,635	48	43
15-45	4,248	51	2,306	54	51	1,942	46	51
45+	686	8	430	63	10	256	37	7
<b>Total</b>	<b>8,339</b>		<b>4,506</b>		<b>54</b>	<b>3,833</b>		<b>46</b>

Household size

Some household characteristics tend to differ according to the type of settlement (tables 3.6 and 3.7). This is the case for the household size. The average size of household for the total population and for urban refugees is five persons. Both wage-earning and land settlements tend to have larger households consisting of six persons. The largest households are found in the rural wage-earning settlements where the average household size is seven persons. These are the two settlements of Fath el Rahman and Kilo 26 which are among the poorest. The average number of children per household tends to vary between two, for the total population and urban areas, to three in the wage-earning and land settlements.

Table 3.6: Household characteristics by type of settlement

	No. of individuals	No. of households	Average no. of children	Average h/h size
Whole sample	8,339	1,607	2	5
Urban refugees	4,728	982	2	5
Rural refugees	3,611	625	3	6
Land settlements	1,653	294	3	6
W.E. settlements	1,653	294	3	6
(a) Sub-Urban	1,362	241	2	6
(b) Rural-Employment	596	90	3	7

Table 3.7: Distribution of household size between urban areas, wage-earning and land settlements

	Urban		W.E.		Land	
	No.	%	No.	%	No.	%
1-2	177	18	22	6.7	23	7.8
3-4	308	31	70	21.2	77	26.2
5-6	276	28	113	34.1	99	33.7
7-8	141	14	80	24.2	60	20.4
9-10	69	7	43	13	33	11.2
11-14	6	.6	2	.6	1	.34
15-19	5	.5	1	.30	1	.34
Total	982	100	331	100.00	294	100.00

Marital status

As indicated in table 3.8, 32 per cent of the population are married. This is similar to the findings of a survey on refugees in Port Sudan.<sup>1</sup> The married refugees represent 29 per cent of the male and 35 per cent of the female refugees. A greater proportion of women are married than men: 63 per cent of the women in the 15-44 age

Table 3.8

	Married		Unmarried		Single		Widowed		Separated/ Divorced		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Population											
	8,339	2,643	32	5,696	68	4,092	49	232	3	401	5
Male	4,506	1,295	29	3,211	71	2,512	56	38	1	183	4
Female	3,833	1,348	35	2,485	65	1,580	41	194	5	301	8
15											
Male	1,770	1	.1	1,769	100	1,769	100				
Female	1,635	9	.6	1,626	100	1,626	100				
15-44											
Male	2,306	918	40	1,388	60	1,210	52	17	1	159	7
Female	1,942	1,224	63	718	37	360	19	87	4	271	14
45+											
Male	430	376	87	54	13	10	2	21	5	23	5
Female	256	115	45	141	55	5	2	107	42	29	11

group as compared to 40 per cent of the men. However among the refugees of more than 45 years old 87 per cent of the men are married compared to 45 per cent of the women.

The presence of a larger number of married women, particularly in the 15-44 age group, is partly explained by the greater mobility of the male population. Many married men have left their spouse in search of better employment opportunities elsewhere in Sudan or abroad. Some of the men are still involved with the war. These factors explain why 21 per cent of the female heads of households are married.

The table also shows that 52 per cent of the male population in the 15-44 age group are single, one per cent widowed and seven per cent separated or divorced. The distribution is quite different for the women of the same age group, 19 per cent are single, four per cent widowed and 14 per cent separated or divorced. Overall 49 per cent of the refugees are single: 56 per cent of the total male population compared to 41 per cent of the women. Three per cent of the population are widowed: the figures for male and female refugees are one per cent and five per cent respectively. Forty-two per cent of the women over 45 years old are widowed compared to five per cent of the men in this age group. As women tend to have a longer life expectancy than men it is difficult to speculate whether this is due to the civil strife or the consequences of the natural process.

### Ethnicity/Nationality

The refugees interviewed were exclusively of Ethiopian nationality. As indicated by table 3.9, 67 per cent of the refugees are Ethiopians of Eritrean origin and 14 per cent Ethiopian of Tigray origin. Other Ethiopian ethnic groups which included Amharas and Oromos account for 18 per cent of the population. Non-Ethiopian refugees made up for less than one per cent of the refugee population surveyed. Most of the refugees (91 per cent) claimed that Tigrinia or

another Eritrean language was their mother tongue; six per cent considered Amharic as their mother tongue, two per cent named another Ethiopian language, and less than one per cent Oromegan (table 3.10). Twenty-six per cent of the refugees claimed to be literate in their mother tongue.

Table 3.9: Ethnic groups

	No.	%
Eritrean	5,098	67
Tigray	1,086	14
Other Ethiopian ethnic groups	1,356	18
Other	27	1
Total	7,567	100

Table 3.10: Mother tongue

	No.	%
Tigrinia	4,802	61
Other Eritrean language	2,328	30
Amharic	498	6
Other Ethiopian language	135	2
Others	58	1
Total	7,821	100

## Religion

In the organised settlements the Christian or Muslim refugees, when they co-exist in large numbers, tend to live in different parts of the settlement. The survey results indicate that 47 per cent of the refugees are Muslims, 48 per cent are Copt or Orthodox Christians and 5 per cent are Catholics.

Although it contributes to heterogeneity, religious differences do not appear to constitute a major source of conflict among the refugees in any of the known settlements.

## Education and illiteracy

As shown in table 3.11, 63 per cent of the total population are illiterate: 54 per cent of male compared to 75 per cent of female. Illiteracy in Arabic and English is even higher: 88 per cent of the refugees are illiterate in Arabic and 94 per cent in English. In general only the refugees who have previously received formal education are literate in either or both of these languages. However, most refugees have some knowledge of spoken Arabic. This has certain implications for the planning of income-generating projects and training programmes since the language barrier constitutes one of the constraints on refugee employment.

Table 3.11: Level of illiteracy

	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Illiteracy	2,425	54	2,865	75	5,290	63
Arabic	3,815	85	3,525	92	7,340	88
English	4,151	92	3,720	97	7,871	94

The level of education of the refugee population in all the settlements is low. As shown in table 3.12 only 4 per cent of the population have completed six years of primary education, 9 per cent have completed secondary education, and less than 1 per cent of the refugees received any form of higher education.

Table 3.12: Education

	No.	%
6 years primary education	297	4
Secondary education	732	9
Higher education	37	1
Total	1,066	13

The flow of refugees into Sudan has been continuous since the mid-1960s. However, while 6 per cent of the refugees arrived in Sudan in the 1967-73 period the major influx took place in the 1974-78 and 1979-82 periods when respectively 56 per cent and 37 per cent of the refugees fled to the Sudan (table 3.13). The period of entry indicates the time the refugees have had to adjust to their new environment and improve their knowledge of their country of asylum, particularly its language. This contributes to the refugees' integration while improving their employment opportunities.



Table 3.13: Period of entry into Sudan

	No.	%
Pre - 1967	38	1
1967 - 1973	418	6
1974 - 1978	3,865	56
1979 - 1982	2,641	37
Total	6,962	100

The influx of refugees and the duration of their stay in Sudan has been a heavy burden for the fragile infrastructure and limited services.

Although it is difficult to establish precisely the impact of successive waves of refugees on existing facilities, nevertheless the following examples point out the strains on educational and health services in refugee-affected areas.

According to the Ministry of the Public Services, and as indicated in the following table, there were 18,283 refugee children attending school at the primary or intermediate level during the 1981/1982 academic year. Some 10,674 children were either attending Sudanese schools or schools in refugee settlements managed by the Ministry of Education.

**Table 3.14: Education: Attendance by refugees during the academic year 1981/1982 in Kassala Province**

1. Primary school attendance

	Boys	Girls	Total
Sudanese schools (Urban)	4,577	2,317	6,894
schools in settlements	1,056	1,380	2,436
Eritrean Liberation Fronts	4,013	2,424	6,437
Provisional Rev. Committee	662	186	848
<b>Total primary</b>	<b>10,308</b>	<b>6,307</b>	<b>16,615</b>
	62%	38%	

2. Intermediate level attendance

	Boys	Girls	Total
Sudanese schools	921	423	1,344
Eritrean Liberation Fronts	294	20	314
Provisional Rev. Committee	6	4	10
<b>Total intermediate</b>	<b>1,221</b>	<b>447</b>	<b>1,668</b>
	73%	27%	

Attendance of refugees in both  
Primary school and intermediate  
Level:

	11,529	6,754	18,283
	63%	37%	

(1) The refugees educational problems

The Democratic Republic of the Sudan, Eastern Region, Ministry of the Public Services, Education Guidance Sector, Kassala 1.2.1982 (pp. 7, 8, 12).

As for the medical services, despite the valuable assistance of NGOs in this field, the following figures indicate the acuity of the situation:

- " - 24% of beds in Kassala hospital were occupied by refugees in 1980
- 200 refugees attended out patient department of the same hospital every day (1980)
- 69,590 refugees attended Gedaref hospital in 1979
- 2,615 refugees admitted to the Gedaref hospital (1979)
- 949 refugees needed surgery."<sup>2</sup>

### Vulnerable groups

While in many respects the whole refugee population is vulnerable, four groups of refugees may be identified as needing special attention in the provision of assistance, the planning and management of services to the refugee community. These are the disabled, refugees over 55 years old, young children and female heads of households. The disabled, the old and very young children are dependent on the employed members of their communities and therefore indirectly on the available employment opportunities. Female heads of households are dependent on food rations distributed to them and community solidarity or must turn to whatever employment available to meet the needs of their family.

#### (a) The disabled

As a group, the disabled represent two per cent of the refugee population (table 3.15). The percentage of disabled in the refugee settlements varies from four in Khashm-el-Girba settlement to one in Abuda.

Table 3.15: Vulnerable group: Disabled

	No.	% Population
Tawawa	16	2
Khashm-el-Girba (s)	20	4
Kilo 26	9	2
Um Gargur	8	2
Abuda	6	1
Um Ali	8	2
Wad Awad	9	
Tenedba	4	2
Fath el Rahman	4	2
Gedaref	38	2
Khashm-el-Girba (Town)	1	
Kassala	39	2
Total	153	2

(b) Refugees over 55 years of age

The refugee population is young. Older refugees as shown in table 3.16 account only for three per cent of the refugee population. In the settlements the percentage of the refugee population over 55 years varies between six in the urban area of Khashm-el-Girba to one in Tawawa. As in most patterns of migration, only the young and healthy become refugees. In addition, the disabled and the old do not always survive the stress and hardship of refugee life. Furthermore the settlements are located far from the border. Consequently, attention should be given to the transit camps and border areas where the old and handicapped are more likely to be connected.

Table 3.16: Vulnerable group: over 55 years old

	No.	% population
Tawawa	11	1
Khashm-el-Girba (s)	23	4
Kilo 26	14	3
Um Gargur	27	6
Abuda	19	3
Um Ali	17	5
Wad Awad	5	3
Tenedba	4	2
Fath el Rahman	9	5
Gedaref	57	3
Khashm-el-Girba (Town)	13	6
Kassala	63	3
Total	262	3

(c) Children

As indicated in table 3.3, 29 per cent of the refugee population are less than ten years old. As 62 per cent of the refugees fled to Sudan before 1978, many of these children were born in Sudan. This number will increase as a proportion of the total refugee population as the refugees prolong their stay in Sudan.

Young children symbolise the pressure which refugees as a group put on the already limited facilities and services in Sudan. In the short term these young refugees will inevitably make demands on the facilities and services available in the host country. Like in all communities, children are the most vulnerable to diseases and health hazards linked either to malnourishment or undernourishment. They suffer the most from the poor sanitation prevalent in the settlements. Their welfare and survival make the provision of special health care programmes a necessity. Consequently, the pulling out of some voluntary agencies involved in providing medical services to children, on the basis that refugees in Eastern Sudan are in a "post-relief situation", is a major issue to be tackled. Children will be the most directly affected as a group.

(d) Female heads of households

The refugees' societies of origin are patrilineal and patriarchal. However, as a result of the breakdown of the family structure, this social characteristic has changed. Female headed households have become a frequent occurrence among the refugee population. Overall, 22 per cent of the household heads are women (tables 3.17 and 3.18). One observes from table 3.18 that the occurrence of female headed households varies between the spontaneously-settled urban refugees, land and wage settlements. Twenty-seven per cent of the households in urban areas are female-headed compared to 15 per cent in wage-earning and ten per cent in land settlements. In the sub-urban wage-earning settlements, 17 per cent of the household heads are women compared to 12 per cent in

Table 3.17: Female heads of household - per settlement

	No.	%
Tawawa	29	19
Khashm-el-Girba (Settlement)	11	12
Kilo 26	7	11
Fath el Rahman	4	16
Um Gargur	3	4
Abuda	8	11
Um Ali	4	7
Wad Awad		
Tenedba	11	20
Gedaref	115	25
Khashm-el-Girba (Town)	39	51
Kassala	116	26
Total	347	22

Table 3.18: Female heads of household - by type of settlement

	No.	Concentration of F.H.H. %	Distribution of F.H.H. %
Urban areas	270	78	27
Rural settlements	77	22	12
Land settlements	26	7	10
Wage-earning	51	15	15
(a) Sub-urban (W.E.)	40	12	17
(b) Rural employment (W.E.)	11	3	12
Total	347		22

rural wage-earning settlements. The female household heads are generally concentrated in urban areas; 78 per cent were registered in urban areas, 22 per cent in rural areas with seven per cent in land settlements and 15 per cent in wage-earning settlements. The marital status of female-heads of households indicate that 21 per cent of these women are married at present; 71 per cent were once married and are now widowed (30 per cent), separated (9 per cent) or divorced (32 per cent) - mostly as a consequence of the war and the uprooting of the family (table 3.19). Only eight per cent of the female heads of households are single. The female heads of households are generally young; 50 per cent of them are between 15 and 34 years old (table 3.20).

Table 3.19: Female heads of household by marital status

	No.	%
Married	74	21
Single	29	8
Divorced	111	32
Widowed	103	30
Separated	30	9
<b>Total</b>	<b>347</b>	<b>100</b>

Table 3.20: Female heads of household by age-group

Age	No.	%
15-24	50	14
25-34	125	36
35-44	90	26
45-54	61	18
55+	21	6
<b>Total</b>	<b>347</b>	<b>100</b>



### III. Skills and employment

Tables 3.21 and 3.22 show clearly the wide variety of occupations held by refugees in their country of origin. However, there are certain important characteristics of the refugee status that influence the utilisation of refugee skills:

(a) Skills are developed in any one region in response to several market and non-market allocative mechanisms. Refugees may find that the skills they possess are at variance with the nature of demand in the country of asylum. Such a mis-match can be quantitative or qualitative in nature. It is reinforced by the type of settlement and the lack of mobility needed to respond to regional demand differentials. Twenty per cent of the urban and 30 per cent of the rural refugees surveyed reported the lack of mobility as their major problem in finding an employment (table 3.24).

(b) Most skills require a minimum of tools and capital in the productive process and in most cases refugees had to leave what little tools and capital they had in their country of origin. Thirty-seven per cent of the urban refugee in the survey and 36 per cent of the rural considered the lack of capital and tools as the main constraint they are facing (table 3.24). Ninety-six per cent of the unemployed mechanics and electricians attributed their unemployment to lack of tools.

(c) The refugee status resulted in the disintegration of the social mechanism responsible for the reproduction and maintenance of skills. In most cases this was an informal apprenticeship system based on kinship. At present many refugees are living in isolated settlements, where many skills are not adjusted to the local market and are consequently not used. A process of degradation may set in over time as skills not utilised for a considerable period of time run the risk of being lost. This may be averted by rehabilitating the traditional apprenticeship system and improving access to formal vocational training facilities. In most instances, but particularly

Table 3.21: Original occupation for male refugees and their present distribution between urban and rural settlements

Occupation	No.	Per cent	Urban %	Rural %
Farmer	852	19	40	60
Farm labourer	194	4	29	71
Shepherd	99	2	46	54
Housewife	185	4	35	65
Medical	9	0.2	67	33
Teacher	43	1	81	19
Driver	136	3	74	26
Typist/clerk	38	1	85	15
Trading	154	3.4	70	30
Hairdresser	14	0.3	86	14
Spinner/weaver	27	0.6	85	15
Tailor	62	1.4	79	21
Blacksmith	10	0.2	90	10
Bricklayer/painter	40	1	75	25
Carpenter	50	1.1	72	28
Shoemaker	10	0.2	90	10
Plumber	15	0.3	47	53
Armed forces	64	1.4	67	33
Student	619	13.7	70	30
Mechanic/electrician	61	1.4	70	30
Nurse	18	0.4	83	17
Unemployed	22	0.5	30	70
Other occupation	124	2.9	-	-
Children	1,660	37	54	46
<b>Total</b>	<b>4,506</b>	<b>100</b>		

**Table 3.22: Original occupations for female refugees and their present distribution between urban and rural settlements**

Occupation	No.	Per cent	Urban %	Rural %
Farmer	20	0.5	85	15
Farm labourer	6	0.2	67	33
Shepherd	6	0.2	100	-
Housewife	1,713	45	56	44
Medical	11	0.3	90	10
Typist/clerk	11	0.3	100	-
Trading	14	0.4	75	25
Hairdresser	4	0.1	50	50
Spinner/weaver	11	0.3	64	36
Tailor	17	0.4	82	18
Domestic servant	57	1.5	75	25
Student	393	10.3	76	24
Food	37	1.0	70	30
Prostitute	7	0.2	71	29
Unemployed	12	0.3	45	55
Other occupation	35	0.9		
Children	1,479	38.1	55	45
<b>Total</b>	<b>3,833</b>	<b>100</b>		

**Table 3.23: Percentage distribution of original occupation by present occupation**

Present Original	Farmer	Farm labourer	Teacher	Driver	Typist	Trader	Bricklayer/ painter/ carpenter	Mechanic/ electrician	Unemployed
Farmer	12	56	-	-	-	6	-	-	14
Farm labourer	-	72	-	-	-	-	-	-	9
Teacher	-	-	51	-	-	-	-	-	20
Driver	-	15	-	53	-	-	-	-	15
Typist	-	-	-	-	16	11	-	-	21
Trader	4	22	-	-	-	32	-	-	12
Bricklayer/ painter/ carpenter	-	11	-	-	-	-	62	-	10
Mechanic/ electrician	-	8	-	-	-	-	-	34	23
Unemployed	-	-	-	-	-	-	-	-	53

Table 3.24: Major constraints

Constraint	Urban %	Rural %
No tools	3	4
No capital	34	32
No permits	11	11
No employment	32	23
Restricted movement	20	30
Total	100	100

among the urban refugees, training programmes are necessary to upgrade the refugees' skills or to generate new skills to better prepare them to adjust to the needs and demands of their host countries' labour markets.

The matrix display of table 3.23 shows the maladjustments resulting from some of the factors discussed above. Theoretically a case of perfect integration will have a zero-symmetrical matrix with a 100 diagonal.

While the fact that only 12 per cent of those refugees who were farmers in the country of origin are farming at present can be explained by the problem of limited access to land, the rest of the matrix points out to serious constraints in labour market information and access to markets. The 20 per cent unemployment rate for teachers and 21 per cent for typists can be partially attributed to the language barrier. Nevertheless, it can be argued that given the

demand for skilled manpower, with a minimum of retraining such skills can be fully utilised within the settlements and particularly in the urban labour markets.

While the urban labour markets suffer from an acute shortage of skilled labour in fields like building trades and auto-mechanics, 10 per cent of the refugees skilled in the former and 23 per cent in the latter remain unemployed. The restrictions on the movement of refugees, particularly those in rural settlements continue to be the major constraint on their access to employment opportunities. In the case of refugees the rural-urban labour mobility is institutionally restricted. Despite the fact that none of the existing laws regulate or prohibit the movement of refugees, the security authorities are controlling it and assuming the responsibility of issuing travel permits. Regular security checks on buses and trains leaving the Eastern region are conducted for the purpose of preventing refugees, without travel permits, from leaving the area. As the freedom of movement of labour does not apply to refugees, only the sub-urban settlements of Tawawa and Khashm-el-Girba have access to the employment opportunities in the urban labour markets. These two communities are among the potentially most viable settlements. The labour force in the rural settlements, whether skilled or unskilled, is condemned to depend on seasonal agricultural employment.

Tables A1 to A12 providing data on the original and present occupations of refugees by the settlement/town, display the range and extent of unused skills.

Of the refugees interviewed, about 46 per cent of those presently working are self-employed (table 3.25). Those who work for the Sudanese represent another 46 per cent with the major employer in rural areas being the agricultural sector providing seasonal employment in both the mechanised rainfed areas around Gedaref and the irrigated schemes of Suki and New Halfa. Most of the self-employed as well as those employed by the Sudanese in urban areas operate within the informal sector. Less than one per cent of the refugees surveyed are employed by the Government.

Table 3.25: Percentage distribution of type of employer

Employer	Urban	Rural
Self-employed	48	43
Sudanese	45	47
Refugee	5	6
Other	2	4
Total	100	100

Table 3.26 presents the number of refugees who received formal vocational training in various fields broken down by sex and age. Only 8 per cent of the refugees between 15 and 54 years old and none of those more than 54 years old received any form of formal vocational training. Men represented 65 per cent of the total number of trained refugees. The most interesting fact that emerges from the table is that 36 per cent of the trained refugees are under 24 years old, all of whom were trained in the Sudan and 70 per cent of them are women mainly trained as typists, nurses and tailors.

An important institutional constraint to the entry of many qualified and skilled refugees to the labour markets is the difficulty and sometimes impossibility of obtaining the recognition of licences and professional qualifications such as degrees and diplomas obtained in their country of origin. Many refugees do not have in their possession the documents to justify their qualifications. The problems facing many refugees are exemplified by the situation of those presently working as dressers and nurses with the different

Table 3.26: Number of respondents with vocational training by sex

Field of training	Age group		15-24		25-34		35-44		45-54	
	Sex		M	F	M	F	M	F	M	F
Medical			2	3	7	-	3	1	3	-
Teacher			4	3	22	-	8	-	5	-
Driver			2	-	6	-	5	-	2	-
Clerk/typist			4	12	11	3	2	1	2	-
Spinner/weaver			-	-	2	2	-	-	-	1
Tailor			-	16	-	6	-	1	-	-
Carpenter/Bricklayer			2	-	3	-	-	-	-	-
Shoemaker			-	-	1	-	-	-	-	-
Plumber			-	-	1	-	-	-	-	-
Mechanic/electrician			3	-	7	-	2	-	1	-
Nurse			5	18	12	4	5	1	1	-
Total			22	52	72	15	25	4	14	1
Per cent			2.4	5.9	7.8	2.1	5.2	1.1	5.1	0.2

medical agencies. They will face difficulties in finding employment in the medical profession when these voluntary agencies phase out their programmes since their qualifications are not recognised by the Sudanese authorities. Teachers and other professionals who have to work in nationalised services face similar problems.

The outward movement of refugees for resettlement or emigration has important consequences both for the host country and for the refugee community. Resettlement programmes and the out-migration of refugees contribute to a "psychology of departure" which creates additional strains on the refugee communities by raising the level of expectations and increasing tensions which are negatively reflected upon the solutions proposed by the host government. The young, the



educated, the highly skilled and the affluent refugees are very mobile within Sudan and internationally. Many have already left Sudan. Furthermore, these categories of refugees are the target groups of all resettlement programmes. Thus, while the number of refugees chosen for resettlement is quantitatively insignificant, it qualitatively amounts to a skill and brain drain. The departure of skilled and qualified refugees affects the quality and availability of many vital services in the refugee communities.

However, resettlement usually results in remittances being sent to families and relatives. In most cases this represents an important source of income. In the households surveyed, remittances amounted to 15 and 14 per cent of urban and rural incomes respectively. Seventy-five per cent of remittances received in rural settlements come from urban areas within the Sudan and the remaining from abroad. In contrast, more than 98 per cent of the remittances received in urban areas come from outside the Sudan. These are usually received every six months and range from few to 5,000 Sudanese pounds. Of the refugee households receiving remittances, these represented, on the average, 32 per cent of the total income. Remittances represent between two to 100 per cent of the household income.

Table A1: Original and present occupations

TAWAWA

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	213	26	3	0.3
Farm labourer	92	11	399	37
Shepherd	18	2	-	-
Housewife	143	18	142	17.5
Teacher	1	0.1	2	0.2
Clerk/typist	2	0.2	-	-
Driver	16	2	8	0.9
Trader	16	2	30	3.7
Non-farm labourer	13	1.6	4	0.5
Spinner/weaver	5	0.5	1	0.1
Tailor	4	0.5	1	0.1
Carpenter	4	0.5	3	0.4
Plumber	2	0.2	-	-
Electrician/mechanic	1	0.1	3	0.4
Food sales	9	1	40	5
Domestic servant	10	1.2	9	1
Student	37	4.6	39	5
Prostitute	2	0.2	4	0.5

Table A2: Original and present occupations  
KHASHM-EL-GIRBA SETTLEMENT

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	34	9.5	-	-
Farm labourer	10	2.8	40	9.3
Shepherd	1	0.3	-	-
Housewife	159	44.5	142	33.2
Teacher	2	0.6	2	0.5
Clerk/typist	-	-	1	0.2
Driver	5	1.4	3	0.7
Trader	7	2.9	7	1.6
Non-farm labourer	3	0.8	8	1.9
Spinner/weaver	-	-	1	0.2
Tailor	3	0.8	5	1.2
Carpenter/bricklayer	4	1.2	6	1.4
Plumber	3	0.8	1	0.2
Electrician/mechanic	4	1.2	6	1.4
Food sales	-	-	4	0.9
Domestic servant	1	0.3	12	2.8
Student	97	27.2	116	27.1
Prostitute	-	-	-	-

Table A3: Original and present occupations

KILO 26

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	33	14.1	-	-
Farm labourer	14	5.9	40	12.6
Shepherd	-	-	1	0.3
Housewife	91	38.9	101	44.8
Teacher	-	-	1	0.3
Clerk/typist	3	1.3	1	0.3
Driver	1	0.4	2	0.6
Trader	7	3.2	9	2.7
Non-farm labourer	-	-	3	0.9
Spinner/weaver	1	0.4	1	0.3
Tailor	-	-	-	-
Carpenter	1	0.4	1	0.3
Plumber	-	-	-	-
Electrician/mechanic	1	0.4	-	-
Food sales	1	0.4	-	-
Domestic servant	-	-	-	-
Student	55	23.5	91	28.7
Prostitute	-	-	-	-

Table A4: Original and present occupations

UM GARGUR

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	61	23.8	64	18.6
Farm labourer	4	1.6	20	5.8
Shepherd	7	2.7	2	0.6
Housewife	139	54.3	100	29.0
Teacher	1	0.4	2	0.6
Clerk/typist	-	-	-	-
Driver	2	0.8	3	0.9
Trader	7	2.7	1	0.3
Non-farm labourer	2	0.8	-	-
Spinner/weaver	-	-	-	-
Tailor	1	0.4	1	0.3
Carpenter/bricklayer	4	1.6	2	0.6
Plumber	-	-	-	-
Electrician/mechanic	2	0.8	-	-
Food sales	-	-	-	-
Domestic servant	-	-	1	0.3
Student	23	8.9	126	36.5
Prostitute	-	-	-	-

Table A5: Original and present occupations

ABUDA

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	56	23.6	27	8.9
Farm labourer	5	2.1	53	17.5
Shepherd	17	7.2	4	1.3
Housewife	107	45.1	106	35.0
Teacher	3	1.3	1	0.3
Clerk/typist	-	-	-	-
Driver	7	3.0	2	0.6
Trader	3	1.3	4	1.3
Non-farm labourer	1	0.4	4	1.3
Spinner/weaver	-	-	-	-
Tailor	4	1.7	2	0.6
Carpenter/bricklayer	1	0.4	1	0.3
Plumber	1	0.4	-	-
Electrician/mechanic	4	1.7	-	-
Food sales	-	-	3	0.9
Domestic servant	-	-	3	0.9
Student	19	8.0	65	21.4
Prostitute	-	-	-	-

Table A6: Original and present occupations

UM ALI

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	55	35.0	19	7.2
Farm labourer	-	-	39	14.8
Shepherd	4	2.5	18	6.8
Housewife	79	50.3	100	37.9
Teacher	1	0.6	1	0.4
Clerk/typist	-	-	-	-
Driver	-	-	-	-
Trader	4	2.5	9	3.6
Non-farm labourer	1	0.6	3	1.2
Spinner/weaver	1	0.6	-	-
Tailor	-	-	-	-
Carpenter	-	-	-	-
Plumber	-	-	-	-
Electrician/mechanic	1	0.6	-	-
Food sales	-	-	-	-
Domestic servant	-	-	1	0.4
Student	7	4.5	55	20.8
Prostitute	-	-	-	-

Table A7: Original and present occupations

WAD AWAD

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	61	16.0	19	14.7
Farm labourer	1	1.0	9	6.9
Shepherd	2	2.0	-	-
Housewife	49	49.0	46	35.6
Teacher	-	-	-	-
Clerk/typist	-	-	-	-
Driver	2	2.0	1	0.8
Trader	3	3.0	1	0.8
Non-farm labourer	1	1.0	1	0.8
Spinner/weaver	1	1.0	-	-
Tailor	4	4.0	4	3.2
Carpenter	2	2.0	1	0.8
Plumber	2	2.0	-	-
Electrician/mechanic	-	-	-	-
Food sales	1	1.0	-	-
Domestic servant	-	-	-	-
Student	15	15.0	35	27.1
Prostitute	-	-	-	-



Table A8: Original and present occupations

TENEDBA

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	28	19.2	7	4.1
Farm labourer	12	8.2	49	28.5
Shepherd	1	0.7	1	0.6
Housewife	58	39.7	55	32.0
Teacher	-	-	-	-
Clerk/typist	1	0.7	-	-
Driver	3	2.1	1	0.6
Trader	3	2.1	2	1.2
Non-farm labourer	2	1.4	-	-
Spinner/weaver	-	-	-	-
Tailor	-	-	-	-
Carpenter	1	0.7	-	-
Plumber	-	-	-	-
Electrician/mechanic	4	2.8	1	0.6
Food sales	3	2.1	10	5.8
Domestic servant	3	2.1	-	-
Student	17	11.6	27	15.7
Prostitute	-	-	3	1.7

Table A9: Original and present occupations

FATH EL RAHMAN

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	13	13.0	-	-
Farm labourer	1	1.0	15	10.8
Shepherd	3	3.0	1	0.7
Housewife	53	53.0	40	28.8
Teacher	-	-	-	-
Clerk/typist	-	-	-	-
Driver	-	-	-	-
Trader	1	1.0	-	-
Non-farm labourer	1	1.0	-	-
Spinner/weaver	-	-	-	-
Tailor	-	-	-	-
Carpenter	4	4.0	1	0.7
Plumber	-	-	-	-
Electrician/mechanic	1	1.0	1	0.7
Food sales	1	1.0	-	-
Domestic servant	-	-	4	2.8
Student	17	17.0	59	42.4
Prostitute	-	-	-	-

Table A10: Original and present occupations  
GEDAREP

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	236	17.7	9	0.6
Farm labourer	50	3.8	163	10.2
Shepherd	17	1.3	-	-
Housewife	446	33.5	363	22.7
Teacher	24	1.8	16	1.0
Clerk/typist	14	1.1	16	1.0
Driver	39	2.9	34	2.1
Trader	66	4.8	62	3.9
Non-farm labourer	11	0.8	37	2.3
Spinner/weaver	29	2.2	34	2.1
Tailor	39	2.9	53	3.3
Carpenter/bricklayer	19	1.4	53	3.3
Plumber	1	0.1	1	0.1
Electrician/mechanic	18	1.4	19	1.2
Food sales	11	0.8	104	6.5
Domestic servant	26	2.0	66	4.1
Student	194	14.6	171	10.7
Prostitute	3	0.2	33	2.1

Table All: Original and present occupations

GIRBA TOWN

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	18	14.5	-	-
Farm labourer	2	1.6	21	14.6
Shepherd	-	-	-	-
Housewife	51	41.1	42	29.2
Teacher	-	-	-	-
Clerk/typist	-	-	-	-
Driver	7	5.7	3	2.1
Trader	4	3.2	2	1.4
Non-farm labourer	-	-	-	-
Spinner/weaver	-	-	-	-
Tailor	-	-	-	-
Carpenter/bricklayer	-	-	4	2.8
Plumber	1	0.8	2	1.4
Electrician/mechanic	4	3.2	3	2.1
Food sales	6	4.8	-	-
Domestic servant	15	12.1	2	1.4
Student	6	4.8	11	7.6
Prostitute	-	-	30	20.8

Table A12: Original and present occupations

KASSALA

Occupation	Original		Present	
	No.	Per cent	No.	Per cent
Farmer	109	6.9	2	0.1
Farm labourer	9	0.6	22	1.2
Shepherd	35	2.2	5	0.3
Housewife	523	33.5	478	25.2
Teacher	13	0.8	10	0.5
Clerk/typist	18	1.2	2	0.1
Driver	54	3.5	62	3.3
Trader	37	2.5	66	3.5
Non-farm labourer	3	0.2	11	0.6
Spinner/weaver	1	0.1	1	0.1
Tailor	29	1.5	26	1.4
Carpenter/bricklayer	40	2.6	77	4.1
Plumber	5	0.3	4	0.2
Electrician/mechanic	21	1.4	23	1.2
Food sales	14	0.9	38	2.0
Domestic servant	3	0.2	53	2.8
Student	529	33.9	670	35.3
Prostitute	2	0.1	9	0.5

#### IV. The viability of settlements

One of the major factors that determine the employment opportunities open to refugees is the type of settlement. The question then becomes one of the economic viability of different types of settlements and of similar settlements in different localities. A thorough analysis of this concept is an essential pre-requisite for both a successful planning of future settlements and the introduction of income-generating activities in existing ones.

##### Rural wage-earning settlements

These are established on the principle that refugees will find employment as agricultural wage labourers in the nearby schemes (for example Kilo 26 settlement near the New Halfa scheme and Fath El Rahman settlement near Essuki scheme). However, refugees in this type of settlement are faced with several problems specific to complete dependence on one source of income.

(a) The seasonal nature of demand for labour characteristic of agricultural production and the limited opportunities for non-farm employment in the slack season result in a very high rate of underemployment. Our survey shows that underemployment amounts to 48 per cent of the person years of the economically active population.

(b) The nature of farm labour and the fact that it usually entails walking long distances and living on the farm make possible the participation of young and healthy only. In the absence of other income-generating activities this results in a high dependency ratio.

(c) The complete dependence on seasonal agricultural employment not only results in low incomes (tables 3.27 and 3.28) but also means a complete reliance on a very unreliable income. Two major uncertainties are involved. First, income uncertainty characteristic of the contractual mode of the task system. The total number of days employed in the season fluctuates according to demand for labour.

These variations are dependent on rainfall, as well as supply of labour from within the region and migrant labour from other parts of the country. The second element of risk is price uncertainty. As more than 80 per cent of the wage is paid in cash the real wage fluctuates with the price of the staple (dura).

Such a situation leaves households completely dependent on agricultural wage employment in a vulnerable position, especially in areas like Gedaref where the main employer is the staple producing sector. A bad season affects this group in two ways. While the decrease in demand for labour results in reduced employment and therefore lower incomes, a bad season usually means higher prices for the staple and thus a low purchasing power for incomes earned. Clearly refugees living in these settlements will remain vulnerable unless an effort is made to diversify sources of income.

#### Suburban wage-earning settlements

Refugees in these settlements are in a relatively better position. Their relatively higher average income and higher income profile (table 3.27 and 3.28) can be attributed to their greater access to the more dynamic urban labour markets. Although 64 per cent of the economically active population in Tawawa (the biggest suburban settlement) are engaged in farm employment, 48 per cent of the income generated in that settlement comes from non-farm employment. A wide variety of occupations ranging from casual labour in the dry season to food sales by the Khartoum-Port Sudan road-side provide major sources of income for refugees in this settlement.

Located near Gedaref and Girba town respectively, Tawawa and Khashm el Girba settlements present more income-generating activities than other rural settlements. Food sales account for 6 per cent of the occupations held by refugees in the sample survey of these two settlements, while it is almost a negligible activity in other rural settlements (table A1 - A12). Other occupations like domestic work and casual labouring generate considerable income to supplement the seasonal income earned in agricultural labouring.

Table 3.27: Percentage distribution of income per adult equivalent by type of settlement

£S	Rural wage-earning settlements	Suburban wage-earning	Land settlements	Urban
200	57	27	64	29
200-399	27	54	26	34
400+	16	19	10	37
Total	100	100	100	100

Table 3.28: Average annual income per adult equivalent by type of settlement

Type of settlement	£S
Rural wage-earning	122
Suburban wage-earning	308
Land	208
Urban	393



### Land settlements

The settlements are based on the provision of a five to ten feddans plot of rainfed land to each refugee household. Food rations supplied by WFP are gradually phased out over two years, and the settlers are expected to reach self-sufficiency in dura by that time. However, several complex and interlocking factors make the achievement of self-sufficiency an impossible target under the present system.

(a) Settlements located in marginal rainfall areas like Um Gargur and Karkora will continue to face a high risk of crop failure. The issue of land is a very complex one, and it is further complicated by the misconception of considering Sudan as a land-abundant country. Out of the 113.5 million feddans representing the total area of both the Central and Eastern regions of Sudan only 7.2 million feddans or six per cent are under crops. Pastures and forests occupy 58.5 million feddans or 52 per cent, while the remaining 48 million feddans fall under the non-arable land category. Therefore it is evident that short of expanding the land frontier by investment in irrigation and other infrastructure, good land can be obtained only by displacing an existing economic activity or risking the already fragile ecological balance by expanding the crop area at the expense of forest land. Obviously this raises a series of complex political and economic questions, and can only be viewed as part of a comprehensive national land policy based on a re-examination of the national resource inventory, measured against the needs of different sectors in the course of the national development plan.

(b) As a result of land shortage, the small holding size of five to ten feddans per household is the major constraint on reaching self-sufficiency in dura. The practice of a crop rotation including fallow land cannot be followed and consequently the continuous deterioration of soil fertility and thus declining yields will further aggravate the situation.

(c) Even in the short run with fairly fertile soil, it is evident that refugee households can only reach self-sufficiency in dura under the assumption of high yields and a ten feddan plot (table 3.29). An average household of 5.6 members completely relying on household labour for harvesting and threshing can only reach self-sufficiency by maintaining a yield of at least 2.7 sacks/feddan which is 15 per cent higher than the average yield in the Gedaref area.

(d) Due to the seasonal nature of agricultural activities and the lack of other forms of employment during the dry season there is a high incidence of under-employment which amounts to 42 per cent of the person years of the economically active population in land settlements.

(e) The need for supporting services and credit cannot be over-emphasised, especially for the more vulnerable households which cannot supply the required household labour and are completely dependent on hired labour.

#### Spontaneously-settled refugees

The majority of refugees live in urban centres. As a result no accurate statistics about their numbers and condition can be easily obtained. While the majority lead a marginal life depending mainly on incomes from casual labour in the urban labour markets or domestic work, some of the well educated professionals are employed in towns and enjoy a relatively better situation. The average higher income enjoyed by urban refugees as shown by table 3.28 does not necessarily imply better living conditions than rural refugees. Obviously the cost-of-living index is much higher for urban areas where about one-third of the income is usually spent on rent.

The major consequence of this type of settlement is the tremendous pressure on the already inadequate service sector. The health needs of the refugee population in urban centres are not properly met and they have to compete with the local population for

**Table 3.29: Profitability of dura production land settlements**

Yield in sacks/feddan	2	3
Dura price LS/sack	15	15
<hr/>		
Returns per ten feddan	300	450
<hr/>		
Costs per 10 feddan (fS)		3
Seeds	3	
Tractor Hire	60	60
Weeding	120	120
Sacks and string	20	30
Transport	6	9
<hr/>		
Total cost	209	222
<hr/>		
Crop profitability	+91	+228
<hr/>		
Less household dura requirement 10 sacks per annum fS	150	150
<hr/>		
Surplus	-59	+78

Source: Compiled from Lars Jonsson and Trevor J. Cree Self-Reliance in Refugee Settlements in the Eastern Sudan UNHCR 1982 and Study of Cost of Production and Comparative Advantage of Crops in Sudan, UNDP/IBRD Planning assistance and training project, 1982.

the limited facilities. Also access to education is more difficult in urban areas. Only 58 per cent of urban refugee children in the school age of 7-15 go to school compared to 70 per cent for rural areas.

The above discussion points out two major factors resulting in the poor economic performance of refugee settlements. First, the "artificial economy" of rural wage-earning and land settlements created by the total dependence on one economic activity. Second, the lack of an institutional framework to identify, categorise and reach urban refugees result in increased pressure on limited urban services and their consequent deterioration and the inability to meet the needs of both the local and refugee populations. The implications will be discussed in more detail in the following section.

But the viability of refugee communities must be considered also in the light of perceptions of refugees themselves and their desires on a number of issues concerning their status.

In fact, table 3.30 indicates that the major preoccupation of refugees in their country of asylum is the search for security and safety of the family.

Table 3.30: Under what conditions would you prolong your stay in Sudan?

	No.	%
1. Safety of family	1,211	75
2. Job security	1,003	62
3. Facility in education	551	34
4. Accepted by Sudanese	539	34
5. Vocational training	518	32

The security of employment is understandably the second preoccupation for household heads (62%) and refugees in general.

The provision of education facilities has the same ranking as acceptance by Sudanese (34%).

It is significant to note that 32% of the household heads considered the provision of vocational training for the upgrading of previous or the acquisition of new skills as a condition for prolonging their stay in Sudan.

Table 3.31: Under what conditions would you return to your country of origin?

	No.	%
1. Political change	1,085	68
2. Political stability	669	42
3. Assistance	241	15
4. Recover previous land and possessions	82	5
5. Find previous employment	30	2

Whereas political considerations, either a change of regime or political stability in the country of origin, appear to be more significant for the refugees to return home than material considerations such as assistance for repatriation, recovering previous land and possessions or finding previous employment. (table 3.31)

To a certain degree, refugees feel accepted by the local population, the majority of household heads considered the relations with Sudanese to be rather good. (table 3.32)

While in some areas conflicts are said to linger within the refugee communities, 92%, of the household heads claimed that they got on well with other refugees. (table 3.33)

Table 3.32: Relations with Sudanese:

	No.	%
Good	387	24
Fair	763	48
Bad	435	27
No answer	21	1

Table 3.33: Do you get on well with refugees?

	No.	%
Yes	1,484	92
No	91	6
No answer	31	2

The prevalent positive feature in attitudes of refugees is their willingness to work together and to organise their life in the new environment.

Eighty-eight per cent of the household heads indicated a great desire to join a cooperative if this was to be established either through the elders committee or as a support to income-generating projects. (table 3.34)

It is also interesting to note that 69 per cent of the refugees expressed the desire to participate in self-help schemes; an indication of a growing sense of community feeling amongst refugees. Most of them were prepared to work for one day or more without pay on such schemes. (tables 3.35 and 3.36)

Among those who objected to participation in self-help schemes only 4% said they were not interested.

Table 3.34: Desire to join cooperatives

	No.	%
Yes	1,413	88
No	173	11
No answer	20	1

Table 3.35: Attitude on participation in self-help schemes

	No.	%
Yes	1,102	69
No	429	27
No answer	75	5

Table 3.36: Condition of participation

	No.	%
One day/week voluntary (free) labour	772	48
More than one day/week (free) labour	156	10
For payment in kind	274	17

Table 3.37: Objection to participation in self-help schemes

	No.	%
Need paid employment for income	190	12
Other reasons	130	8
Too much work	88	5
Not interested	59	4



## V. Conclusions and recommendations

The preceding analysis suggests that the lack of an adequate programme to facilitate the increased participation of urban refugees in economic activities on the one hand, and the inherent weakness in the complete reliance on one economic activity in rural settlements on the other, represent the two main constraints on establishing economically viable types of settlement.

Communities maintain their economic viability through the continuous adjustments of economic activities and the corresponding resource allocation and reallocation in response to variations in the interlocking determinants of supply and demand in the commodity, labour and financial markets. In planning refugee settlements affirmative action is needed at different levels to set these economic forces into motion if the settlements are intended to function as viable economic units. Thus, the over-riding objective in planning the settlements should become one of transformation; the transformation of the needs of the refugee population into effective demand that can be articulated in the local markets with positive contributions to the development of the region. This raises a series of inter-related issues:

(a) The discussion in the second sub-chapter emphasised the fact that the refugee population is not a homogeneous one. This implies that needs vary between categories according to age, sex and type of household. It is vital, in planning settlements, to identify these groups, their respective needs, their inter-dependence and the implications for designing income-generating projects.

(b) An increase in aggregate demand without an accommodating shift on the supply side will only result in inflationary pressures and the eventual erosion of the purchasing power of incomes earned. Therefore, the only way to transform refugee needs into effective demand - without having such a negative impact - is by securing productive employment.

(c) Productive employment can take the form of self-employment in farming or trade. In this case it requires three essential and complementary sets of inputs: fertile land with sufficient and reliable rainfall for crop production, the skilled labour to achieve high levels of productivity and most importantly an efficient vertical system of assembly and distribution of both inputs and the final product.

An alternative form of productive employment is wage earning in the different sectors of the economy inside or outside the settlement. Two major issues are involved:

- The elimination of barriers to entry in the labour market. These barriers take the forms of restrictions on mobility and the need to have business and work permits, licences, etc.
  
- Access to regular and secure employment in order to ensure regular and sufficient incomes and minimise or eliminate under-employment. This involves the diversification of sources of income.

(d) The three issues discussed above give rise to two fundamental and interlocked determinants of the economic viability of settlements, namely size and location. Obviously some important political and security related considerations may play a major role in decisions involving these two issues. However, at this point of the analysis only the socio-economic prerequisites can be studied with the view of meeting them, as much as possible, subject to the political constraints.

The size of the settlement influences its economic viability in three major ways:

- (1) The viability of the internal markets within the settlement is positively correlated to its size. While a viable size

entails diversity in skills - an essential element for the operation of labour markets - it also generates the necessary demand for goods, and services within the settlement.

(2) The per capita fixed cost of infrastructure and services (health, education, water, transport links, electricity and administration) varies inversely with size. Most settlements are just too small for such services to be provided at a reasonable cost. On the other hand when size is not in proportion to available infrastructure (for example Gedaref) the resulting pressure on the limited facilities will lead to their deterioration.

(3) On the production side, larger settlements will allow for the full realisation of economies of scale in enterprises organised at the settlement level. This also facilitates the establishment of settlement level organisations and institutions at a lower transaction cost.

Similarly, location has important consequences on the viability of settlements:

(1) It determines the amount, type and quality of physical resources available for exploitation by the settlers. This is particularly important for crop and livestock production.

(2) It also influences access to markets and services as well as employment opportunities. Most settlements are located in remote areas. A striking characteristic of the settlements when perceived as a group is their isolation from each other and their remoteness from the main urban centres and transport network. For most of them accessibility is a major problem for part of the year. Um Ali and Abuda lie respectively 18 and 12 kilometres, south-east of Showak, on the east bank of the Atbara-Setit rivers. The river is not fordable during part of the rainy seasons. Tenedba, Abu Rakham and Wad Awad are located close to

the Rahad scheme. Their isolation is marked by the fact that Tenedba lies 20 kilometres from the all-weather service road in the Rahad Scheme. Access to these settlements is very difficult during the rainy season. Fath el Rahman, Kilo 7 and Awad Es Sid settlements are located close to the Suki Agricultural Corporation in the Blue Nile Province. The closest urban area is Sennar - 25 km. away. Um Gargur and Karkora are situated respectively 15 and 20 km. from Showak and are not accessible in the rainy seasons. The major exceptions are the two suburban settlements of Khashm-el-Girba and Tawawa located on the Port Sudan - Khartoum all weather road.

(3) From a general perspective the performance of the settlements will be adversely affected in the short-run by the present plight of the Sudanese economy characterised by a high debt burden, high inflation rates and low productivity. Of more significance is the state of the local economy where the settlements are located. Locating settlements in economically depressed areas like Suki will only mean limited opportunities for refugees and additional problems for the local communities.

It is beyond the purpose of this paper to determine what is optimum in terms of the size and location of settlements. As has been expressed earlier, there might be other overriding considerations. Nevertheless, any analytical approach to settlement design should consider these two important aspects.

(e) Finally, and most importantly, maximum participation of refugees in the decision-making process is called for. Unless refugees are allowed and encouraged to articulate their preferences through an efficient institutional framework within settlements, plans will be conceived and decisions made without enough consideration to the refugees' perception. Grass-root participation is a prerequisite for healthy community development in the settlements. The present post-relief situation and the objective of transforming the refugee camps into viable communities make the participation of refugees in the running of their settlement a necessity.

## Recommendations

1. An alternative approach to refugee settlements is called for since what might have been an adequate set up for the relief programmes is certainly different from what is needed for the self-reliance stage. Such an approach will involve major changes in the present structure of settlements and the resettlement of some refugees who are presently in non-viable settlements.

This can only be achieved through close co-ordination between UNHCR, COR, regional government, the Central Ministry of Finance and Planning and refugee representatives.

2. Relief programmes should be maintained as long as the refugee influx continues. However, they should be viewed only as a transitional period towards making refugees self-reliant.

3. A prerequisite for the productive employment of refugees is the upgrading of their existing skills as well as training in fields presently in short supply in the Sudanese labour market.

4. A literacy campaign in Arabic is needed to both improve access to employment and reduce the cultural gap between refugees and Sudanese.

5. To mobilise the refugee skills and set them toward self-reliance and development, income-generating activities need to be identified, financed and established along with the institutional framework needed to ensure their continuity.

6. It is necessary to alleviate the legal constraints limiting the mobility of refugees and their access to employment. A legal officer should be attached to each of the regional COR offices to help refugees acquire business permits, licences and to co-ordinate the evaluation and recognition of degrees and diplomas as well as other qualifications acquired in the country of origin.

7. The establishment of a data bank based on a computerised registration system. This will be of great value to both monitor the refugee situation and the disseminate labour market information. It will also provide the data necessary for planning repatriation in the future.

Footnotes

<sup>1</sup> Economic and Social Research Council, Socio-Economic Survey of Spontaneously-Settled Refugees in Port Sudan, Khartoum, February 1982.

<sup>2</sup> Our Refugee Guests in the Sudan and their Burden of Ill Health. Paper presented by Dr. Hassan Bella Elamin, to the Seminar on Refugees - Khartoum, Sudan, 13-16 September, 1982, p. 9.





Appendix to Chapter 3: Settlements Profile

TAWAWA SETTLEMENT

Year of establishment : 1980  
Type of settlement : Wage-earning; sub-urban  
Planned population : 5,000  
Population (estimated) : 10,000

Household sample : 150

Number of individuals surveyed : 814

1. Demographic Data (%)

Religion : Christian

Ethnic origin : Tigray - 55  
Other Ethiopian ethnic groups - 41

Sex distribution : Male - 68  
Female - 32

Age distribution : 15 - 28  
15-44 - 68  
45+ - 5

Average size of household : 5.39

Average number of children/hh : 1.48

Average number of non-relatives/hh : 0.9

2. Vulnerable Groups (% of population)

Female-headed households : 19  
(% of household heads)

Disabled : 3  
Over 55 years old : 1  
Children 5 years old : 11

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 11  
15-44 - 31  
45+ - 23  
Settlement - 25

Literacy rate (other language) : 15 - 9  
15-44 - 18  
45+ - 18  
Total - 15

Education attainment : Primary - 16  
Secondary - 4  
Higher -  
Settlement - 19

Student/population : 6

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 60  
: 1979-82: 36

Refugees 15 born in Sudan (% population) : 10

5. Economic Data

Income per capita (£S) : 275  
Economically active (% of population) : 58  
Unemployment (% of economically active) : 5  
% of economically active engaged in farming : 64

KILO 26

Year of establishment : 1979 (Refugees expected:  
3,000)  
Type of settlement : Wage-earning; rural employment  
Planned population : 4,500  
Population (estimated) : 4,000  
  
Household sample : 65  
  
Number of individuals surveyed : 420

1. Demographic Data (%)

Religion : Muslim  
  
Ethnic origin : Eritrean  
  
Sex distribution : Male - 53  
Female - 47  
  
Age distribution : 15 - 50  
15-44 - 41  
45+ - 9  
  
Average size of household : 6.46  
Average number of children/hh : 3.25  
Average number of non-relatives/hh : -

2. Vulnerable Groups (% of population)

Female-headed households : 11  
(% of household heads)  
  
Disabled : 2  
Over 55 years old : 3  
Children 5 years old : 13

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 6  
15-44 - 12  
45+ - -  
Settlement - 8

Literacy rate (other language) : 15 - 28  
15-44 - 39  
45+ - 8  
Settlement - 31

Education attainment : Primary - 27  
Secondary - 4  
Higher -  
Settlement - 30

Student/population : 29

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 96

Refugees 15 born in Sudan (% population) : 14

5. Economic Data

Income per capita (fS) : 101  
Economically active (% of population) : 25  
Unemployment (% of economically active) : 42  
% of economically active engaged in farming : 34

FATH EL RAHMAN

Year of establishment : 1978  
Type of settlement : Wage-earning, rural employment  
Planned population : 2,500  
Population (estimated) : 1,600

Household sample : 25

Number of individuals surveyed : 176

1. Demographic Data (%)

Religion : Muslim - 65  
Christian - 35

Ethnic origin : Eritrean

Sex distribution : Male - 46  
Female - 54

Age distribution : 15 - 51  
15-44 - 37  
45+ - 19

Average size of household : 7

Average number of children/hh : 4

Average number of non-relatives/hh : -

2. Vulnerable Groups (% of population)

Female-headed households : 16  
(% of household heads)

Disabled : 2

Over 55 years old : 5

Children 5 years old : 15

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 16  
15-44 - 18  
45+ - 5  
Settlement - 15

Literacy rate (other language) : 15 - 30  
15-44 - 29  
45+ - 14  
Settlement - 28

Education attainment : Primary - 36  
Secondary - 2  
Settlement - 38

Student/population : 42

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 80

Refugees 15 born in Sudan (% population) : 23

5. Economic Data

Income per capita (£S) : 54

Economically active (% of population) : 20

Unemployment (% of economically active) : 8

% of economically active engaged in farming : 42

UM GARGUR

Year of establishment : 1972  
Type of settlement : Land settlement  
Planned population : 5,000  
Population (estimated) : 5,000

Household sample : 75

Number of individuals surveyed : 462

1. Demographic Data (%)

Religion : Muslim

Ethnic origin : Eritrean

Sex distribution : Male - 53  
Female - 47

Age distribution : 15 - 52  
15-44 - 35  
45+ - 13

Average size of household : 6.16

Average number of children/hh : 3.19

Average number of non-relatives/hh : -

2. Vulnerable Groups (% of population)

Female-headed households : 4  
(% of household heads)

Disabled : -

Over 55 years old : 6

Children 5 years old : 15

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 6  
15-44 - 8  
45+ - 3  
Settlement - 6

Literacy rate (other language) : 15 - 40  
15-44 - 36  
45+ - 20  
Settlement - 36

Education attainment : Primary - 31  
Secondary - 3  
Settlement - 34

Student/population : 37

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 72

Refugees 15 born in Sudan (% population) : 25

5. Economic Data

Income per capita (fS) : 105  
Economically active (% of population) : 24  
Unemployment (% of economically active) : 5  
% of economically active engaged in farming : 76



ABUDA

Year of establishment : May 1981  
Type of settlement : Land settlement  
Planned population : 5,000  
Population (estimated) : 5,000

Household sample : 75

Number of individuals surveyed : 419

1. Demographic Data (%)

Religion : Muslim - 75  
Christian - 25

Ethnic origin : Eritrean

Sex distribution : Male - 55  
Female - 45

Age distribution : 15 - 45  
15-44 - 46  
45+ - 9

Average size of household : 5.59

Average number of children/hh : 2.51

Average number of non-relatives/hh : 0.55

2. Vulnerable Groups (% of population)

Female-headed households : 11  
(% of household heads)

Disabled : 1

Over 55 years old : 3

Children 5 years old : 16

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 6  
15-44 - 25  
45+ - 8  
Settlement - 15

Literacy rate (other language) : 15 - 7  
15-44 - 24  
45+ - 5  
Settlement - 15

Education attainment : Primary - 18  
Secondary - 5  
Settlement - 23

Student/population : 21

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 40  
1979-82: 45

Refugees 15 born in Sudan (% population) : 21

5. Economic Data

Income per capita (£S) : 152  
Economically active (% of population) : 30  
Unemployment (% of economically active) : 14  
% of economically active engaged in farming : 63

KHASHM EL GIRBA SETTLEMENT

Year of establishment : 1979  
Type of settlement : Wage-earning, sub-urban  
Planned population : 10,000  
Population (estimated) : 6,000

Household sample : 90

Number of individuals surveyed : 548

1. Demographic Data (%)

Religion : Muslim - 54  
Christian - 46

Ethnic origin : Eritrean

Sex distribution : Male - 53  
Female - 47

Age distribution : 15 - 45  
15-44 - 43  
45+ - 12

Average size of household : 6.09

Average number of children/hh : 2.73

Average number of non-relatives/hh : .07

2. Vulnerable Groups (% of population)

Female-headed households : 19  
(% of household heads)

Disabled : 4

Over 55 years old : 4

Children 5 years old : 14

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 14  
15-44 - 33  
45+ - 11  
Settlement - 22

Literacy rate (other language) : 15 - 14  
15-44 - 31  
45+ - 9  
Settlement - 21

Education attainment : Primary - 27  
Secondary - 7  
Settlement - 34

Student/population : 27

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 81

Refugees 15 born in Sudan (% population) : 14

5. Economic Data

Income per capita (£S) : 139  
Economically active (% of population) : 27  
Unemployment (% of economically active) : 21  
% of economically active engaged in farming : 27

UM ALI

Year of establishment : 1981  
Type of settlement : Land settlement  
Planned population : 5,000  
Population (estimated) : 4,000

Household sample : 60

Number of individuals surveyed : 370

1. Demographic Data (%)

Religion : Muslim

Ethnic origin : Eritrean

Sex distribution : Male - 55  
Female - 45

Age distribution : 15 - 51  
15-44 - 39  
45+ - 10

Average size of household : 6.17

Average number of children/hh : 3.12

Average number of non-relatives/hh : -

2. Vulnerable Groups (% of population)

Female-headed households : 7  
(% of household heads)

Disabled : 2

Over 55 years old : 5

Children 5 years old : 18

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 3  
15-44 - 5  
45+ - 3  
Settlement - 4

Literacy rate (other language) : 15 - 8  
15-44 - 22  
45+ - 14  
Settlement - 14

Education attainment : Primary - 17  
Secondary - 1  
Settlement - 18

Student/population : 21

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1979-82: 55  
1967-73: 38

Refugees 15 born in Sudan (% population) : 39

5. Economic Data

Income per capita (£S) : 156  
Economically active (% of population) : 27  
Unemployment (% of economically active) : 9  
% of economically active engaged in farming : 57

WAD AWAD

Year of establishment : 1980  
Type of settlement : Land settlement  
Planned population : 4,000  
Population (estimated) : 2,000

Household sample : 30

Number of individuals surveyed : 172

1. Demographic Data (%)

Religion : Muslim - 60  
Christian - 39

Ethnic origin : Eritrean

Sex distribution : Male - 55  
Female - 45

Age distribution : 15 - 54  
15-44 - 38  
45+ - 8

Average size of household : 5.73

Average number of children/hh : 3.10

Average number of non-relatives/hh : 0.06

2. Vulnerable Groups (% of population)

Female-headed households : -  
(% of household heads)

Disabled : -

Over 55 years old : 3

Children 5 years old : 16

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 17  
15-44 - 32  
45+ - 7  
Settlement - 22

Literacy rate (other language) : 15 - 19  
15-44 - 23  
45+ - 14  
Settlement - 20

Education attainment : Primary - 29  
Secondary - 5  
Settlement - 34

Student/population : 27

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 84

Refugees 15 born in Sudan (% population) : 18

5. Economic Data

Income per capita (fS) : 109  
Economically active (% of population) : 28  
Unemployment (% of economically active) : 23  
% of economically active engaged in farming : 58



TENEDBA

Year of establishment : 1981  
Type of settlement : Land - wage earning  
Planned population : 5,000  
Population (estimated) : 3,600

Household sample : 54

Number of individuals surveyed : 230

1. Demographic Data (%)

Religion : Muslim - 22  
Christian - 78

Ethnic origin : Tigray - 55  
Eritrean - 36  
Other Ethiopian ethnic groups - 9

Sex distribution : Male - 49  
Female - 51

Age distribution : 15 - 41  
15-44 - 53  
45+ - 6

Average size of household : 4.26  
Average number of children/hh : 1.76  
Average number of non-relatives/hh : 0.07

2. Vulnerable Groups (% of population)

Female-headed households : 20  
(% of household heads)

Disabled : 2

Over 55 years old : 2

Children 5 years old : 17

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 11  
15-44 - 25  
45+ - 21  
Settlement - 19

Literacy rate (other language) : 15 - 7  
15-44 - 17  
45+ - 21  
Settlement - 19

Education attainment : Primary - 20  
Secondary - 3  
Settlement - 23

Student/population : 16

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 62  
: 1979-82: 34

Refugees 15 born in Sudan (% population) : 18

5. Economic Data

Income per capita (£S) : 230  
Economically active (% of population) : 37  
Unemployment (% of economically active) : 6  
% of economically active engaged in farming : 65

GEDAREF

Year of establishment :  
Type of settlement : Urban - spontaneously settled  
Planned population :  
Population (estimated) : 30,000  
  
Household sample : 455  
  
Number of individuals surveyed : 2,166

1. Demographic Data (%)

Religion : Muslim - 40  
Christian - 60  
  
Ethnic origin : Tigray - 22  
Eritrean - 31  
Other Ethiopian ethnic groups - 47  
  
Sex distribution : Male - 54  
Female - 46  
  
Age distribution : 15 - 36  
15-44 - 57  
45+ - 7  
  
Average size of household : 4.76  
Average number of children/hh : 1.73  
Average number of non-relatives/hh : 0.46

2. Vulnerable Groups (% of population)

Female-headed households : 25  
(% of household heads)  
  
Disabled : 2  
Over 55 years old : 3  
Children 5 years old : 15

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 12  
15-44 - 42  
45+ - 27  
Settlement - 30

Literacy rate (other language) : 15 - 13  
15-44 - 31  
45+ - 20  
Settlement - 24

Education attainment : Primary - 20  
Secondary - 10  
Higher - 1  
Settlement - 31

Student/population : 8

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 46  
: 1979-82: 49

Refugees 15 born in Sudan (% population) : 16

5. Economic Data

Income per capita (£S) : 292  
Economically active (% of population) : 48  
Unemployment (% of economically active) : 22  
% of economically active engaged in farming : 17

KHASHM EL GIRBA

Year of establishment :  
Type of settlement : Urban - spontaneously settled  
Planned population :  
Population (estimated) : 10,000

Household sample : 76

Number of individuals surveyed : 210

1. Demographic Data (%)

Religion : Christian

Ethnic origin : Tigray - 36  
Eritrean - 57  
Other Ethiopian ethnic groups - 7

Sex distribution : Male - 41  
Female - 59

Age distribution : 15 - 41  
15-44 - 52  
45+ - 6

Average size of household : 2.76  
Average number of children/hh : 1.14  
Average number of non-relatives/hh : 0.04

2. Vulnerable Groups (% of population)

Female-headed households : 51  
(% of household heads)

Disabled : 2  
Over 55 years old : 3  
Children 5 years old : 22

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 7  
15-44 - 22  
45+ - 31  
Settlement - 16

Literacy rate (other language) : 15 - 6  
15-44 - 11  
45+ - 15  
Settlement - 9

Education attainment : Primary - 11  
Secondary - 3  
Higher - -  
Settlement - 14

Student/population : 5

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 89

Refugees 15 born in Sudan (% population) : 25

5. Economic Data

Income per capita (£S) : 248  
Economically active (% of population) : 43  
Unemployment (% of economically active) : 9  
% of economically active engaged in farming : 23

KASSALA

Year of establishment :  
Type of settlement : Urban - spontaneously settled  
Planned population :  
Population (estimated) : 30,000  
  
Household sample : 451  
  
Number of individuals surveyed : 2,352

1. Demographic Data (%)

Religion : Muslim - 38  
Christian - 62

Ethnic origin : Eritrean

Sex distribution : Male - 52  
Female - 48

Age distribution : 15 - 41  
15-44 - 51  
45+ - 8

Average size of household : 5.22

Average number of children/hh : 2.13

Average number of non-relatives/hh : 0.13

2. Vulnerable Groups (% of population)

Female-headed households : 26  
(% of household heads)

Disabled : 2

Over 55 years old : 3

Children 5 years old : 13

3. Literacy and Education (% of population)

Literacy rate (mother tongue) : 15 - 26  
15-44 - 54  
45+ - 22  
Settlement - 40

Literacy rate (other language) : 15 - 18  
15-44 - 39  
45+ - 19  
Settlement - 29

Education attainment : Primary - 33  
Secondary - 16  
Higher - 1  
Settlement - 50

Student/population : 28

4. Refugee Influx (%)

Entry into Sudan (periods of influx) : 1974-78: 50  
: 1979-82: 45

Refugees 15 born in Sudan (% population) : 14

5. Economic Data

Income per capita (£S) : 269  
Economically active (% of population) : 30  
Unemployment (% of economically active) : 28  
% of economically active engaged in farming : 3



## CHAPTER 4

### Review of Existing Self-Help Activities and Self-Employment of Refugees in Eastern and Central Sudan

#### I. Introduction

The seasonality of employment, and the inadequacy of incomes earned by refugees from agricultural activities in the settlements or from casual labour in urban areas as highlighted above call for the diversification of sources of income. In this respect, a very small number of refugees possessing basic skills, have been able to find sources of initial funding to set themselves up in petty businesses and embark upon extra-farm activities. These are basically of three types:

- individual self-employment
- group self-employment
- self-employment in partnership with Sudanese nationals.

In addition to this, some initiatives have been taken by the COR and various voluntary agencies to encourage the gainful exploitation of the skills and abilities of the refugees.

These attempts have been more or less successful for a variety of reasons. Therefore, it was decided that, a closer examination of the existing activities was necessary in order to build-up a record of experience regarding the reasons of success and causes of failure.

For this purpose, a sample of existing activities in eight settlements and four urban areas were reviewed. The size of the sample and the variety of activities is given in table 4.1.

The information was obtained from the refugees using the interview schedule in Appendix 1 and through discussions with local authorities and responsables of voluntary agencies.

Table 4.1: Approximate numbers and types of spontaneous self-help activities in the camps

	Trading				Artisans				Others	Number of registered activities
	General shops	Butchers	Other <sup>1</sup> trading activities	Blacksmiths/ metal workers	Tea shops and restaurants	Carpenters	Shoe-makers	Tailors		
1. Kashm el Girba	19	6	5	-	9	-	-	5	-	39
2. Kilo 26	13	-	6	-	5	-	-	4	-	22
3. Um Gargur	20	4	-	2	6	5	1	10	-	48
4. Kakora	6	-	-	-	1	-	-	2	-	3 cattle breeders <sup>3</sup> 9
5. Abuda	38	2	2	4	12	1	1	2	-	1 jeweller 1 mechanic (tractor owner) 60
6. Um Ali	12	4	2	1	6	-	-	2	-	25
7. Tavava	98	19	-	9	45	4	1	57	12	1 bicycle repair shop Beer brewers 12 barbers 2 laundries 233
<b>TOTAL</b>	<b>206</b>	<b>35</b>	<b>15</b>	<b>16</b>	<b>84</b>	<b>10</b>	<b>3</b>	<b>82</b>	<b>12</b>	
Number interviewed (total = 52)	14	5	3	2	8	3	3	6	1	(one of each) 7
$\bar{x}$ of total reported number	6.8	14.2	20	12.5	95	30	33	7.3	8.3	

<sup>1</sup> These include wood and vegetable sellers. In some camps these are not registered.

<sup>2</sup> Weavers are as a rule not registered. The 12 here are those working in the community centre at Tavava.

<sup>3</sup> Although there are supposed to be many cattle breeders at Kakora, the members of the refugee committee interviewed reported only 3. Later it was learnt that they were probably trying to avoid paying taxes imposed on cattle owners.

The main objective of the review was to assess the problems and bottlenecks encountered by refugees and to draw conclusions for future planning.

The following is a summary of major findings by type of activity.

1. Self-help activities in the settlements (rural and sub-urban)

For the purpose of this study, self-help activities are defined as the activities providing goods and services for the settlement market.

1.1 Individual refugee initiatives:

As it can be seen from table 4.1, the services constitute the most common self-help activity. Amongst these, trading is the most popular activity undertaken by refugees.

(a) Trading and service groups:

(i) General shops<sup>1</sup>

General shops - the most common category - have been opened in the settlements almost immediately after installation of the refugees. They provide the essential goods within the settlements for refugees, who would otherwise have to travel long distances to purchase these items from the nearest urban areas. Most of the shop owners had been merchants in Eritrea and set up their business with relatively low initial capital investment (on average £\$1400).

The funds have been obtained from different sources such as initial money brought in, wages from agricultural schemes, gifts from friends or relatives. Profitability is impossible to estimate satisfactorily, but there seems good reason for

supposing that the 14 general shops (and their 20 proprietors) derive acceptable margins from their activity, particularly as price control does not exist within the settlements. Average profits per item sold may be as high as 20 per cent for general shopkeepers.<sup>2</sup> A number of other commodity-specific traders (e.g. charcoal dealers in Wad Sherifee) were interviewed and reported profit rates on turnover of between 10-25 per cent.

(ii) Butchers

In the case of the butchers interviewed, mobilisation of initial capital was achieved mainly by agricultural labour. A number of labourers would then pool together, (17, for instance, in Tawawa) purchase livestock and set up as butchers. Entry costs were thus relatively low, since they all worked in the butchers' stalls provided by the camp management in the market places. The initial expenditure ranged between £100 to 500. However, average monthly incomes of such groups might be no more than £40 and profitability is clearly inferior to that of the general shops.

(iii) Tea shops/Restaurants

After general trading, the running of a tea shop/restaurant is the second most popular activity in the camps, providing a venue for relaxation and informal meetings. From the proprietors interviewed, it is estimated that the daily turnover ranged between £0.60 and £3 for the smaller tea shops and between £5 and £20 a day for restaurants. Profitability on tea sales is at least 80 per cent giving a bare minimum monthly income of £56 for the families who run these concerns.

All the above self-help activities provide useful - if at times exorbitantly priced - services to the settlement inhabitants. Indeed, the service sector displays the greatest dynamism of all the self-help activities noted in the settlements.

(b) Artisans:

The only artisans practising their trade in the camps were blacksmiths, carpenters, shoemakers, tailors and weavers. Excluding tailors and weavers, who constitute over 70 per cent of the total number of licensed artisans, the number of registered practising artisans was very low.

(i) Tailoring

Most of the tailors interviewed had worked in this capacity for a relatively short period (2-12 months) and had learnt their trade in the Sudan. Initial investment could run to between £300/400, the cost of a sewing machine. For those who could not afford this, renting at a rate of £20 per month or leasing on a profit sharing basis, was reported. These high entry costs meant that tailors did not employ outside help, relying at most on additional family labour.

Unlike for many other artisans product demand is more certain as most refugees wish to purchase their national dresses which the tailors can provide. For this, as with other work, the client provides all the materials. On this basis, daily turnover averages between £2-£6, with annual incomes varying between £460 and £1300; an average ratio of monthly income to initial capital investment of 0.16:1. The principal constraint for tailors thus remains the high initial entry costs; a problem that could be alleviated through careful provision of loans.

(ii) Weaving

The major problem for individual weavers was rather different. While initial investment costs are lower - and in Tawawa, for instance, the Community Centre houses a number of looms which can be used gratis - and inputs are purchasable from Khartoum, demand and price fluctuate severely.

The main obstacle for the expansion of production is the very low demand for the type of woven cloths which do not meet Sudanese tastes in the surrounding areas.

(iii) Blacksmithing and carpentry

In all the settlements it appears that these goods and services are mostly provided from outside the camps. A number of carpenters and blacksmiths were interviewed in Um Gargur, Abouda and Tawawa. While some had been practising their trades for as long as seven years, others had been working for as little as a month. Most had learnt the trade in their home country but had developed further experience in Sudan.

The basic requirement is hand tools, for initial investment runs to between £S150-£S400. While one interviewee had brought his tools with him from Eritrea, most accumulated the necessary funds by wage labouring. Once in business, work was strictly done to order with materials and specifications provided by the client. The items manufactured and repaired by carpenters were windows, doors and furniture. The blacksmiths also did a lot of repair work which involved forging and soldering. Items such as metal stoves, lamps, coffee pots are common items which were repaired by them. The materials used for production by blacksmiths are mainly vehicle scrap, used 44 gallon drums and jerry cans and corrugated iron sheets. The fuel used for heating is charcoal which is bought from fuel sellers within the camps.

As regards profitability, the variations were wide, ranging from a monthly income of £S20/30 to over £S100. In general, the monthly incomes per capital invested for these two categories were estimated to be between 0.25:1 and 0.15:1. With such ratios it is not surprising that hiring-in of labour is uncommon.

The major barriers to enhanced production (as against simple repair work) by carpenters and blacksmiths remain lack of

finance, skill deficiencies and shortage of raw materials in the neighbourhood of the camps. However, a more structural constraint is the limited size of the market, within the settlement.

(iv) Shoemaking

The majority of the sample learnt their trade in their home country. Initial investment ran to between £S35/50 and was purchased through savings accumulated by agricultural labouring. While repair work predominated, one interviewee in Tawawa manufactured soles for slippers using rubber tyres.<sup>3</sup> His monthly income was £S58, as against an average of £S24; an income to capital invested ratio of 1.2:1 instead of 0.7:1. The Tawawa shoemakers work has potential for generalisation in so far as it could provide cheaper footwear for the settlement inhabitants.

The problems expressed by the shoemakers were the lack of funds, which prevent them to procure materials and adequate tools.

(v) Other artisanal work

This ranges from bicycle repairers with initial investments of around £S12 and annual incomes of £S520, to hairdressers and launderers. The latter barely allows for an annual income of £S275. When investment is initially more lumpy - as with jewellery and tractor transportation - it appears that profitability is correspondingly augmented. A tractor mechanic in Abuda, who also used his tractor to transport goods and people, could earn as much as £S60 a day in season.

1.2 Cooperative/group activities in the settlements

Other basic activities such as bakeries and grinding mills are run on a cooperative basis. The membership of the cooperatives in four settlements are shown in table 4.2. Shares were bought for £S5

Table 4.2:

No.	Name of camp	No. of families belonging to cooperative	% of total no. of families in camps	Business owned
1	Khashm-el-Girba	245	26	Shop, flour-mill, bakery <sup>1</sup>
2	Kilo 26	386	50	Shop, flour-mill (SCC donated)
3	Um Gargur	800	80	Bakery-mill, butchers shop
4	Um Ali	every family	100	Shop (machines for mill but not yet in operation)

<sup>1</sup> To be started by the end of 1982.

each by all the members. In the case of cooperative shops those in the sample were not registered and hence could not receive subsidies on basic commodities. Prices and stock were accordingly very similar to those in private general shops.

The bakeries in this sector have yet to start production, but given a secure product demand adequate profitability could be secured.

By contrast, a number of sorghum grinding mills are already operating. The capital equipment had been donated.<sup>4</sup> However, at Kilo 26 daily milled output (600 kgs.) was only 60 per cent of that required to ensure profitability. In Um Gargur daily output averaged 1,800 kgs., whereas the break-even point was as low as 540 kgs. Accordingly, profits exceeded £3,420 per annum in this instance.

It is seen that in setting up mills in the camps it is essential to take into consideration the break-even point if the enterprise is



to at least break even. The above figures suggest that at Kilo 26 a net loss is incurred when the cost of replacement of the equipment is considered. Thus at the end of the economic life of the equipment (estimated at 10 years) the cooperative would have to dig into its funds for replacement. The charge for milling should be adjusted to avoid these losses if the enterprise is to be self-supporting.<sup>5</sup>

### 1.3 Initiatives for self-help activities taken by COR and voluntary agencies

#### (a) Vegetable gardens

Originally intended as communal gardens producing low cost vegetables, in reality both features have been missing from the start.<sup>6</sup> With high running charges - inflated by the employment of an excessive permanent staff - the cost of production remains high (£S500 per feddan per annum), incommensurate with any possible revenues. The gardens at Um Gargur and Karkora have, moreover, been closed due to lack of water, while those at Kilo 26 and Khashm el Girba are in a highly unsatisfactory condition. Substantial UNHCR funding is thus being dissipated.

The gardens require complete reorganisation coupled with a policy of greater refugee participation in the enterprise. Administration costs would then be pared down while mobilisation of refugee labour on a 'food for work' basis could enhance production.

#### (ii) Poultry farms<sup>7</sup>

Several farms have been started by the camp management and by SCC at Um Sagata. The ventures have not been very successful. At Khashm el Girba half of the 1,000 chicks initially provided perished during the first rainy season. The basic infrastructure for centralised poultry farms is yet lacking. Greater success might be achieved in the environment of domestic poultry rearing relying on local cross-bred strains.

(iii) Community Centre Workshops

Centres have been set up in a few settlements providing facilities, free of charge to artisans in the camps such as women's centres of sewing and embroidery, carpenters workshops as well as weaving and tailoring workshops. All the artisans had to provide was their own materials and marketing outlets.

(b) Initiatives by voluntary agencies

(i) SCC handicrafts projects

The SCC projects are non-profit making and aim to provide elementary relief. Spinning and weaving (at Um Gulga, Um Rakoba and Gedaref), basket making (Abu Rakhm) as well as sewing and embroidery are the main activities.

- Spinning and weaving projects

In Um Gulga settlement, there are 135 spinners (women) and 22 weavers (1 woman and 21 men) registered with the SCC project. Fixed quantities of cotton and yarns are allotted to each spinner and weaver who are paid on a piece-rate basis. Weavers use traditional looms (initial investment of between £\$10-15 per loom) and produce on average 9 metres a day of the traditional "gabi" or "boloko" white cotton cloth.

The spinners are paid at a rate of £\$4 per kg., while the daily income of the weaver averages £\$3.15. Marketing is done by the SCC with cloth sold at £\$1.50 per metre and the blankets being distributed to refugees.

The SCC also provides yarn and pays weavers in Um Gulga and UM Rakoba for their products. The number of weavers fluctuates widely as a result of the shift into agricultural labouring in the rainy season.

The main problem faced by the SCC is that of marketing the finished products. At present the cloth is sold only to foreigners in Sudan, a market which has already been saturated. In the present state, the designs do not meet local and foreign tastes.

- Women's basket making, sewing and embroidery centres

Home produced palm leaf baskets made at Abu Rakham are marketed by the SCC on a subsidised basis in urban areas.

A comparable level of subsidisation exists in the sewing and embroidery centres. Designed to impart basic skills the proceeds of any sales go towards the purchase of further inputs. Attendance fluctuates widely and demand is uncertain.

The centres also run small nurseries where participants could leave their children during the training period.

(ii) Sudan Aid self-help projects for vulnerable groups

UNHCR provision of loans to Sudan Aid for a number of projects in Tawawa, Um Gulga and Tenedba, have been directed towards such diverse activities as soap making, T-shirt printing, rope (macramé) work, tea shops, water carts, petty trading and shoemaking. In addition, some five handicapped refugees are being specifically trained.

- T-shirt printing

The most successful is T-shirt printing. Old X-ray plates form the stencils while oil paint is used for the design. Despite the fact that oil paint is unsuitable, the

market remains relatively buoyant. Products are sold not only in Gedaref but in Khartoum and Port Sudan. The profit rate calculated on the cost of each shirt amounts to around 40 per cent.

- Soap-making

Of comparable potential is the women's soap making project at Um Gulga. Three women with a loan in kind of £5,870 have set up a small soap factory. Rigorous enough tests as regards quality have yet to be made but the manufacturing process itself appears satisfactory. Animal fat and caustic soda remain the principal inputs. With the latter being subsidised a profit rate of 50 per cent on costs is feasible.<sup>8</sup>

Other projects include the manufacture of rope hangers for vases by handicapped refugees and the production of wood and rope beds. Provision of donkey carts for transportation of water in Tawawa is another project. While the rope hangers and bed production appear adequately profitable at present, this in part depends on subsidised inputs and low output. Demand and lack of marketing knowledge remain, as elsewhere, major constraints. In the case of the water transportation project the recipients' income would in any event be low (£360 per annum) and is further depressed by the poor design of the cart, with resultingly high maintenance and repair charges.

2. Self-employment initiatives by urban refugees in Kassala, Gedaref, El-Showak and Khartoum

2.1 Individual self-employed

Although the government policy is to accommodate as many refugees as possible in the organised rural or sub-urban settlements the

majority of them have spontaneously settled in urban areas and a very small number of them as reviewed in Khartoum, Kassala, Showak and Gedaref have started small-scale businesses.

These ranged from shoemakers and carpenters to general traders and photographers. A number of shoemakers were interviewed in Kassala, one of whom not only employed a permanent assistant and between four and six temporary workers, but also trained other refugees. His monthly profits were around £S150, principally in the production of hand-made shoes. It seems possible that this market could be widened in a number of the major towns. However, this particular shoemaker had the advantage of bringing his tools with him from Ethiopia, as initial capital investment can exceed £S1,000.

A comparable level of investment was reported for an urban carpentry shop. Work is done to order and while income per week can rise to £S100, fluctuations are pronounced.

In the services sector, a number of general merchants and the joint proprietor of a photo studio were interviewed. As in the settlements, trading secured more than adequate profits, while the photo studio's initial capital investment (£S2,100) came from earnings in the Gulf.

## 2.2 Group activities

### (a) Relief Society of Tigray weaving cooperative, Omdurman, Khartoum

Started with a donation of £S60 four years ago, some 28 refugees now work a total of 22 traditional looms. The original professional weavers have all left for Saudi Arabia and their replacements mostly came from Um Gulga settlement, being trained thereafter for about a year. The cooperative provided the yarn and of the £S3 profit made on every shama (10 hours labour) 90 per cent went to the weaver. Where the latter produced

non-traditional designs income could be double. However despite some sales within Sudan as also in the Gulf and Italy, the major problem faced by this cooperative was that of marketing. Advice on designs, improvement of looms, and additional training are required in order to secure adequate outlets.

(b) Relief society of Tigray tailoring cooperative, Khartoum

Some 18 tailors (including four women), trained in Khartoum, sew on contract. Paid by the piece their monthly incomes range between £\$60-100. The cooperative is now self-supporting and caters for a local refugee market. Its location - away from the main roads - remains a considerable drawback in terms of marketing.

Most of the refugees were trained in a centre opened for this purpose in Khartoum for a period of 6 months.

II. Conclusions

Of the variety of self-help activities already in existence, many still remain of marginal importance with regard both to income and employment generation. A large number of projects initiated by external agencies (Camp Management, UNHCR and voluntary agencies) continue to require heavy levels of effective subsidy. At the same time there is evidence of projects being set in motion without adequate evaluation of product demand, skill resources and management expertise.

The major constraints and bottlenecks preventing refugees from initiating small-scale businesses in the settlements and towns in Eastern and Central Sudan could be summarised, as follows:

(1) Economic constraints

(a) Lack of initial funding remains the major impediment hindering the development of extra-farm activities. Table 4.3

provides examples of sources of initial funding which have enabled a very small number of refugees to set up their own business.

Table 4.3: Source of initial funds for spontaneous self-help activities

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No.	Principal source of initial funds	% Respondents reporting
1	Money brought from Eritrea (sale of items brought from Eritrea)	25
2	Loans from relatives and friends and voluntary agencies. Borrowed equipment	9
3	Earned from wage labour	47
4	Rented building and/or equipment	9
5	Gifts	12
6	Uses facilities at community centre	6

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Note: Some reported more than one source.

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This problem is more acute for urban refugees whose requirements of working capital are higher due to the levels of rents, and to the larger scale and sophistication of operations. While the above situation can be eased by working in partnership with Sudanese, the total dependence on the latter has led in some cases to unfair terms of partnership.

(b) Difficulty in obtaining raw materials: Most of the required materials are only available in the urban centres. Given the distances involved, the poor transportation facilities and the difficulty in obtaining travel permits, the artisans in the settlements cannot obtain a regular supply of raw materials at reasonable costs.

(c) Limited market for the products: The scattered nature of the settlements and their small size (average of 6,000 persons) combined with low purchasing power of refugees offer a very limited market for the products of artisans. While some activities could rely on the settlement market, most of the artisan activities if replicated on a large scale would necessitate the establishment of outlets outside the settlements, which again raises the problem of travel permits and lack of mobility.

Larger settlements would have created a more dynamic and viable market within the refugee community.

(d) Skills: Generally refugees have brought many skills with them. However, the most skilled ones have left the rural areas towards urban centres and in some cases, the Sudan. The existing skills do not always correspond to the market requirements in the new environment and thus require upgrading in order to provide marketable products in the Sudan. Lack of basic managerial and accounting skills in the settlements and urban areas have affected the profitability of activities.

(e) Lack of infrastructural facilities such as adequate water supply, accessible roads round the year and transportation constitute major bottlenecks for a wide range of activities.

(2) Institutional constraints

The difficulty of obtaining work, business and travel permits has been a major constraint in securing gainful employment for refugees.

In urban and sub-urban areas, work and business permits constitute essential prerequisites in finding employment in the formal sector or to start a business.<sup>9</sup>



In the rural settlements, the main constraint is obtaining travel permits;<sup>10</sup> this limits the movement of refugees in search of raw materials and equipment for extra farm activities or for the sale of finished products. Collective initiatives in the rural and urban areas have attempted to overcome some of the above-mentioned obstacles. However, a few activities could be regarded as technically and financially self-supporting. Refugee-run enterprises in the urban areas, such as the REST tailoring and weaving cooperatives, have been the most successful in this respect, although expert advice on designs and marketing strategies are required for the future expansion of the activity.

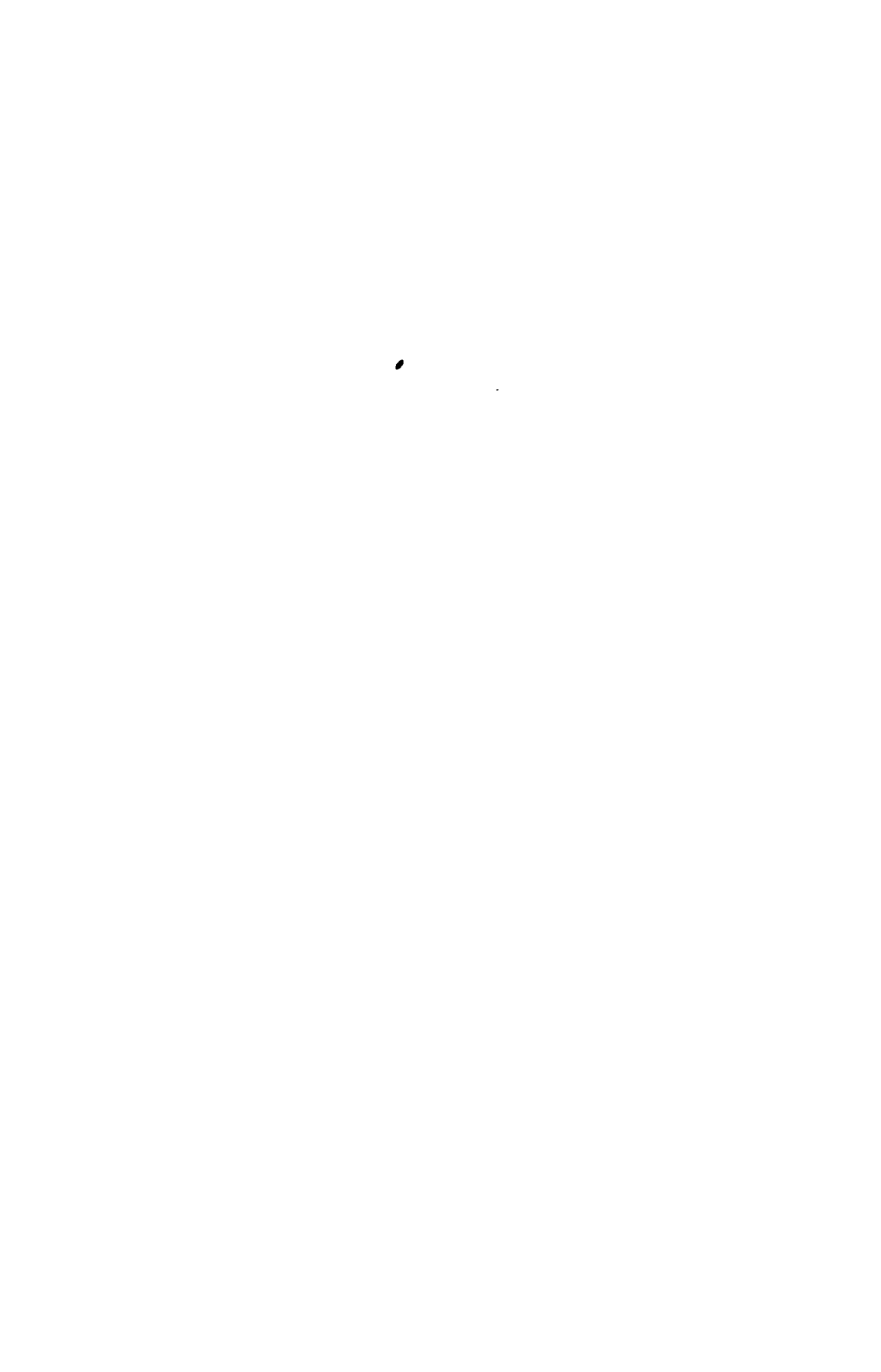
The UNHCR/COR community centres provide facilities for only a handful of camp residents with the necessary skills. However, since no raw materials are provided and credit facilities are non-existent, the facilities could not be used to advantage. Communal activities such as vegetable gardens and poultry farms do not cater for participation by the refugees and cannot truly be classified as "self-help" activities.

The activities sponsored by various voluntary agencies are heavily supported financially and administratively. Most of the projects could be considered as social welfare schemes rather than socially and economically viable activities, and it is doubtful, that these activities would survive the withdrawal of the support.



Footnotes

- 1 These do not include cooperative shops.
- 2 Allowing for 10 per cent transportation and handling costs.
- 3 One used rubber tyre costs £S7 and can be used to make 10 pairs of slippers. Uppers can be made of scrap pieces of cloth or even rubber.
- 4 The duty-free price of these donated mills were around £S8000.
- 5 The charge is lower at Kilo 26 than in any of the other camps.
- 6 Vegetable gardens were initially set up in 9 settlements: Um Gargur, Karkora, Abu Rakham, Wad Awad, Tenedba, El Kawata, Khashm el Girba, Kilo 26 and Suki.
- 7 At five settlements: Tenedba, Karkora, Um Rakoba, Khashm el Girba and Tawawa.
- 8 This is estimated with a price of 15 psts. per bar of soap. Factory made soap of the same size currently sells at 30 psts.
- 9 In the Port Sudan Survey (National Council for Research, Socio-Economic Survey of Spontaneously Settled Refugees in Port Sudan, Khartoum, 1982). 94 per cent of refugees reported that they felt handicapped by problems in obtaining work and business permits. According to the ILO Skill Survey, only 1.8 per cent and 12.6 per cent of household heads in urban and sub-urban settlements possessed business and work permits respectively.
- 10 Only 5.5 per cent of household heads in the settlements possessed business and work permits respectively. (Source: ILO Skill Survey).



Appendix to Chapter 4

Interview Schedule for Spontaneous Self-Help  
Activities in the Settlements

Name of settlement:

Type of activity:

Ownership:

Length of time in business:

Occupation before in Ethiopia/Eritrea:

Starting capital (value):

Source of starting capital:

Turnover:

Profit:

Share of profits:  
(for group ownership)

Technology in use (if any):

Infrastructural facilities utilised:

Raw materials types, sources and costs:

Number and skill of employees:

Wages paid:

Types of clients:

Market outlook:

Problems (if any):

Plans for the future:



## CHAPTER 5

### Female-Headed Households: A Profile

One of the major concerns of the preliminary Mission to Sudan was the plight of refugee women in general and of the female-heads of households, in particular. In fact, the abnormally high incidence of female-headed households and their precarious conditions of life called for specific measures to enhance their standard of living. This particular group of refugees constituted in most cases one of the poorest segments of the population.

To assess the needs and expectations of refugee women and to propose means of providing employment opportunities and reliable sources of income, informal interviews and field surveys were carried out in the rural settlements, as well as in urban areas.

#### Present conditions

As indicated earlier in table 2.18 of the Skill Survey, on average, the female-headed households represent 22 per cent of the total refugee households. This is a direct outcome of the breakdown in the family structure due to the traumatic events which have preceded and accompanied the fleeing of refugees from their homeland.

Widowed, separated, divorced and single women who were traditionally looked after within the system of extended family, suddenly assume the double responsibilities of mothers and breadwinners for a large number of dependents in an alien environment.<sup>1</sup>

Although the prevalence of the female-headed households is due to a series of factors such as the participation of male supporters in the liberation wars and internal conflicts, the phenomenon is also

intimately related to the employment conditions of refugee men in the host country. In fact, the lack or inadequacy of employment opportunities in the rural and urban areas has resulted in the migration of men in search of employment.

A common feature in most of the settlements, is that men leave the rural areas to major towns in Eastern Sudan, or sometimes even the country, leaving behind a large number of dependents. In the best cases, irregular remittances are sent for the first few months or years.

Moreover, for many refugee men and women, the lack of employment opportunities and stable sources of income has exacerbated the tensions within families, thus leading to very high rates of divorce and separations.

The variations in the percentage of the female-headed households according to the type of settlements, underpin this observation. In fact, the highest rate is recorded in the urban areas (27 per cent) as compared to the wage-earning settlements (15 per cent) and land settlements (10 per cent). In the latter case, where the allocation of small plots of lands has provided a more reliable source of income for refugees, the family structure is more stable and consequently the percentage of female-headed households, much less important. By contrast, in the urban areas such as Port Sudan, despite the presence of adult male members, women are the major economic providers of a large number of households. The casual labour in the informal sector is only available to a limited number of refugee men and therefore, more and more refugee women are forced to resort to prostitution or employment as housemaids in order to earn a living for their large households.<sup>2</sup>

Except for a very few women who have set up very small scale businesses (such as charcoal sale or teashop/restaurants) three main categories of female-headed households can be generally distinguished:



- (a) In the isolated rural settlements such as Suki or Kilo 26, the female-headed households are classified by the camp management as a "vulnerable group" and WFP provides them with food rations. Mostly of a nomadic background coming from the lowlands of Ethiopia/Eritrea, refugee women and their households live solely on the meagre food rations and constitute one of the poorest strata within the refugee community.
- (b) In the sub-urban settlements such as Tawawa and Um Gulga, as well as in the towns, three major activities predominate among the refugee women:
- (i) Food and beverage processing: 41 per cent of the economically active female heads of households are engaged in beer brewing or "anjara" (traditional pancake) making;
- (ii) Prostitution is the major source of income for 27 per cent of female-headed households mainly among refugees originating from the highlands of Ethiopia. This pattern predominates especially in the extremely poor and overcrowded slums of Port Sudan.

It should be pointed out that in many cases these activities (beer brewing, anjara making and prostitution) go hand in hand, providing refugee women with relatively high earnings and enabling them to support a large number of dependents.<sup>3</sup> Sometimes women send remittances to their country of origin. However, it should be stressed that although the influx of refugees has aggravated the problem of prostitution, the phenomenon is not exclusively related to the refugee community. The magnitude of the problem is also sometimes exaggerated and is prejudicial to the image of refugees in the host country.

(iii) Domestic service and employment in the hotels are other sources of income for women in the urban areas, but the incomes are by far less than what they get from the above-mentioned activities.

### Education, skills and employment potentialities

The Socio-Economic survey of refugees revealed, as expected, that women have a lower educational and skill profile.<sup>4</sup> The majority of them, originating from rural areas, only possess the traditional skills specific to their respective communities. Women from the highlands of Ethiopia are mainly trained in sewing, knitting, embroidering and spinning. Those from the nomadic communities of the lowlands in Eritrea possess skills in dairy production, basket and mat weaving, spinning, construction of mud stoves and sometimes in pottery.

As it was briefly outlined in the preceding chapter, a number of centres have been set up in the settlements and urban areas, either by COR or by various voluntary agencies, providing certain facilities to make use of the traditional skills of women. However, none of these activities could be regarded as a reliable source of income. They only attract a small number of women and most importantly they do not reach the main target group, i.e. the female heads of households. The products of the centres set up by COR are occasionally sold in exhibitions; while the voluntary agencies display the finished goods in the shops in Khartoum or Gedaref for the foreign clientele or export to other countries. In the latter case, the activities are heavily subsidised and conceived as a welfare scheme rather than a means to provide a reliable and independent source of income.

The main objective in the present plan of action has been to avoid the "dependency syndrome" and achieve the self-reliance of refugees by proposing a range of socially and economically viable activities. The general approach is to include men and women, on equal footing in all the proposed activities; however given the lower

literacy and skill profile of women and their relative isolation, they could be bypassed by common activities. Therefore specific proposals are made to reach the particular target group of female-headed households. These activities have been selected after a thorough feasibility study in each case. The aim has been to avoid the "handicrafts trap" such as in mat and basket weaving which are time consuming activities with an extremely limited market in the Sudanese environment. The proposed-scheme covers a wide range of agricultural and non-agricultural activities from poultry keeping to secretarial and administrative work for different groups of women in rural and urban areas of Eastern and Central Sudan.<sup>5</sup>

These projects intend to provide them with cottage-based activities, in case they cannot leave their children alone, as well as outdoor occupations. Moreover, within the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees", it is proposed to set up women's production centres in each settlement grouping all income generating activities for female-headed households, breaking their state of isolation and developing their potential for self-reliance.



Footnotes

<sup>1</sup> According to the ILO Socio-Economic Survey, 71.7 per cent of female-headed households reported being previously housewives as against 29.5 per cent at present.

<sup>2</sup> The Survey of Refugees in Port Sudan carried out by the National Council for Research in 1982 revealed that only 12.3 per cent of the economically active males are employed.

<sup>3</sup> The Port Sudan Survey, indicated that prostitutes constitute 2.7 per cent of the total population surveyed earning 14.6 per cent of the total income.

<sup>4</sup> 88 per cent of female heads of households are illiterate.



**PART III:**

**PROGRAMME OF ACTION FOR SELF-RELIANCE OF REFUGEES**

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## CHAPTER 6

### A Global Approach

As revealed by the field surveys undertaken within the framework of the Project on Income Generating Activities, the pattern of employment in the rural settlements and in urban areas does not secure a reliable livelihood for the majority of refugees in Eastern and Central Sudan.

In the land settlements, the location of the agricultural land in marginal rainfed areas, the small size of the allocated plots and poor management practices have resulted in high risks of crop failures and uncertainties of income.

In the rural wage-earning settlements, the fluctuations of demand for wage-labourers in the irrigated schemes, low payments and sometimes hard conditions of work have created a high degree of poverty among refugees.

In both cases, the seasonality of agricultural activities, compounded with quasi-absence of other forms of employment have led to high rates of unemployment and to low incomes:

- the unemployment rate amounts to 42 per cent of the economically active population in land settlements and 48 per cent in wage earning settlements.<sup>1</sup>
- the annual average income per adult equivalent is estimated at £S208 in land settlements and £S122 in rural wage-earning settlements. It is slightly higher in the sub-urban wage-earning settlements where refugees can seek non-farm employment in nearby towns.

The inadequacy of incomes earned from agricultural activities in the settlements or from casual labour in urban areas, calls for the diversification of activities and sources of income. However, the field surveys and the review of a few existing activities disclose a number of factors which prevent refugees from initiating extra-farm activities on their own. The main constraints are the following:

- (a) Economic constraints:
  - lack of funds
  - difficulties in obtaining raw materials at reasonable costs
  - limited market for the products in the settlements which are small in size and scattered over a large area
  - lack of appropriate skills.
  
- (b) Institutional constraints such as difficulties in obtaining work, business and travel permits for refugees.

Therefore, based on the major findings of the field studies and taking into account the environmental and institutional constraints in Eastern and Central Sudan as set out in the preceding chapters, a detailed Programme of Action was worked out. A global approach aiming at achieving self-reliance for refugees and their integration in the development of the host country, underlies the proposed Programme of Action. This new approach goes beyond the conventional responses offered hitherto by the international community to the refugee problem; i.e. relief assistance and resettlement in third countries, which have proven to be inadequate. The approach is based on the following premises:

- (a) with continuing flows of refugees and no prospect of voluntary repatriation the problem should no longer be considered as a transient phenomenon. Long-term development-oriented strategies are called for;

- (b) refugees represent a largely untapped economic potential; which with appropriate planning and initial assistance could be converted to productive forces contributing to the development of the country of asylum;
- (c) the development programmes for refugees should benefit the "refugee-affected areas" as a whole including to the extent possible the local populations;
- (d) refugees, as immediate beneficiaries, have to be involved from the outset in the design, formulation, implementation and management of development plans.

The proposed Programme of employment promotion for refugees in Eastern and Central Sudan consists of three major lines of action:

- (1) integration of refugees in the local labour markets
- (2) initiation of a number of pilot income generating activities
- (3) establishment of a Revolving Fund to finance small-scale ventures.

The 17 detailed project documents covering these three areas are included in Chapter 7.

#### I. Integration of refugees in the local labour markets

The results of surveys outlined in the preceding chapters point out to the fact that while the Sudanese labour markets are characterised by an acute shortage of skilled manpower, due to massive emigration of Sudanese to the Gulf countries, many refugees possessing scarce skills remain unemployed. This is a direct outcome of three inter-related factors. First, the restriction on refugee mobility which prevents them from responding to regional demand differentials. Second, the limited knowledge about refugee skills. Third, and most importantly, the lack of a system to generate and disseminate labour market information and to match demand and supply as much as possible.

In order to provide greater employment opportunities for refugees, a project proposal on "Refugee Registration and Labour Market Monitoring Systems" is proposed (see Chapter 7, Project no. I). It is intended to initiate the establishment of a computerised system jointly operated by the Offices of the Commissioner for Refugees and the Commissioner of Labour to serve the two purposes of registration of refugees and their integration in the Sudanese labour markets.

The Socio-Economic Survey of refugees provided the first comprehensive set of data on refugees and the proposed scheme would maintain a continuous flow of information on their skill profile, as well as data on vacancies and local demand for labour. The system will act as a clearing house matching as much as possible the supply of labour (refugee labour force) with the demand (employers' needs).

## II. Pilot income-generating activities

The objective of the feasibility studies carried out from August 1982 to January 1983 was to identify new income-generating activities which would supplement the agricultural incomes in rural settlements and provide alternative employment opportunities to refugees in urban areas. Fifteen projects are proposed under this topic, embracing three main types of activities:

(i) Agricultural and related activities:

It should be noted that the ideal solution of opening new lands has not been considered; the main aim has been to provide additional agriculture-related activities such as animal breeding and dairy farming, poultry and bee-keeping, vegetable gardening and food processing;

(ii) Small-scale industries, such as carpentry, brickmaking, electrical and mechanical repairs and leatherwork;

(iii) Provision of services such as secretarial pools in the urban areas.

The diagram in the Appendix shows the complete set of proposed activities creating new employment opportunities for approximately 11,000 households, i.e. new sources of income for 55,000 refugees representing 8 % of the refugee population in Eastern and Central Sudan, in four towns and 15 settlements or group of settlements. This is without taking into consideration the spill-over effect on the whole region and the involvement of local populations in many projects.

Tables A6.1 and A6.2 in the Appendix indicate the required annual disbursements, the expected employment generation and the geographical coverage of the projects.

Project no. II sets the Organisational Structure for the initiation of all income-generating activities. Its objective is twofold:

- (a) given the small size of settlements, their isolation and scattered nature, and in order to benefit from economies of scale, the proposed structure aims at establishing a number of common services such as transportation and marketing facilities on a decentralised basis, for a large number of locations;
- (b) ensure full refugee participation in the implementation and management of activities. The objective is to mobilise and encourage grass-root refugee organisations to run the proposed activities. In this respect, a particular emphasis has been put on the creation of women's groups to overcome their state of isolation in most areas.

As for the income generating activities, each project document contains, inter alia, details of the feasibility study, the size of the target group, the location of the project, the market potential for the products and the expected incomes.

The main concern in the choice of each activity has been its economic and social viability in the medium and long term. The length

of the proposed projects varies from one year to three years depending on the type of activity and the importance of the gestation period. However, it is expected that most activities would be viable and financially rewarding after a 6-month to 12-month period, and that at the end of the project life, they would be technically and financially self-supporting.

In the selection of the activities, the following considerations have been fully taken into account:

- (a) the needs felt and the desires expressed by the refugees:  
refugees have been naturally involved from the beginning in the identification and formulation of project ideas. The details of the range of proposed activities have been discussed with them at various stages of the Project, during the field surveys and the feasibility studies, as well as in the Khartoum workshop in April 1983. In the formulation of the proposals, a great effort has been made to reflect their concerns and suggestions;
- (b) the conformity of the activities with the Sudanese development objectives;
- (c) the economic location of the activities:  
The selection of the sites for different types of activities has been guided by the environmental constraints, the availability and proximity of inputs and infrastructural facilities. Especially with regards to the availability of water, the settlements facing important shortages in its supply have not been considered for the activities for which water is a major input. For a few other settlements, where the supply of water is irregular (0 to 30 litres per day and per capita), due consideration should continuously be given to the availability of the required amount of water, especially if several projects were to be implemented at the same time.

(d) the market potential for the output;

Suitability of the output to local tastes: The products of many on-going self-help activities do not meet the tastes of Sudanese consumers. This is the case, for example of handicrafts or handspun and woven cloth using Ethiopian design and patterns.

In the proposed projects, the adaptation of products to Sudanese taste has thus been given due interest through provision of appropriate expertise and on-the-job training.

Market outlets: In the case of certain activities, the size of settlements markets are adequate to make them viable. In other cases, extra-settlement Sudanese markets will provide the additional outlet required to guarantee the viability of activities. In this last instance, it is envisaged to provide shops in market places in nearest towns for display and sale of finished products. The latter not always being in the vicinity of the settlements, transportation facilities will be provided by the Organisational Structure envisaged in Project no. II.

Sufficiency of purchasing power: The suggested prices of the goods to be produced are equivalent to, or in many cases, lower than those presently marketed in the Sudan. The actual purchasing power is therefore taken into consideration.

(e) the use of existing skills;

The proposed activities intend to use to the extent possible the existing skills of refugees. For this purpose, the recruitment of international staff for the implementation and management of project has been confined to the minimum. Wherever possible qualified refugees and Sudanese will fulfil these duties.

The target groups in each activity will be composed of skilled refugees in the specific activity; however in many cases an initial period of upgrading the skills is required and provided for within the project.

(f) benefits to the "refugee-affected areas";

The proposed activities are designed in a way to benefit the refugee affected areas of Eastern and Central Sudan as a whole, therefore:

(i) whenever projects intend to introduce an improved technology, expert advice on designs or upgrading of skills, it is envisaged that Sudanese craftsmen will equally benefit from these schemes.

(ii) the activities will not compete with existing activities undertaken by Sudanese in these areas. The products of activities either consist of range of basic goods in shortage in the Sudanese markets, such as dairy and poultry products or substitute imported goods.

(g) the needs of vulnerable groups:

One of the main concerns in the design of the projects has been to reach the most vulnerable group among refugees. Therefore a number of activities has been specifically devoted to cater for the needs of the female-headed households (5 projects) and the disabled (1 project). The latter group represents 2 per cent of the total refugee population and further investigations are required to identify the types of disabilities and to propose a comprehensive plan for the rehabilitation of handicapped refugees.

(h) the projects have been conceived as a pilot scheme:

Further expansion or replication of the activities in other



areas and for a larger number of refugees could be undertaken at a later stage. The working capital would be provided by the Revolving Fund.

The projects have been designed to overcome the economic constraints described earlier. However, it should be stressed that unless measures are taken to guarantee the availability of permits and passes to refugees, participation in the activities would be minimal and the objective of self-reliance will not be achieved.

III. A Revolving Fund to finance small-scale ventures in "refugee-affected areas":

The lack of funds being one of the major constraints in the initiation of income generating activities, Project no. III intends to provide a source of finance for refugee (or refugee/Sudanese) operated small-scale enterprises. Any activity in the areas of agriculture, animal husbandry, small-scale industries and services which prove to be economically and financially feasible could be financed through loans on concessional terms. It is envisaged that 100 loans of an average size of £57,500 will be granted each year for individual or collective ventures. The Fund will be self-generating at the end of the project life (5 years), providing a fresh round of loans to refugee/Sudanese applicants.



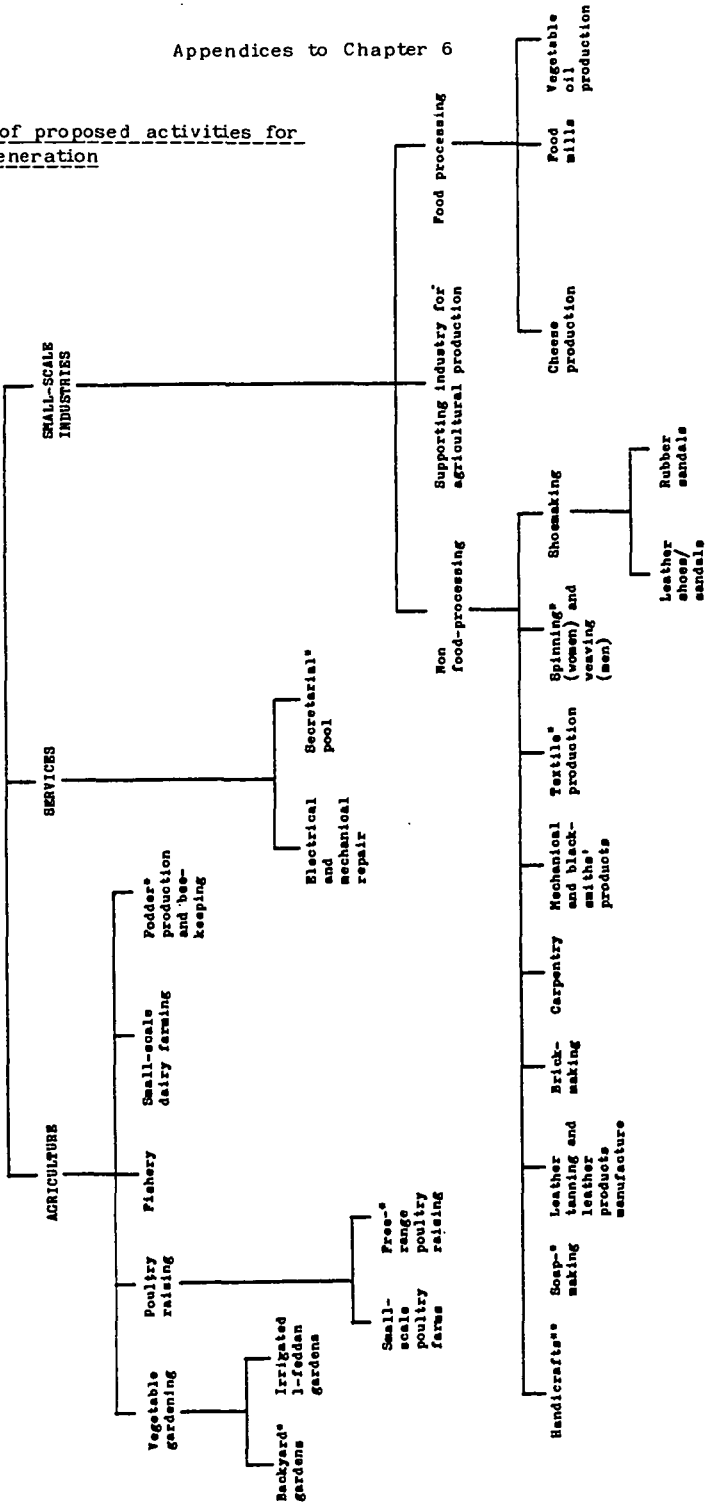
Footnotes

- <sup>1</sup> ILO Socio-Economic and Skill Survey of Refugees (1982/83).



Appendices to Chapter 6

Diagram of proposed activities for income generation



\* Specific activities for female-headed households.

\*\* Specific activity for the handicapped.



Projects on Income Generating Activities for Refugees in Eastern and Central Sudan

Table A6.1: Annual disbursement and employment generation<sup>1</sup>

Project No. and Title	Duration	Donor Contribution					No. of immediate beneficiaries (Households)
		Total	1983	1984	1985	1986	
1. Refugee Registration and Labour Market Monitoring System in Eastern and Central Sudan*	2 years	217,810	113,725	71,390	32,695		
2. The Organisational Structure for the Promotion of Self-Reliance among Refugees	3 years	1,487,972	463,029	444,104	317,436	263,403	
3. The Revolving fund <sup>2</sup>	5 years						
4. Small-scale Dairy, Poultry and Vegetable Farming for Income Generation in Eastern and Central Sudan**	2 years	2,269,980		1,771,420	498,560	7,832	
5. A Fishing Co-operative for Refugees in and around Port Sudan	2 years	682,170		544,670	137,500	400	
6. Small-scale Vegetable Oil Production in Refugee Settlements in Eastern and Central Sudan	1 year	171,350		171,350		50	

Annual disbursement and employment generation (contd.)

Project No. and Title	Duration	Donor Contribution				No. of immediate beneficiaries (Households)
		Total	1983	1984	1985	
7. A Programme to Develop Carpentry Workshops for Income Generation for Refugees in Eastern and Central Sudan	2 years	309,580		257,750	51,830	96
8. Brickmaking Associations for Income Generation for Refugees in Khashm-el-Girba	2 years	145,220		116,790	28,430	65
9. A Network of Electrical, Mechanical and Blacksmith's Workshops for Income Generation for Refugees in Eastern and Central Sudan	2 years	1,262,660		1,157,560	105,100	220
10. Small-scale Leatherwork Factories for Employment of Refugees in Eastern and Central Sudan	2 years	729,300		635,160	94,140	197
11. Rubber Sandals Manufacture in Refugee Settlements in Eastern and Central Sudan	1 year	148,770		148,770		80
12. Pilot Handicraft Production for Income Generation by Handicapped Refugees in Settlements in Eastern and Central Sudan	18 months	211,200		163,600	47,600	100



Annual disbursement and employment generation (contd.)

Project No. and Title	Duration	Total	Donor Contribution				No. of immediate beneficiaries (Households)
			1983	1984	1985	1986	
13. Small-scale Bee-keeping and Fodder Production Scheme in Refugee Settlements in Eastern and Central Sudan	2 years	975,850		894,860	80,990		870
14. Small-scale Soap Making Units in Refugee Settlements in Eastern and Central Sudan	18 months	141,390		126,320	15,070		65
15. Support and Expansion of Refugee Spinning and Weaving Activities in Eastern and Central Sudan	2 years	1,159,330		945,080	214,250		600
16. Pilot Garments' Production Workshops in Refugee-Affected Areas of Eastern and Central Sudan	18 months	915,730		861,000	54,730		300
17. Secretarial Pools in Khartoum, Port Sudan and Kassala	2 years	<u>397,750</u>		<u>303,880</u>	<u>93,870</u>		<u>100</u>
TOTAL							10,975***

\* For these projects, it is difficult to estimate the exact number of beneficiaries, since for Project no. I this will depend on the number of vacancies available. In Project no. III 100 loans will be granted annually, but each case could generate employment for one or more persons.

\*\* Comprises four sub-projects.

\*\*\* Without counting the employment opportunities to be generated by Projects no. I and no. III.

<sup>1</sup> The present table reflects the total budget and annual disbursements of projects as finalised by August 1983. Some of the figures have been revised since.

<sup>2</sup> The annual disbursements for 1987, 1988 and 1989 will be US\$579,740, US\$291,900 and US\$170,100 respectively.



Table A6.2: Geographical coverage

Town/Settlement	Soap	Vegetable gardening		Bee & Fodder	Poultry		Dairy farming	Fishing	Elec. & mech. repair	Secretarial pool	Veg. oil	Handicrafts	Leather tanning & works
		(1)	(2)		(3)	(4)							
Port Sudan					X			X	X	X			
Kassala									X	X			X
Khashm-el-Girba	X	X		X	X	X	X					X	X
Kilo 26	X	X	X	X		X						X	X
Um Gargur	X		X			X							X
Karkora			X			X							X
Um Ali			X			X						X	
Abouda	X		X			X						X	X
Gedaref									X				
Tawawa	X		X	X		X					X	X	X
Um Gulga	X		X	X		X					X	X	
Um Rakoba	X		X			X						X	
Qala el Nahal	X		X			X					X	X	X
El Hawata			X			X							X
Wad Awad			X	X		X							
Abu Rakham	X		X	X		X						X	
Tenedba	X		X	X		X							
Suki	X	X	X	X	X	X	X					X	
Khartoum									X				

- (1) Vegetable gardens of 1 feddan
- (2) Backyard vegetable gardening
- (3) Centralised poultry farms
- (4) Individual poultry raising

**Table A6.2: Geographical coverage (contd)**

Town/Settlement	Brickmaking	Shoemaking (leather)	Shoemaking (rubber)	Carpentry	Mech. and blacksmiths' products	Textile	Spinning and weaving
Port Sudan					X	X	
Kassala		X			X	X	X
Khashm-el-Girba	X		X	X	X		X
Kilo 26			X	X	X		X
Um Gargur		X	X	X	X		X
Karkora			X	X	X		
Um Ali			X	X	X		
Abouda		X	X	X	X		X
Gedaref					X		X
Tawawa			X	X	X	X	X
Um Gulga			X	X	X		X
Um Rakoba			X	X			X
Qala el Nahal		X	X	X	X		
El Mawata			X	X	X		
Wad Awad		X	X	X	X		X
Abu			X	X	X		
Tenedba			X	X	X		
Suki			X	X	X		
Khartoum					X	X	

**CHAPTER 7**

**Project Documents**



INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Refugee Registration and Labour Market  
Monitoring Systems in Eastern and  
Central Sudan

Geographical coverage: Eastern and Central Sudan

Project sites: Offices of the Commissioner for Refugees  
Office of the Commissioner for Labour  
Khartoum, Kassala, Port Sudan and  
Gedaref

Project language: English and Arabic

Starting date: October 1983

Duration: Two years

Donor contribution: US\$217,810

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)





Refugee Registration and Labour Market Monitoring  
Systems in Eastern and Central Sudan

1. Background and context

Sudan has experienced a large influx of refugees from four neighbouring countries in the course of the last three decades. By September 1983, the total number of refugees was estimated at 671,000 with the majority of them (or 465,000) coming from Ethiopia. Given the conditions in their areas of origin, it is likely that the refugees will remain in the Sudan for a considerable period of time. The consensus that emerged from both the "Pan-African Conference on the Situation of Refugees in Africa" (Arusha, Tanzania, 1979) and the International Conference on Refugees in the Sudan (Khartoum, 1980), is that longer-term solutions, beyond relief, have to be pursued with the objective of achieving self-reliance for refugees.

One of the major constraints in planning viable refugee settlements and integrating them in regional and national development plans is the extremely limited information about the number of refugees, their socio-economic characteristics, skills and geographic distribution. While the Sudanese labour market is characterised by an acute shortage of skilled manpower, some refugees who possess scarce skills remain unemployed and others may live in abject poverty.<sup>1</sup> This is a direct result of three inter-related factors. First, the restriction on refugee mobility which prevents them from responding to regional demand differentials. Second, the limited knowledge about refugee skills. Third, and most important, the lack of a system to generate and disseminate labour market information in order to match demand and supply as much as possible.

In order to provide greater employment opportunities for refugees, a preliminary project proposal on refugee registration and

labour market monitoring systems was presented to the Khartoum Workshop (17-20 April 1983) within the general ILO/UNHCR report entitled Self-Reliance for Refugees in Sudan: A Programme of Action.<sup>2</sup> The Workshop approved the proposal and it was decided that the activities should be coordinated with the UNHCR project on "Contribution to General Registration and ID Card System for Refugees in the Sudan".

In the Memorandum of Understanding between the Government of Sudan, ILO and UNHCR signed on 24 May 1983, the ILO was requested to implement the present project.

It is intended to initiate the establishment of a computerised system jointly operated by the Offices of the Commissioner for Refugees and the Commissioner of Labour to serve the two purposes of registration of refugees and their integration in the Sudanese labour market.

Four mini-computers will be set up at four locations in Eastern and Central Sudan: Khartoum, Port Sudan, Kassala and Gedaref. Two series of data will be collected in the different project sites:

- (a) data on the socio-economic characteristics and manpower related information of refugees, collected during the issuance of identity cards; and
- (b) data on vacancies and local demand for labour.

The system will act as a clearing house matching as much as possible the supply of labour (refugee labour force) with the demand (employers' needs).

## 2. Target group

Refugees in Eastern and Central Sudan.

3. Development objective

Greater employment opportunities for refugees and their integration in the development of the host country.

3.1 Indicator

In five years' time a minimum of 15 per cent of notified vacancies are filled by the corresponding number of refugees.

3.2 Source of indicator data

Files and records of project management.

4. Immediate objective

A computerised system combining the refugee registration and the monitoring of labour market information.

4.1 Indicators

- (a) 4 mini-computers are set up at 4 locations in Eastern and Central Sudan;
- (b) 4 mini-computer operators are trained in the collection and registration of data;
- (c) in 4 years' time data on a minimum of 200,000 refugees are collected and registered;
- (d) the main operations of data collection, registration, classification and preliminary analysis are executed by the local personnel without international expertise (at the completion of the project status);
- (e) data on vacancies are collected and cleared in the 4 areas covered by the project.

4.2 Sources of indicator data

- (a) Files and records of the data banks;
- (b) Reports of the project management, the offices of the Commissioner of Refugees and the Labour Department.

5. Outputs

- (a) Project Manager and consultants are recruited. (Month 1)
- (b) The appropriate programme (software) for the mini-computers is designed. (Months 1-2)
- (c) Two questionnaires are designed for the collection of refugee socio-economic data and labour market information. (Months 1-2)
- (d) Local personnel is recruited. (Month 2)
- (e) Equipment is purchased and installed at 4 locations: Khartoum, Kassala, Port Sudan and Gedaref. (Month 3)
- (f) The personnel is trained in the operation of the computerised system. (Month 3)
- (g) The registration of refugees and issuance of identity cards is started in Khartoum, Port Sudan, Kassala and Gedaref. (Month 4)
- (h) Labour market data are collected and registered on a regular basis from the regional labour offices and individual employers (firms, companies and agricultural tenants). (Month 4)
- (i) Copies of data (diskettes) are sent to the Khartoum Centres. (Months 4-24)
- (j) Data on the supply and demand of labour are cleared at each regional centre. Refugees and employers are informed of the potential opportunities. (Months 4-24)
- (k) The data on vacancies which cannot be filled at the regional level are transmitted to Khartoum. (Months 4-24)
- (l) Data is analysed periodically in Khartoum and decisions concerning the travel authorisation for refugees and regional adjustments are taken. (Months 4-24)

- (m) Once a year, on the basis of the data collected throughout the country, global statistical analysis and elaborate data processing are carried out in Khartoum Centre. (Months 16-24)

6. Activities

- (a) Recruit the Project Manager and consultants. (Month 1)
- (b) Design and prepare the appropriate programme (software) for the mini-computers for the purpose of refugee registration and labour market monitoring. (Months 1-2)
- (c) Design two questionnaires for the collection of information:
  - Form A: containing the socio-economic characteristics of the refugee and his/her dependants, as well as the manpower related data (such as the educational level, past and present occupations, vocational or on-the-job training).<sup>3</sup>
  - Form b: collecting the data on the demand of labour submitted by regional labour offices and employers (data on vacancies, required qualifications, job descriptions, duration of employment, etc). (Months 1-2)
- (d) Recruit 6 local mini-computer operators. (Month 2)
- (e) Purchase and install equipment at 4 locations: Khartoum, Port Sudan, Kassala and Gedaref. (Months 2-3)
- (f) Train the personnel in the operation and maintenance of the system. An initial training period of 6 weeks is envisaged in Khartoum, where the operators will be acquainted with the different operations of the system: data collection, recording, retrieving and reporting. (Months 2-4)
- (g) Start the registration of refugees and issue the identity cards in the project sites. Coordinate the activities with UNHCR. (Month 4)

- (h) Record the data on vacancies submitted by labour offices and employers in 4 project sites. (Month 4)
- (i) Send regularly copies of data on the labour supply and demand to Khartoum. (Months 4-24)
- (j) Clear the data in each unit for the area under its coverage by matching as much as possible the supply of labour with demand. Inform the employers and refugees on the availabilities. (Months 4-24)
- (k) Transmit to Khartoum the data on vacancies which can not be filled at the regional level, where the coordinating committee takes the appropriate decisions concerning travel authorisation for refugees and regional labour adjustments. (Months 4-24)
- (l) Once a year, undertake global statistical analysis and processing in the Khartoum main system. (Months 16-24)

## 7. Inputs

### A. Donor

#### A.1 Personnel

Consultants (computer programmers) (international) (4 m/m)

Essential qualifications: degree in computer science or equivalent, with extensive experience in mini/micro computers. Experience of work in Third World countries. Languages: fluency in English, knowledge of Arabic would be an advantage.

Duties:

- General responsibility for the initiation of the project (programming, design of questionnaires, etc.).
- Training the Sudanese to supervise the management of the project.
- Training the mini-computer operators in the various activities of the system: registration, copying, classification and clearing of data.

Duty station: Geneva, will be required to travel to Khartoum to initiate the implementation of project (installation of equipment and training of operators).

1 project manager (locally recruited) (24 m/m)

Essential qualifications: university degree in social sciences or equivalent. Experience of work with computers. Languages: fluency in English and Arabic.

Duties:

- General responsibility for the implementation and supervision of the project.
- Work in close cooperation with international consultants in various stages of the project:
  - (i) during the period of programming and design of questionnaires (Geneva);
  - (ii) during the first phase of implementation (installation of equipment, training of operators, etc.) in Khartoum.
- Responsible for the coordination with UNHCR registration project.
- Supervision of work of operators.
- Supervision of the functioning of the system in different project sites.
- Undertake global statistical analysis and data processing at the country level.

Duty station: Khartoum, will be required to travel to Geneva for the first phase of the project as well as to visit frequently the project sites in Sudan.

6 micro-computer operators (locally recruited)

Essential qualification: Certificate of secondary education. Fluency in English and Arabic.

Duties: under the guidance of the Project Manager will be responsible for the collection and registration, classification and clearing of data.

Duty station: 1 in each project site: Khartoum, Port Sudan, Kassala and Gedaref.

A.2 Equipment

US\$

(a) 5 micro-computers<sup>4</sup> with the main system in Khartoum

50,000

	US\$
(b) Diskettes	5,000
(c) Generators and ventilators (for the 4 project sites)	12,000
(d) Programming (software)	5,000

A.3 Other costs

(a) Maintenance and operation cost	6,000
(b) Reporting costs	5,000
(c) Sundries (including local travel fund, transportation cost of equipment and materials and stationery)	9,000

B. Government of Sudan

- (a) Office accommodation for the computer centres and the staff in Khartoum, Port Sudan, Kassala and Gedaref;
- (b) Release of national staff for participation in the coordinating committee.

C. ILO

- (a) Overall project supervision;
- (b) Expertise for programming and data processing.

D. UNHCR

- (a) Equipment and personnel for the registration of refugees (other than provided within the present project).

8. Institutional framework

The project will be implemented by the ILO in coordination with UNHCR. The Offices of the Commissioner for Refugees and of the Commissioner of Labour will assist the establishment of the system in the 4 project sites.



A coordinating committee composed of one official each from the Office of the Commissioner of Refugees, the Labour Department, the UNHCR and the Project Manager will be responsible for the overall supervision of the activity. The Committee will meet periodically and take appropriate decisions concerning the operation of the system, the linkages between project sites and Khartoum Centre, data analysis, policy proposals and recommendations.

9. Prior obligations and prerequisites

9.1 Prior obligation

The Office of the Commissioner of Labour and its sub-offices in Eastern Sudan will take all necessary steps to ensure a continuous and systematic flow of information concerning employment opportunities and vacancies in each region. This information should be transmitted to the regional computer centres on a regular basis.

9.2 Prerequisite

Refugees who cannot find employment opportunities in the region where they live should be allowed to move to other areas to fill the vacancies corresponding to their qualifications.

10. Assumptions

10.1 Immediate to development objective

- (a) The Government of Sudan continues to support the integration of refugees in the development of the country;
- (b) There continues to be a shortage of skilled labour within the country. With the continuous out-migration of Sudanese it is unlikely that the situation will change in the near future.

10.2 Outputs to immediate objective

- (a) The UNHCR project on "Contribution to General Registration and ID Card System for Refugees in Sudan" is implemented on time and in coordination with the present project;
- (b) An efficient system for the notification of vacancies to the computer centres is set up.

10.3 Activities to outputs

- (a) Qualified personnel for the supervision and operation of the system is available in the country;
- (b) Trainees do not drop out of the activity during and after the training period;
- (c) Operation and maintenance of equipment is satisfactory. There are no continuous electricity cuts and abnormal climatic conditions which can affect the functioning of the system;
- (d) The communications with the Khartoum Centre and transmission data (copies of diskettes) from all the project sites are carried out regularly.

10.4 Inputs to activities

- (a) Support obtained from UNDP to speed up customs formalities for the imported equipment;
- (b) Physical facilities (transport, fuel) available for the installation of equipment.

11. Rationale

(a) Coordination with UNHCR Registration Project

So far, the registration of refugees and issuance of identity cards has been carried out only sporadically in the Sudan. In order

to regularise the personal status of refugees and their residence in the Sudan, the UNHCR intends to undertake a general distribution of identity cards to existing refugees and the new arrivals. The number of immediate beneficiaries has been estimated at 300,000 adult refugees out of a total of 671,000 refugees. The project, starting in 1983, is expected to phase out in 1986.

The present ILO project initiating a computerised system will provide the opportunity to combine the collection of the general socio-economic data and the occupational profiles of refugees in the course of the issuance of identity cards.

However, it should be noted that the UNHCR Project covers the refugees in the Southern region too, whereas the ILO system will focus only on the Eastern and Central Sudan.

(b) Updating the data

An important issue is to update the refugee manpower-related data collected in the course of the registration process. The changes in the occupational status of refugees should be recorded regularly. For this purpose, it is envisaged that refugees will report subsequent changes in their employment situation to the regional centres. However, it can be expected that only refugees in search of employment would notify such changes. To overcome this obstacle and to ensure the accuracy of the collected information, the provision of certain benefits such as food subsidies, work and travel permits, business licences, etc. could be linked to the presentation of updated identity cards.

(c) Utilisation of micro-computers

The micro-computers envisaged within the project present the advantage of being relatively inexpensive and more practical under the climatic and infrastructural conditions of the Sudan, i.e. high temperatures and frequent power cuts. The operation of the system requires only a short training period in Khartoum where the local operators will be initiated in the various activities.

The memory capacity of the micro-computers could cope with the expected flow of information (socio-economic and manpower related data) in each centre for approximately 50,000 refugees.

It is expected that each unit will function independently, clearing as much as possible the data on the supply and demand of labour at the area level.

Copies of data will be sent regularly to Khartoum where the decisions concerning intra-regional adjustments and refugee mobility would be taken.

The initial programming of the system and further elaborate global analysis would be carried out at the ILO Headquarters (Geneva).

(d) Significance to the Government of Sudan

The system will contribute to the alleviation of some of the acute skill shortages in the Sudanese economy by integrating the refugee labour force in the development of the country. The project is also in line with the general government policy in encouraging income-generating activities for refugees.

Furthermore, the system will provide up-dated and comprehensive data on the overall trends and changes in the characteristics of the refugee population, as well as continuous monitoring and analysis of the labour market in Sudan (demand side). The data generated in this manner could serve for the purposes of global statistical analysis and policy recommendations.

12. Reporting, monitoring and evaluation schedule

12.1 Reporting

The following reports will be required:

- 8 three-monthly financial reports
- 8 three-monthly progress reports
- 1 terminal report

12.2 Evaluation plan

- (a) Frequency and timing: The project will be evaluated by the two joint ILO/UNHCR missions provided within the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees". The evaluations will take place at the end of 1984 and 1986.
- (b) Evaluation participants<sup>5</sup>
- (c) Collection of data: The project manager, the offices of the Commissioner of Labour and the Commissioner for Refugees will be responsible for the collection of data necessary for the evaluation review.



Footnotes

<sup>1</sup> The ILO study on the Urban Labour Market in Sudan and Socio-Economic and Skills Survey of Refugees found that while the Sudanese economy suffers from the lack of skilled artisans (like mechanics, plumbers, electricians, welders, carpenters) a substantial proportion of refugees possessing these skills remain unemployed.

<sup>2</sup> The above-mentioned report published in two volumes is the outcome of the joint ILO/UNHCR Project on Income-Generating Activities for Refugees in the Sudan. The ILO carried out field surveys and research studies during August 1982 - March 1983. The report includes three parts: (a) a survey of socio-economic characteristics and skill profiles of refugees; (b) surveys of labour markets in Sudan; (c) a package of 21 income-generating projects.

<sup>3</sup> A modified version of the Form 1 of the UNHCR Biodata System in operation in South-east Asia could be used for this purpose.

<sup>4</sup> A spare micro-computer is envisaged in case of a breakdown in one of the project sites. The computer could be sent to Egypt for repairs.

<sup>5</sup> See the above-mentioned project on "The Organisational Structure".





Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: SUDAN

Project No:

Title: REFUGEE REGISTRATION AND LABOUR MARKET MONITORING SYSTEMS IN EASTERN AND CENTRAL SUDAN

Code	Details	Total		1983		1984		1985		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
11	EXPERTS										
11.01	Consultants	4.0	28,000	3.0	21,000	1.0	7,000				
15	Travel on official business		10,000		8,000		2,000				
17	National Professional Staff										
17.01	Manager	24.0	15,000	3.0	1,875	12.0	7,500	9.0	5,625		
17.02	6 Mini-computer operators	144.0	35,000	12.0	2,900	72.0	17,500	60.0	14,600		
	COMPONENT TOTAL		88,000		33,775		34,000		20,225		
40	EQUIPMENT		72,000		55,000		17,000		-		
	COMPONENT TOTAL		72,000		55,000		17,000		-		
50	MISCELLANEOUS										
51	Operation and maintenance of eqt.		6,000		3,000		3,000		-		
52	Reporting Costs		5,000		-		2,500		2,500		
53	Sundries		9,000		5,000		2,000		2,000		
	COMPONENT TOTAL		20,000		8,000		7,500		4,500		
	SUB-TOTAL		180,000		96,775		58,500		24,725		
60	Programme Support Costs (1%)		23,400		12,580		7,600		3,220		
	TOTAL PROJECT		203,400		109,355		66,100		27,945		
70	Provision for cost increases:*										
	4% - 1983; 8% - 1984; 17% - 1985		14,410		4,370		5,290		4,750		
	GRAND TOTAL		217,810		113,725		71,390		32,695		

\* The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase the project inputs.



INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Organizational structure for the promotion of self-reliance among refugees in Eastern and Central Sudan

Geographical coverage: Eastern and Central Sudan

Project language: English and Arabic

Starting date: September 1983

Duration: Three years

Donor contribution: US\$1,487,972

Cooperating Government Agency in the Sudan: Office of the Commissioner for Refugees (Ministry of Internal Affairs)



Organisational Structure for Income-Generating  
Activities for Refugees in Eastern and Central Sudan

1. Background and context

Since 1965 Sudan has been facing the influx of successive waves of refugees from four of its neighbouring countries, Chad, Uganda, Ethiopia and Zaire. The actual population of refugees is estimated at 690,000 with the majority of them coming from Ethiopia (480,000). Approximately 100,000 refugees are accommodated in organised camps, another 10,000 are accommodated in reception and transit centres and others are spontaneously settled in urban areas.

Upon the request of the Sudanese Government, a joint ILO/UNHCR Inter-Disciplinary Mission on Employment, Income Generation and Training for Refugees visited the Sudan during October-December 1981. The refugee problem, not being a transient one, the main conclusion of the Mission pointed to the necessity of longer-term solutions beyond the relief work. In order to identify the employment opportunities for refugees and to propose a detailed plan of action, the Government and UNHCR entered into agreement with ILO to carry out field surveys and research studies from August 1982 to March 1983. The outcome of the project is published in two volumes entitled "Self-Reliance for Refugees in Sudan: A Programme of Action". It included three parts:

- (a) a survey of socio-economic characteristics and skill profiles of the refugees;

- (b) surveys of the labour markets in Sudan (rural and urban areas);
- (c) a package of 21 income-generating projects for priority implementation.

The report was discussed in a national workshop held in Khartoum (17-20 April 1983) attended by representatives of the refugees, the Sudan government, UN and Voluntary Agencies, donor countries and university scholars.

A tripartite working group (ILO, UNHCR, Government of Sudan) made the final selection and revision of the project proposals (May 1983), thereafter a Memorandum of Understanding among the Government of Sudan, UNHCR and ILO was signed on 24 May 1983 covering a package of 16 projects.

The ILO was requested to implement the present project which will provide the organisational structure for the promotion of self-reliance.

An adequate organisational structure is a prerequisite for the efficient implementation and operation of income generating activities. It aims to overcome the obstacles which inhibit the development of these activities. Such a structure should ensure:

- (a) the provision of raw materials and equipment for all income-generating activities;
- (b) the distribution of the finished products in major towns and market places;
- (c) the access of refugees to credits;
- (d) collective security and enhanced bargaining power;
- (e) proper co-ordination with existing <sup>\*</sup> refugee and national co-operatives;

- (f) above all, full refugee participation in the management of the activities.

To benefit from the economies of scale, the present project will have three organisational levels (see attached diagram):

I. At the settlement (or town) level, the various income generating activities will be organised through:

- (a) Income-Generating Associations (IGA) per type of activity;
- (b) Women's Production Groups (WPG) encompassing all the activities proposed for female-headed households.

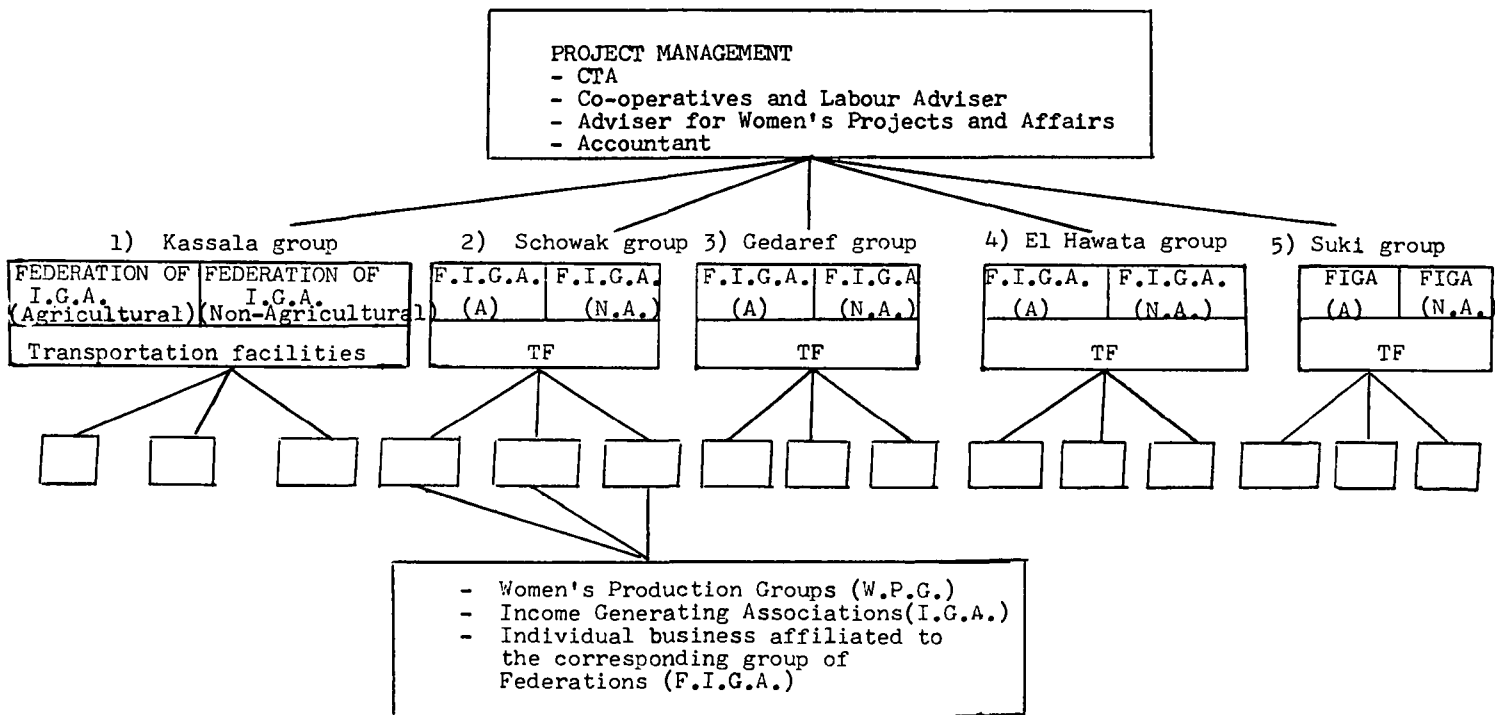
II. These units (IGA and WPG) will be affiliated in each area to two multi-purpose Federations of Income-Generating Activities (FIGA), one dealing with agricultural and the other with non-agricultural activities.

The rationale behind the separation of the two types of activities (agricultural and non-agricultural) is to keep the federations at a reasonable size, thus allowing full participation of members in the management process.

The federations will have the following responsibilities:

- (a) to provide transportation facilities for the supply of raw materials and collection of finished products;
- (b) to obtain credit facilities;
- (c) to make arrangements for the appropriate training of refugees selected by their communities in management and book-keeping. These refugees would ensure the continuity of activities at the completion of the project.

ORGANISATIONAL STRUCTURE FOR THE PROMOTION OF SELF-RELIANCE AMONG REFUGEES





Taking into consideration the geographical location of the settlements in Eastern and Central Sudan, these federations will be established in five areas:

- (i) Kassala group embracing the activities in:
  - Kassala
  - Khashm el Girba
  - Kilo 26
  
- (ii) Showak group embracing the activities in:
  - Um Gargur
  - Karkora
  - Um Ali
  - Abuda
  
- (iii) Gedaref group embracing the activities in:
  - Gedaref
  - Tawawa
  - Um Gulga
  - Um Rakhoba
  
- (iv) El Hawata group embracing the activities in:
  - Mafaza
  - Qala en Nahal
  - El Hawata
  - Wad Awad
  - Abu Rakham
  - Tenedba
  
- (v) Suki group embracing the activities in:
  - Fath el Rahman
  - Awad es Sid
  - Kilo 7

III. The project management composed of the CTA, the co-operatives and labour adviser, the adviser for women's projects and affairs and the accountant will have the overall responsibility for the

coordination of income-generating activities and will supervise the setting up of the organisational structure for a period of three years at the end of which the associations at different levels should be self-supporting.<sup>1</sup>

The proposed structure encourages group-based activities rather than individual business. It ensures on the one hand the optimal use of equipment, training and expertise and on the other the development of the sense of community interest and responsibility among refugees. However, the flexibility will be important noting that:

- (a) The main objective is to encourage grass-root actions and initiatives at the local level rather than impose a structure from above. The project management will have the responsibility to develop the infrastructural facilities and coordinate activities at different levels in order to ensure the efficiency of the system.
- (b) The proposed structure aims to:
  - (i) strengthen the existing group-based activities and producers' cooperatives; and
  - (ii) develop new associations within the framework of the proposed income-generating projects.
- (c) The structure does not preclude individual and independent initiatives at the settlement (or town) level, which could be affiliated to the federations in each area benefiting from transport facilities or other services.
- (d) The associations and federations will be administered according to cooperative principles, i.e. profit and expense sharing and self-management by refugees.<sup>2</sup> Those that do not qualify for cooperative status under the Sudanese Cooperative Act,<sup>3</sup> would still benefit from the facilities granted to the registered

cooperative societies such as the provision of raw materials at cheaper than market prices.

2. Target group

Refugees in the towns and settlements in Eastern and Central Sudan participating in income-generating activities.

3. Development objective

Self-reliance and income generation for refugees in Eastern and Central Sudan.

3.1 Indicator

A minimum of 5,000 refugee households are earning sufficient income from the income generating projects.

3.2 Source of indicator data

Records of income-generating associations and federations.

4. Immediate objective

Organisational structure for the implementation and management of income generating activities for refugees in Eastern and Central Sudan.

4.1 Indicators

- (a) 10 federations (5 grouping agricultural activities and 5 non-agricultural activities) are set up at each group of settlements level.

- (b) 15 women's production groups and a minimum of 30 income generating associations for other activities are set up in 15 settlements and affiliated to the above-mentioned federations.
- (c) A minimum of 60 per cent of refugees involved in income generating projects are members of the associations at different levels.
- (d) The associations and federations are financially self-supporting at the end of the project.
- (e) The associations and federations are run without international expertise at the end of the project.

#### 4.2 Source of indicator data

- (a) Project management's records.
- (b) Records of federations and income-generating associations.

### 5. Outputs

- (a) Personnel are recruited. (Months 1-3)
- (b) Physical and infrastructural facilities (buildings, construction of storage facilities, etc.) for 10 FIGAs in 5 areas, 15 WPFs and IGAs in towns and settlements of Eastern and Central Sudan are established. (Months 1-6)
- (c) Associations and federations are established with organisational links among them for the promotion of self-reliance activities. (Months 1-12)
- (d) Each group of federations is provided with transportation and storage facilities. (Months 1-4)
- (e) Each group of federations has established a mechanism for the acquisition and supply of raw materials and equipment to the income generating projects in the settlements under its coverage. (Months 3-6)

- (f) Each group of federations has established arrangements for the collection of finished products and their distribution to the markets. (Months 3-6)
- (g) Management committees are elected within the IGA at the settlement level. (Months 6-36)
- (h) Representatives of these committees are elected for the management of the multi-purpose federations at each group of settlements level. (Months 12-36)
- (i) Training needs of refugee representatives in principles of management and book-keeping are identified and arrangements are made with the National Cooperative Development and Training Centre. (Months 6-36)
- (j) Modalities for the phasing-out of the project management and self-management of the structure by refugees are defined and agreed on by members of the associations. (6 months before final project termination.)

6. Activities

- (a) Recruit the personnel:
  - (i) 1 CTA, 1 cooperative and labour adviser, 1 adviser for women's projects and affairs and 1 accountant (project management);
  - (ii) 10 managers for the IGAs;
  - (iii) 15 social workers for women's production groups in each settlement. (Months 1-3)
  - (iv) Administrative and support personnel. (Months 1-3)
- (b) Set up the infrastructural and organisational facilities (buildings, storage facilities) for the following (Months 1-6):
  - (i) 10 local federations of IGAs at each group of

settlements/towns: 1 for agricultural and 1 for non-agricultural activities for each of the 5 following areas - Kassala, Gedaref, Showak, El Hawata and Suki;

- (ii) 15 women's production groups in 15 settlements/towns grouping the income generating projects for female-headed households;
  - (iii) income-generating associations at settlement level for each type of activity.
- (c) Set up operational links between the associations in the settlements in each area and corresponding federations. Establish the responsibilities and tasks at each level. (Months 1-12)
  - (d) Provide each federation group with transportation (one lorry) and storage facilities. (Months 1-6)
  - (e) Establish a mechanism and calendar for the collection of finished products from the settlements and their distribution to the market place. (Months 1-6)
  - (g) Train and advise the refugee at different levels in management and book-keeping. (Months 1-36)
  - (h) Prepare the election of associations' committees at the settlement level. (Months 6-36)
  - (i) Prepare the election of the representatives of the above-mentioned committees to the federation group in each area. The latter will be run by recruited managers over the length of the project (3 years) at the end of which it will be handed over to elected refugee representatives. (Months 18-36)
  - (j) Determine the modalities for the phasing-out of the project management, , and the transfer of responsibility to refugees for the management and financial support of the organisational structure.

7. Inputs

A. Donor

A.1 Personnel

A.1.1 International

1 Chief Technical Adviser (36 m/m)

Essential qualifications:

- University degree in Economics, Social Sciences, Management and Business Administration or equivalent;
- extensive planning experience in the field of implementation and management of small-scale industries in developing countries;
- experience of work with rural institutions in developing countries especially with cooperative societies;
- field experience with refugee communities would be an advantage;
- ability and tact to deal with people of different national and cultural backgrounds;
- fluency in English, knowledge of Arabic would be an advantage.

Duties: General responsibility for the establishment and supervision of the organisational structure for the promotion of self-reliance among refugees:

- prepare a detailed plan of action for the implementation of the project;
- participate in the Advisory Board on Income Generating Activities for refugees (ABIGAR) and undertake the discussions and negotiations with officials of government and international agencies for activities concerning refugees;
- on the recommendation of ABIGAR, recruit the local personnel for the project who shall be suitably qualified refugees where possible,

1 adviser for women's affairs

1 cooperative and labour adviser

1 accountant

10 managers

15 women social workers

administrative and support personnel (secretary, drivers, etc.);

- supervise the establishment of physical facilities for the implementation of the project, i.e. construction of buildings and storage facilities and allocation of equipment and transport facilities to the 5 project sites (see diagram);
- ensure that the project is properly coordinated with related activities for the benefit of refugees and Sudanese nationals;
- prepare guidelines and advise the staff on the responsibilities and tasks at each level of the organisational structure (settlement level, group of settlements and supervising body). Supervise the staff over the length of the project;
- set up operational links between the income generating associations and federations at different levels and locations;
- ensure the efficiency of the machinery for the provision of raw materials and equipment and the collection of finished goods and their distribution to market places;
- undertake any additional action within his competence required to ensure the proper and timely implementation of this project;
- prepare the phasing-out of the project and the hand-over of responsibilities to refugee associations, in particular;



- a. develop in close cooperation with other implementing agencies the modalities and conditions for progressive contribution of refugees involved in activities to the recurring costs of the organisational structure.
  - b. prepare the replacement of recruited managers by the elected representatives of refugee communities at each level and location. Make arrangements for their adequate training in basic principles of management and book-keeping;
  - c. organise in close liaison with the implementing agencies, the management of income generating associations on cooperative principles;
- report to the Rural Employment Policies Branch (EMP/RU), ILO, Geneva in accordance with established procedures;

Duty station: Es Showak.

#### A.1.2 Local

1 cooperatives and labour adviser (36 m/m)

Essential qualifications:

- university degree in Law;
- extensive experience with refugee problems and sound knowledge of national laws governing the status of cooperatives, labour and business related questions;
- languages: English and Arabic.

Duties:

- advise the CTA and ABIGAR on matters relating to income generating activities, including registration of cooperative societies and necessary authorisations;
- set up an advisory service for the beneficiaries of this project.

Duty station: Es Showak.

Adviser for women's projects and affairs (36 m/m)

Essential qualifications:

- university degree in social sciences or equivalent;
- extensive experience of work with women's groups, particularly in rural areas;
- full knowledge of women's situation and problems in the Sudan and within refugee communities;
- ability to deal with central and regional authorities regarding women's questions;
- experience in rural appropriate technology for women;
- languages: English and Arabic, knowledge of Tigre, Tigrinya or Amharic an advantage.

Duties:

- assist the CTA in the implementation of the organisational structure for women's activities, especially:
  - a. supervise the establishment of women's production groups at each settlement level encompassing all income generating activities for female-headed households;
  - b. ensure the integration of qualified refugee women in the general income generating projects ;
  - c. prepare guidelines and advise the women social workers on the mobilisation of isolated refugee women and their participation on the cooperative principle in productive activities and in the development of the community;
- deal with specific problems that inhibit the participation of refugee women in these activities;
- coordinate the activities of women's production groups with existing women's centres dealing with home economics and adult literacy.

Duty station: Es Showak.

1 accountant (36 m/m)

Essential qualifications:

- diploma in accounting;
- experience of work with small-scale business and cooperative societies;
- knowledge of English and Arabic.

Duties:

- under the guidance of the CTA, responsibility for the financial control and monitoring of the disbursement of funds for the implementation of the organisational structure;
- supervise the allocation of funds and equipment to the 5 federations at the settlement group level;
- collect and coordinate the financial reports submitted by managers;
- assist the CTA in the evaluation of the financial performance of various income generating activities and the development of an agenda for their progressive contribution to the recurring costs of the organisational structure.

Duty station: Es Showak.

10 managers (360 m/m)

Essential qualifications:

- diploma/certificate in business administration. Experience of work with rural institutions and preferably with refugee communities;
- 5 managers with experience of work in agricultural activities and 5 others in the administration of small-scale industries;
- languages: Arabic and English, knowledge of Tigre, Tigrinya or Amharic would be an advantage.

Duties:

- under the guidance of the CTA and in full cooperation with the General Project Manager in Es Showak, each manager will be responsible for the administration of the transportation pool and other services provided by the project for agricultural or non-agricultural activities at the group of settlements level;
- establish an inventory of activities, towns and settlements under the coverage of each group. Ensure the regular distribution of raw materials and collection of the finished goods in each area;
- advise the income-generating associations at the settlement level on issues of management and financial administration;
- coordinate in close liaison with implementing agencies project activities under the coverage of each group of federations;
- assume responsibility for the training of elected refugee representatives in basic methods of management and book-keeping enabling them to take over the administration of the transportation pool and other services at the end of the project status;
- responsibility for periodic reporting to the CTA on the progress of projects and financial accounts.

Duty station: 2 each in Gedaref, Kassala, Suki, El Hawata and Showak.

15 social workers for women's production groups (450 m/m)

Essential qualifications:

- diploma/certificate in book-keeping;
- experience of work with women's groups;
- languages: Arabic, Tigre or Tigrinya or Amharic.

Duties:

- under the guidance of the adviser for women's projects and affairs, and in full cooperation with the project Manager, responsibility for the mobilisation of refugee women and organisation of women's production groups in each settlement;

- promotion of the income generating activities for women in each settlement;
  - dealing with the federations in each area for the supply of raw materials and collection of finished goods, etc.;
  - training a number of literate refugee women in basic principles of organisation and simple book-keeping.
- Duty station: 1 in each settlement or group of settlements.

6 drivers (1 for the project staff and 5 for the federation lorries) (36 m/m)

5 assistant drivers (36 months)

6 secretaries (1 for project management and 5 for federations) (36 months)

#### A.2 Equipment and materials

- (a) 12 typewriters (a set of English and Arabic typewriters for the supervising body and each federation);
- (b) office furniture;
- (c) 5 lorries (1 for each settlement group);
- (d) 6 vehicles for the project management and 1 for the staff of each federation of IGA;
- (e) miscellaneous.

#### A.3 Other costs

- (a) Operation and maintenance costs (over the length of the project);
- (b) Reporting costs;
- (c) Travel on official business;
- (d) Evaluation missions;
- (e) Funds for training of refugee representatives.

A.4 Buildings and construction

- (a) Office accommodation for the federations and income generating associations;
- (b) Storage facilities and warehouses at the federation level.

B. ILO

- (a) Overall supervision of the projects;
- (b) Staffing of two evaluation missions.

8. Institutional framework

The project forms part of a programme for income generating activities for refugees in Eastern Sudan within the overall framework of assistance to refugees under the authority of the Commissioner for Refugees. For this programme an Advisory Board on Income Generating Activities for Refugees (ABIGAR) has been established consisting of one representative each from the Office of the Commissioner for Refugees, UNHCR, the regional Government, and the Chief Technical Advisor of this project for its duration. Representatives of project cooperatives and implementing agencies will join the Board on an ad-hoc basis whenever matters related to their projects are being considered. The ILO will be guided by the advice of ABIGAR in implementing this project.

The CTA and ABIGAR will be able to call on the advice of a designated cooperatives officer from the Government Cooperatives Department.

The ILO will report quarterly in writing to ABIGAR on the progress of the project. In addition regular coordination meetings will be held between the parties.

At the end of the project refugees will run the organising structure in accordance with government policy and procedures on cooperatives and assistance to refugees.

9. Prior obligations and prerequisites

9.1 Prior obligations

- (a) Support of informal income generating associations<sup>4</sup> and granting of legal status to those which would satisfy the conditions of cooperative societies;
- (b) Freedom of movement guaranteed fo refugee representatives to purchase raw materials and transport finished goods.

9.2 Prerequisites

Release of national staff to assist the project management and to participate in the coordinating committee.

10. Assumptions

10.1 Immediate to development objective

- (a) Continuation of the Sudanese Government policy encouraging income generating activities and the integration of refugees in the development of the country;
- (b) Provision of revolving funds for refugee cooperatives for the expansion of activities or replication in other areas;
- (c) Giving the necessary support and backing to income generating associations.

10.2 Output to immediate objective

- (a) The proposed income generating projects are implemented as scheduled (early 1984) and integrated in the organisational structure;
- (b) There continues to be a strong will among refugees to join cooperatives and group-based activities;
- (c) At the end of the project there should be sufficient numbers of refugees trained in book-keeping and management to take over the running of associations and federations;
- (d) The income earned from different income generating activities are high enough to allow refugees to finance the running costs of associations and federations at the end of the project.

10.3 Activities to outputs

- (a) Sufficient number of qualified managers and women social workers are available;
- (b) The drop-out rate of trainees (refugee representatives) in management does not exceed 20 per cent.

10.4 Inputs to activities

- (a) Physical facilities (buildings, transportation, fuel, etc.) available for setting up the organisational structure;
- (b) Support obtained from the UNDP to speed up custom formalities for the imported equipment.

11. Reporting, monitoring and evaluation schedule

- (a) Reporting
  - 36 monthly financial reports
  - 12 three-monthly progress reports
  - 1 terminal report.



(b) Evaluation plan

The project is to be the subject of two evaluation missions, one at mid-term and the second at the completion of the project. Upon the findings of the final evaluations, appropriate decisions concerning the phasing-out of the supervising body will be taken.

(c) Evaluation participants

- CTA
- Other members of ABIGAR (Advisory Board on Income Generating Activities for Refugees)
- Representatives of the Department of Labour and Ministry of Cooperation
- ILO Area Office Director
- Representatives from ILO and UNHCR Headquarters.

(d) Parties responsible for the collection of data

The CTA will have the primary responsibility for the collection of data necessary for the evaluation of reviews.

(e) Orientation and training required

The CTA has received adequate training in the application of the evaluation methodology prior to posting.



Footnotes

1 It is expected that refugees will support the management and recurring costs of the IGA and FIGA. The financial commitment of members must be clearly defined and agreed by all members.

2 The ILO Socio-Economic and Skills Survey of Refugees (September-October 1982) indicated that 90 per cent of refugees have expressed their desire to join cooperatives.

3 Most artisan activities under the proposed income generating projects involve only 5 to 10 persons and therefore would not qualify for cooperative status which requires a minimum of 50 members.

4 Ease the acquisition of raw materials on concessional terms.



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: SUDAN

Project No:

Title: Organisational Structure for the Promotion of Self-Reliance among Refugees

Code	Details	Total		1983		1984		1985		1986	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
11	EXPERTS										
11.01	CTA (Khartoum)	36.0	259,000	4.0	28,400	12.0	85,500	12.0	86,700	8.0	58,400
13	Administrative Support Personnel		50,000		6,000		16,000		16,000		12,000
15	Travel on Official Business		15,000		2,000		5,000		5,000		3,000
16	Other Costs		30,000		-		15,000		-		15,000
17	NATIONAL PROFESSIONAL STAFF										
17.01	Legal Adviser		22,000		1,800		7,200		7,200		5,800
17.02	Adviser for women's affairs		22,000		1,800		7,200		7,200		5,800
17.03	Co-operative Managers		105,000		8,750		35,000		35,000		26,250
17.04	Social Workers for women's groups		45,000		-		18,000		18,000		9,000
17.05	Accountant		15,000		1,250		5,000		5,000		3,750
19	COMPONENT TOTAL		563,000		50,000		193,900		180,100		139,000
30	TRAINING										
33	In-Service Training		30,000		3,000		10,000		10,000		7,000
39	COMPONENT TOTAL		30,000		3,000		10,000		10,000		7,000
40	EQUIPMENT										
41	Equipment		284,000		284,000		-		-		-
43	Construction costs		150,000		50,000		100,000		-		-
49	COMPONENT TOTAL		434,000		334,000		100,000		-		-

Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: SUDAN

Project No:

Title: Organisational Structure for the Promotion of Self-Reliance among Refugees

Code	Details	Total		1983		1984		1985		1986	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
50	MISCELLANEOUS										
51	Operation and Maintenance of										
	Equipment		91,000		-		45,000		30,000		16,000
52	Reporting Costs		50,000		5,000		10,000		15,000		20,000
53	Sundries		15,000		2,000		5,000		5,000		3,000
59	COMPONENT TOTAL		156,000		7,000		60,000		50,000		39,000
90	SUB-TOTAL		1,183,000		394,000		363,900		240,000		185,000
60	PROGRAMME SUPPORT COSTS										
68	Programme support costs (13%)		153,790		51,220		47,307		31,213		24,050
	TOTAL PROJECT		1,336,790		445,220		411,207		271,313		209,050
70	PROVISION FOR COST INCREASES*										
71	4% - 1983		17,809		17,809						
71	8% - 1984		32,897				32,897				
71	17% - 1985		46,123						46,123		
71	26% - 1986		54,353								54,353
99	GRAND TOTAL		1,487,972		463,029		444,104		317,436		263,403
	*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.										

INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL CO-OPERATION

Project Document

Project title: A Revolving Fund for Income Generating  
Activities for Refugees in Sudan

Geographical coverage: Eastern and Central Sudan

Project languages: English and Arabic

Project Sites: Offices of the Commissioner of Refugees  
in Eastern and Central Sudan

Starting date: Mid-1984

Duration: Five years

Donor contribution: US\$3,703,200.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)





A Revolving Fund for Income-Generating Activities  
for Refugees in Sudan

1. Background and context

Upon the request of the Sudanese Government, a joint ILO/UNHCR interdisciplinary Mission on Employment, Income Generation and Training for Refugees visited the Sudan during November-December 1981. The refugee problem, not being a transient one, the main conclusion of the Mission pointed to the necessity of longer-term solutions beyond the relief work. The establishment of a Revolving Fund to finance the income generating activities in refugee affected areas of Eastern and Central Sudan constitutes one of such solutions. Field surveys carried out by the ILO in Sudan in 1982 showed that lack of finance was the major obstacle preventing skilled refugees from initiating small-scale ventures. The feasibility of setting up a Revolving Fund and its economic and legal implications were worked out in September-October 1983.

The present project intends to provide a source of finance for refugee( or refugee/Sudanese) operated small-scale enterprises in the various fields of agriculture, animal husbandry, small scale industries, services and other activities which prove to be economically and financially viable. These enterprises could be individual businesses, joint venture projects, partnerships or cooperative societies. It should be stressed that the use of a revolving fund concept to finance income-generating activities presupposes that the projects financed through the fund will be individually successful, able to pay their way, and repay their loans on schedule. Only in this way can the scale of operation of the fund be maintained over time. This presupposes that loan operations will be concentrated on those projects with the best prospects of success, and not on activities needing relief assistance. The purpose of the fund is to support growth, and not to relieve need (other than the need for capital). The object is to promote self-reliance and not to provide a further cushion of support for the dependent.

The size of the loan will vary according to the type of the activity, the scale of operations of the enterprise and the number of recipients. However, it should be also a function of the employment creation potential of the enterprise to be supported. A workshop to be operated by several partners with the eventual possibility of taking on apprentices would need a much larger sum to provide premises, equipment and stocks of raw materials. Given the variety of environments, rural and urban, in which refugees operate, local experience will determine the applicable level of loans according to the above criteria. However, it is estimated that the average size of each loan will be £S7500 (or US\$5800). It is envisaged that each year, starting in March 1984, 100 loans will be processed and approved, 50 in March and 50 in September. The field investigations indicated that this figure is a reasonable estimate of potentially eligible loan applications by refugees in Eastern and Central Sudan. Thus the total annual amount of capital for the first year will be £S750,000. After a 6 month grace period, repayment will be made in monthly installments (£S128.75 including 3 per cent administrative charges) over a 60-month period. Barring any failure or default case, the Fund would be self-generating by the end of 1990, providing a fresh round of loans of £S750,000 each year.

A total amount of £S2,955,000 would be invested in the Revolving Fund over the length of the project with annual allocations decreasing from £S750,000 in 1984 to £S0 in 1990 as shown in tables 1.1 and 1.2.

Given the uncertain life conditions of the main target group, i.e. the refugees, it is envisaged to add a further annual supplement of £S75,000 to the capital to meet any possible failure and/or default cases. Naturally, such a supplement is not required for the first year of the project. (See tables 1.1 and 1.2)

## 2. Target group

Refugees and the local population in the refugee-affected areas are the target groups for the project. Particular attention will be given to assisting those groups or individuals who demonstrate the

Table 1.1: Scale of operations of the Revolving Fund (in Sudanese Pounds)

Year	Capital paid into the Fund	Capital available in Jan.	Disbursements in March	Repayments up to March	Balance in March	Disbursements in Sept.	Balance in Sept.	Repayments from March to end of year	Balance at the end of year
1984	750,000	750,000	375,000	0	375,000	375,000	0	19,312	19,313
1985	730,687	750,600	375,000	19,313	394,313	375,000	19,313	135,187	154,500
1986	595,500	750,000	375,000	57,938	432,938	375,000	57,938	251,062	309,000
1987	441,000	750,000	375,000	96,563	471,563	375,000	96,563	366,937	463,600
1988	286,500	750,000	375,000	135,188	510,188	375,000	135,188	482,812	618,000
1989	132,000	750,000	375,000	178,813	553,813	375,000	178,813	578,375	756,188
1990	0	756,000	375,000	193,125	574,125	375,000	199,125	579,375	778,500

Table 1.2: Total and annual payment of capital into the Revolving Fund (LS and US\$)<sup>1</sup>

Year	Capital paid into the Fund each year (fS)	Capital after supplementation (fS)	US\$ equivalent of Capital of capital after supplementation
1984	750,000	750,000	577,000
1985	730,687	805,000	620,000
1986	595,500	670,500	516,000
1987	441,000	516,000	397,000
1988	286,500	361,500	278,000
1989	132,000	207,000	160,000
	2,935,687	3,310,000	2,548,000

<sup>1</sup> Exchange rate U\$1 = fS1.3.

best capacity to realise and develop a project, because only in this way will the continuation of the revolving fund approach be assured. This will also offer the best possibility of spreading the beneficial effects of the project, through the potential for creation of additional employment opportunities in expanding enterprises.

### 3. Development objective

Income generation and self-reliance for refugees and local population in Eastern and Central Sudan.

#### 3.1 Indicator

At least 80 per cent of the enterprises financed from the Revolving Fund are economically viable and self-supporting at the end of the project.

#### 3.2 Source of indicator data

Reports of the Fund Committee and of the project management.

### 4. Immediate objective

A Revolving Fund to finance income generating activities for refugees in Eastern and Central Sudan.

#### 4.1 Indicators

- (a) The fund is self-generating at the end of the project.
- (b) 100 loans of an average size of £\$7500 are annually granted to refugees (or Sudanese/refugee partnerships).
- (c) Default cases do not exceed 10 per cent annually.
- (d) The Fund is managed by Sudanese and refugees without international expertise at the end of the project.

4.2 Sources of indicator data

- (a) Reports of the project management.
- (b) Reports of the Fund Committee.
- (c) Records of various individual and collective ventures.

5. Outputs

- (a) Project manager and consultants are recruited. (Month 1)
- (b) Local personnel and project advisors are recruited. (Month 2)
- (c) Fund Committee is established. (Month 1)
- (d) Standing rules, procedures and policy guidelines for the operation of the Fund are adopted. (Month 1)
- (e) First group of loan receivers is identified. (Month 3)
- (f) Annually, 100 loans of an average amount of £S7500 are granted. (Months 12-60)
- (g) Arrangements are made for the training of eligible applicants in basic principles of management, organisation of small-scale enterprises and book-keeping. (Months 3-60)
- (h) Extension services and advice are provided for refugees (and Sudanese) benefiting from the scheme.

6. Activities

- (a) Recruit the Project Manager and consultants. (Month 1)
- (b) Recruit the local personnel and project advisers. (Month 2)
- (c) Purchase equipment. (Month 1)
- (d) Set up the Fund Committee. (Month 1)
- (e) Establish rules, procedures and policy guidelines for the operations of the Revolving Fund. (Months 1-2)
- (f) Establish extension and advisory services in the following locations: (Months 1-3)
  - (i) Kassala, covering the refugees in Kassala, the

settlements of Khashm el Girba, Kilo 26 and any future settlement likely to be established in the area.

- (ii) Port Sudan, covering refugees in Port Sudan and Suakin.
  - (iii) Showak, covering the settlements of Um Gargur, Karkora, Abuda, Um Ali and any future settlement in the vicinity.
  - (iv) Gedaref, covering the urban refugee population in Gedaref and also the settlements of Tawawa, and Um Gulga
  - (v) El Hawata, covering the settlements of Um Rakhoba, Tenedba, Wad Awad, Abu Rakhm, Qala al Nahal and any future settlement in the area.
  - (vi) Sennar, covering the Suki group of settlements.
  - (vii) Khartoum, covering the urban refugees in the three towns.
- (g) Advise the loan recipients in setting up businesses and in the procurement of equipment and raw materials. (Months 3-60)
- (h) Make arrangement with the existing training institutions for the training of eligible refugees in basic principles of management of small-scale business and book-keeping. (Months 3-60)

## 7. Inputs

### A. Donor

#### A.1 Personnel (International)

1 Project manager, Technical adviser (36 m/m)

Essential qualifications: University degree in Economics with specialisation in small-scale enterprise management and financing. Experience in the management of revolving funds or similar schemes in developing countries.

Languages: Fluency in English and preferably Arabic.

Duties: General responsibility for the overall

operation and co-ordination of the project activities. He will act as the chief co-ordinator of the Fund Committee and will ensure the liaison with the Office of the Commissioner for refugees. Responsibility for training the national counterpart to take over the management of the Fund at the end of the third year.

Duty station: Khartoum, will be required to travel to project sites in Eastern and Central Sudan.

1 Training expert (6m/m)

Essential qualifications: University degree in Management, Business Administration or equivalent. Extensive experience in training in small-scale business.

Languages: English and preferably Arabic.

Duties: Responsible for the training of refugee loan recipients in the existing training centres in basic principles of management and book-keeping. In collaboration with NTDC, will assess the needs and draw the curricula and modalities for the training of refugees. He will be responsible to prepare the national counterpart to take over responsibilities at the end of his assignment.

Duty station: Khartoum, will be required to travel to project sites in Eastern and Central Sudan.

Local

1 Legal Expert (60 m/m)

Essential qualifications: University degree in Law. Knowledge of Sudanese laws especially corporate and labour laws.

Duties: Assist the project manager in all legal issues; responsible for the evaluation of documentation related to Loan Application and Loan Agreement forms, default and business failure cases. He will be required to contact relevant local authorities to initiate legal proceeding for obtainment of business and work permits,



travel authorisations for refugees, registration of co-operative societies, etc. Will advise refugee enterprises facing legal problems.

Duty station: Khartoum

7 Extension officers (420 m/m)

Essential qualifications: Degree in business or public administration, economics or the equivalent. Experience in small-scale industries. Training in counselling and guidance would be desirable.

Duty stations: Will be based in 7 different locations in Eastern and Central Sudan, as stated above.

1 Accountant

Essential qualifications: Degree in Accounting. Experience of work in financing small-scale business would be an advantage. Knowledge of English and Arabic.

Duties: Responsibility for the financial control and monitoring of the disbursements and repayments of loans to the Revolving Fund. Preparing financial records of all the operations.

Duty station: Khartoum

2 Drivers (72 m/m)

9 Secretaries/typists (324 m/m)

A.2 Equipment and materials

- 2 vehicles:

one for the project management in Khartoum and one for the extension officer in Port Sudan. The extension officers in the 5 other locations will be using the vehicles provided within the project on "The Organisational Structure".

- Typewriters (9) and photocopier (1)
- Office furniture
- consumable supplies (paper)

### A.3 Capital for the Revolving Fund

Table 1 gave estimates of the capital needs of the fund over a period of five years. Assuming an annual rate of 100 loans of £S750,000 and a 10 per cent failure rate of repayments, capital needs will appear as follows:

	<u>US\$</u>
1984	577,000
1985	620,000
1986	516,000
1987	397,000
1988	278,000
1989	162,000
Total	2,550,000

### A.4 Other costs

- (a) Operation and maintenance of equipment (including fuel)
- (b) Funds for in-country travel
- (c) Fellowships
  - National project manager  
(1 x 9 months)
  - National training officer (1 x 9 months)
  - 2 lecturers at the Training Centres (2 x 6 months)
  - Family support for refugee trainees.

## B. The Government of Sudan

### B.1 Personnel

- (a) Counterpart to the project manager, to take over responsibility for the operation of the Revolving Fund, after the initial three years, and to supervise the extension officers.
- (b) Senior Training Officer, counterpart to the Training Expert, to take over responsibility after the first six months of the project.

B.2 Accommodation

- (a) Provision of offices for the Project staff in Khartoum; the staff in the field will be accommodated in the buildings provided by the project on "The Organisational Structure".

8. Institutional framework

The project will be placed under the Office of the Commissioner for Refugees. The project headquarters would be in Khartoum, the extension officers will be stationed in the six other locations in Eastern and Central Sudan (see above under "Activities"). A "Fund Committee" will be set up to run the activities of the Revolving Fund. It will act as a vetting committee and will have the following tasks:

- (a) establish operating rules, procedures and criteria for the evaluation of loan applications
- (b) issue guidelines for the proper operation of projects
- (c) review loan applications, accept, reject, or request resubmission
- (d) monitor and evaluate the operations of projects and take decision on failures and defaults.

The Committee will be composed of the following members:

- (1) Project Manager
- (2) Official from the Office of the Commissioner for Refugees
- (3) The General Project Manager for the Eastern Region or his representative
- (4) Representative of UNHCR
- (5) Official from the Labour Department
- (6) Representatives of the Regional Governments (one from the Central Region and one from Eastern Region)
- (7) Representative of the Small-Scale Industries Board
- (8) 2 Representatives of the refugee community in the beneficiary area

9. Prior obligations and prerequisites

9.1 Prior obligations

The Office of the Commissioner for Refugees will continue to assist eligible refugees in obtaining the necessary trading licences and authorisations. The regulations to this effect will be promulgated.

9.2 Prerequisites

- (a) The Office of the Commissioner for Refugees will take the necessary action to make arrangements with the NTDC and other relevant Training Institutions for the training of refugees participating in the project.
- (b) The Office of the Commissioner for Refugees should, in time for the commencement of the project, select the necessary national counterpart staff, as itemised in section 7 above. Budgetary provision should be made in due time to cover expenditures under this item from the second year of this project. The costs for the first year and part of the second year will be covered by the project budget.

10. Assumptions

10.1 Immediate to development objective

- (a) The government's policy of encouraging refugees to become self-supporting will be continued.
- (b) There will not be any significant decrease in the number of refugees in the Eastern and Central Sudan during the project life.
- (c) Refugees and their Sudanese neighbours will be willing to improve their standard of living by their own efforts through participation in income-generating activities financed by the Revolving Fund.

10.2 Output to immediate objective

- (a) The income earned from different activities financed through the Fund will be high enough to allow refugees to continue paying back the loans and running such activities.
- (b) The failure cases will not exceed 10 per cent.

10.3 Activities to outputs

- (a) Sufficient number of eligible refugees to receive loans are available.
- (b) Arrangements could be made with the relevant training institutions to train refugees in the management of small-scale industries.
- (c) The trainees drop-out rate does not exceed 20 per cent.

10.4 Inputs to activities

- (a) Physical facilities available for the implementation of the project.
- (b) Support obtained from the UNDP to speed up custom formalities for the imported equipment.

11. Rationale

The modalities for the operation of the Revolving Fund, the criteria for the selection of eligible candidate to receive loans and the conclusion of fair, flexible and reasonable loan agreements constitute the major prerequisites for the success of the project.

11.1 Criteria and procedures for granting loans

- (a) Eligibility. The eligibility of loan applicants to receive finance will be determined according to the following criteria:

- (i) They belong to the target group, i.e. refugees in Eastern and Central Sudan or Sudanese living in the refugee affected areas with no access to any other source of credit and who are willing to set up small-scale business in partnership with refugees.
- (ii) The applicants possess the required qualification and skills to undertake the proposed activity.
- (iii) The activities for which the applicants are seeking finance, are proven to be viable and feasible projects in the local environment. A brief feasibility study will be presented by the applicants.

Loan applications which provide for additional job creation, i.e. which will lead to the employment of others besides the applicant, whether they be refugees or Sudanese, should receive preferential consideration.

(b) Size and form of loans

Loans could be granted in kind (stock of raw materials, equipment) or cash. The size of loans will vary according to the type of the activity, the estimated working capital, the scale of operations, and the numbers of jobs to be created. In each case the extension officer in each location will evaluate the needs for capital. On completion of this stage, the extension officer will submit the Loan Proposal Form (Appendix A) with his comments and recommendations to the Fund Committee.

(c) Conclusion of Loan Agreements

The Loan Proposal Form will contain general information and data, inter alia, about the nature of the project,

the pay-back period, the expected sales, the marketing channels of the product, the employment opportunities to be generated by the project, the operating expenses and the expected profits.

The Fund Committee, on the basis of the information provided, together with the recommendation of the extension officer may decide to grant a loan to the applicant, request more elaboration for resubmission or otherwise reject the application. Once the Fund Committee is satisfied with the Loan Proposal, a Loan Agreement will be concluded and signed by the Project Manager and the borrower (or borrowers).

The Loan Agreement (Appendix B) is intended to be brief and flexible in its terms and conditions. The agreement provides that the borrower shall pay the loan in installments, after a grace period, with 3 per cent administrative charge on each installment. Conditions for the disbursements of the loans and its cancellation are set out. Given the conditions of refugees, land mortgage or personal guarantors could not be used as security for repayment; therefore it is proposed to use promissory notes and debenture.\* The assets of the borrower, present and future, are made subject to a floating charge, as a collateral security. The security for repayment of the loan is deemed to be appropriate, due to practical considerations, for the purposes of the project. General conditions to cater for the proper monitoring of the project and to suit the rationale of the Fund will be also set out in the agreement.

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\* See Annex A and B.

## 11.2 Training

The training component of the project consists in providing eligible loan applicants with basic knowledge of principles of management of small-scale industries and simple book-keeping.

Part of the training to be provided to potential loan recipients should include full explanation of the implications of entering the scheme - the obligation to make prompt and regular repayment of loans, etc. Management of funds for running the business on a continuing basis will be another key aspect of training. Arrangements will be made to develop a special curricula and organise short term courses for different categories of refugees in the National Cooperative Development and Training Centre or when appropriate in the regional centres in Kassala and Gedaref.

## 11.3 Extension staff and advisory services

An effective extension and advisory service is a major prerequisite for the successful implementation of the project. The extension officers recruited locally on the basis of their experience in the area of small scale industries will be located in 7 major towns with a high degree of concentration of refugee operated enterprises. They will have the task of continuous monitoring of the activities financed by the Fund and gathering first-hand in-field knowledge of the needs, successes and failures of the project. More specifically they will:

- assist potential applicants in the identification of suitable projects, in providing simple feasibility studies and in fulfilling the procedures for the grant of loans;



- undertake regular visits to the activities, review their progress and provide advise and guidance to project operators;
- deal with the local Sudanese/UNHCR Authorities for the grant of businesses, work or travel permits, and other facilities;
- assess failure cases and inform the project management.

12. Reporting, monitoring and evaluation schedule

(a) Reporting

- three-monthly progress reports
- three-monthly financial reports
- 1 terminal report

(b) Evaluation plan

The project is to be the subject of two evaluation missions, one approximately at mid-1985 and the second at the end of 1986, when the national counterparts will eventually take over the project management. These two missions are provided for within the Project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees". It is expected that a self-evaluation report will be prepared at the end of the project by the project management.

(c) Evaluation participants

Project Manager and counterpart

- representative of Small-Scale Industries Board
- representative of Department of Labour
- representative of Eastern and Central Regional Governments
- representative of UNHCR
- ILO Area Office Director
- representatives of the refugees (2).

Parties responsible for the collection of data:

The project management will have primary responsibility for the collection of data necessary for the evaluation reviews, working in close collaboration with the Eastern and Central Governments.

LOAN PROPOSAL

1. Applicant

Name (s) of Applicant and Nationality (ies)

.....

2. Settlement or Address

Name of settlement where applicant resides or his address

.....

3. Legal Status of the Enterprise

(Whether Co-operative Society/Joint Venture or One-man business)

.....

4. Location of the Project or Enterprise

.....

5. Assets

(a) Cash ..... (Sudanese and Refugees)

(b) Machinery or Tools ..... (Sudanese and Refugees)

6. Nature of Project Output

.....



13. Loan Disbursement

- (a) Installments  
.....
- (b) Cash  
.....
- (c) Machinery or Tools or Raw Materials  
.....
- (d) In case of each loan: number and duration of disbursements  
.....

14. Project Inputs

- (a) Type of inputs required
- (b) Origin of inputs required
- (c) Means of securing inputs required
- (d) Availability of inputs required

15. Net Cash Income Generated by the Project to Applicant

.....  
.....

16. Any Possible Spill-Over Effects on the Community at Large or the Local Settlement the Project may Generate

.....

P.S. All relevant document (certificate of registration for co-operative societies, etc.) should be attached to the Loan Proposal.

Note: This application is subject to variations necessitated by the type of project to be considered. Thus in the cases of one-man businesses, most of the above information may not actually be needed.



LOAN AGREEMENT

Memorandum of Agreement for a loan made on .....  
between .....  
(address) .....(hereinafter  
called the borrower) of the one part and .....  
(address) .....(hereinafter  
called the Fund) of the other part.

WHEREBY it is AGREED AS FOLLOWS:

1. Amount and Date of Loan

1.1 The Fund agrees to loan and the Borrower agrees to accept on the terms herein set out, a loan of the sum .....  
and the date on which the loan is to be made is the .....  
day of .....

1.2 Calculation of Administrative Charge

The Borrower shall pay the Fund administrative charges at the rate of 3% to be paid together with the relevant monthly installments on the loan.

2. Disbursement of Loan

2.1 The loan will be disbursed to the Borrower upon signature of this Agreement or, from time to time, as required by the Borrower (and approved by the Fund Committee) for the proper conduct of his business.

2.2 Notwithstanding the provisions of the above Article, the Fund may, on the request of the Borrower, pay the loan or any part thereof in the form of machinery, tools and/or raw materials.

2.3 The cash component of the loan or each disbursement shall be made to an account in the name of the Borrower (in case of co-operative or joint ventures) or to the borrower personally.

3. Conditions of Disbursement

3.1 Disbursement pursuant to the above Articles shall be made subject to the condition that the Borrower has carried out all obligations or executed any promises that may appear in the "Application Form for Loan".

4. Loan Cancellation:

4.1 The Fund shall have the right at any time to refuse disbursing the loan or any undisbursed portion thereof or to withhold delivering machinery or raw materials in the happening of any of the following events:

- (a) if the borrower (or a substantial number of the membership of the borrower's society) ceases to stay or carry business in Sudan,
- (b) if the application submitted for obtaining the loan contains inaccurate statements of facts,
- (c) if default be made in the payment of any of the due installments,
- (d) if the borrower fails to co-operate with the extension officers (field advisers),



5. Loan Repayment and Grace Period:

5.1 The Borrower shall repay the loan in ..... monthly installments provided that the first installment shall be paid after a period of six months from the date of the signature of the promissory notes.

5.2 Payment of each installment and the administrative charges due monthly shall be made during (..... first or second) week of each month for the credit of account No. .... or to ..... or to such person or account as the Fund may designate from time to time.

6. Promissory Notes:

6.1 As security for the payment of the installments of the loan and said administrative charges thereon payable in accordance with the terms of this agreement, the Borrower shall sign, execute, deliver and furnish to the Fund at the Fund's expense the Promissory Notes attached to this agreement for the loan amount and the administrative charges in the form, dates and amounts attached hereto as "Annex A".

6.2 The Fund agrees that upon full payment of the sums due under any Note, the Fund shall surrender such Note to the Borrower marked "Paid".

7. Collateral Security:

7.1 The Borrower, as beneficial owner, further agrees to charge, for the repayment and discharge of the loan and administrative charges, in favour of the Fund, his undertakings and all his movable property whatsoever and wheresoever, both present and future, by way of debenture with a first floating charge as specified in "Annex B" attached to this Appendix.

8. General Conditions

8.1 Use of Loan:

The Borrower shall use the loan for the financing of the project referred to in the application submitted to the Fund for the loan.

8.2 Purchasing of goods and Ordering of Works:

The Borrower shall purchase goods, secure services and order works for the project in consultation with the extension officer designated by the Fund for the area or settlement where the project lies.

8.3 Books and Accounts:

The borrower shall keep proper books and accounts.

9. Information Concerning the Project

9.1 The Borrower shall co-operate with the extension officer in informing the Fund, or any person designated by the Fund, about work and progress of work and management of the project.

9.2 The Borrower shall deliver to the Fund or any person designated by the Fund for such purposes periodical reports about the project and to furnish audited balance sheets and a profit and loss account together with any other information as may be required by the Fund.

9.3 The borrower shall permit, and shall provide all necessary assistance to enable the extension officer or any person designated by the Fund to inspect books, machinery and works in the project and to make such examinations as they consider necessary.

9.4 The borrower shall not in any way assign charge or mortgage or dispose of any of the rights of the borrower to any other person.

Annex (A)

FORM OF PROMISSORY NOTE

For value received I/We (jointly and severally) promise to pay  
..... (Fund) the sum of .....  
of which of ..... represents (administrative charges) by  
..... monthly payments of fS .....  
The first of such payments to be made six month after the date hereof  
and subsequent payments to be made during .....  
week of each ensuing month.

The whole amount payable under this note is to become  
immediately due and payable in any of the events specified in  
Article 4 of the Loan Agreement.

Signature of Borrower



DEBENTURE

BORROWER'S NAME: .....

1. In consideration of the Agreement of .....  
(the fund) to advance or continue to advance to .....  
..... (Borrower) a loan ("the said loan") not  
excluding the sum of .....  
The Borrower HEREBY undertakes that he will repay to the Fund  
all the sum of the said loan plus Administrative charges as  
agreed upon in the said Loan Agreement dated .....
  
2. The Borrower as beneficial owner hereby charges with the  
repayment and discharges of the said loan and Administrative  
charges and all other incidental expenses in form of the fund,  
his undertakings and all his movable property whatsoever and  
wheresoever, both present and future, by way of first floating  
charge.
  
3. All monies hereby secured shall become immediately payable in  
any of the events following:

- (a) if default be made in the payment of any installment or Administrative Charge under the said loan agreement dated .....
- (b) if the borrower ceases to stay or carry on his business or left the Sudan,
- (c) if the application submitted for obtaining the loan contains inaccurate statement of fact,
- (d) if the Borrower fails to co-operate with the Extension Officer,
- (e) if the Authorities withdraw or suspend the Borrower's identity card or labour permit.

4. The Borrower shall not have power to create any mortgage or charge ranking in priority to/or parri passu with this Debenture.

5. The Fund may at any time after any of the installments, or any of the Promissory Notes under the said loan agreement, become payable, appoint by writing under the hand of the CTA any person, whether an officer of the Fund or not, as the receiver and manager of the property hereby charged and may in like manner from time to time remove any such receiver and manager so appointed and appoint another in his place.

6. A Receiver and Manager so appointed shall be the agent of the Borrower and shall have power:

- (a) to carry on or concur in carrying on the business of the Borrower,

- (b) to take possession of and get in the property hereby charged,
- (c) to sell or concur in selling any of the property hereby charged,
- (d) to make any arrangements or compromise which he shall think expedient and to do any other act or things which a receiver would have power to do.

7. The net profits of carrying on the said business and the net proceeds of the said sale shall be applied by the Receiver and Manager subject to the claims of all secured creditors (if any) ranking in priority to this Debenture.

Firstly: In payment of all costs, charges and expenses offered incidental to the appointment of the Receiver and Manager and the exercise by him of all or any of the powers aforesaid including the reasonable remuneration of the Receiver and Manager not exceeding a commission at the rate of ..... on the amount of all monies received by him.

Secondly: In/or towards payment to the Fund of all principal installment due in respect of this Debenture.

Thirdly: In/or towards payment to the Fund of the Administrative charges remaining unpaid in respect of this Debenture.

Fourthly: Any surplus shall be paid to the Borrower.

8. The Fund shall have the right to transfer and assign this Debenture at will.

9. This Debenture shall not in any way prejudice or affect any guarantee, mortgage, or other security which the Fund may have from the Borrower or any person to secure the repayment of any of the advances made or to be made by the Fund to the Borrower under the said loan.

Given under the seal of the Borrower, this ..... day of ..... 1984.

---

Signature of the Borrower  
(or his representative)

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Signature of the Fund Representative

Who signed in the presence of  
Witnesses:



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: SUDAN

Project No.:

Title: REVOLVING FUND FOR FINANCING INCOME-GENERATING ACTIVITIES FOR REFUGEES

Code	Details	Total		1984		1985		1986		1987		1988		1989	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL														
11	EXPERTS														
11.01	Project Manager	36.0	276,800	6.0	45,500	12.0	91,600	12.0	92,900	6.0	46,800				
11.02	Expert in Training	6.0	39,600		-	6.0	39,600		-		-				
11.99	SUB-TOTAL		316,400	6.0	45,500	18.0	131,200	12.0	92,900	6.0	46,800				
13	Admin. Support Personnel		135,400		22,600		45,100		45,100		22,600				
15	Travel on Official Business		16,000		1,000		7,000		7,000		1,000				
17	National Professional Staff														
17.01	Legal Adviser		40,000		6,000		13,500		13,500		7,000				
17.02	Extension Officers (7)		97,000		15,000		33,000		33,000		16,000				
17.03	Accountant		25,000		4,000		8,000		8,000		5,000				
19	COMPONENT TOTAL		629,800		94,100		237,800		199,500		98,400				
20	SUB-CONTRACTS														
21	Sub-contracts (Revolving Fund)		2,550,000		577,000		620,000		516,000		397,000		278,000		162,000
29	COMPONENT TOTAL		2,550,000		577,000		620,000		516,000		397,000		278,000		162,000
30	TRAINING														
31	Fellowship		30,400		-		30,400		-		-				
33	In-Service Training		70,000		10,000		25,000		25,000		10,000				
39	COMPONENT TOTAL		100,400		10,000		55,400		25,000		10,000				
40	EQUIPMENT														
41	Equipment		45,000		40,000		2,500		2,500		-				
49	COMPONENT TOTAL		45,000		40,000		2,500		2,500		-				

**Project Budget Covering Contribution from Donor**  
(In US Dollars)

Country: SUDAN

Project No:

Title: REVOLVING FUND FOR FINANCING INCOME-GENERATING ACTIVITIES FOR REFUGEES

Code	Details	Total		1984		1985		1986		1987		1988		1989	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
50	MISCELLANEOUS														
51	Operation & Maintenance of Equipment		26,000		5,000		8,000		8,000		5,000		-		-
53	Sundries		6,000		1,000		2,000		2,000		1,000		-		-
59	COMPONENT TOTAL		32,000		6,000		10,000		10,000		6,000		-		-
90	SUB-TOTAL		3,357,200		727,100		925,700		753,000		511,400		278,000		162,000
60	PROGRAMME SUPPORT COSTS														
67	Programme Support Costs (Ad hoc 5% on 21) <sup>1</sup>		127,500		28,850		31,000		25,800		19,850		13,900		8,100
68	Programme Support Costs (13%)		104,940		19,510		39,740		30,810		14,880		-		-
	TOTAL PROJECT		3,589,640		775,460		996,440		809,610		546,130		291,900		170,100
70	PROVISION FOR COST INCREASES <sup>2</sup>														
71	4% - 1984		6,780		6,780										
	8% - 1985		27,640				27,640								
	17% - 1986		45,530						45,530						
	26% - 1987		33,610								33,610				
	GRAND TOTAL		3,703,200		782,240		1,024,080		855,140		579,740		291,900		170,100
	*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.														
	<sup>1</sup> On the amount of the revolving fund.														
	<sup>2</sup> Does not apply to line 21 "Revolving Fund".														

INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Small-Scale Dairy, Poultry and  
Vegetable Farming for Income Generation  
in Eastern and Central Sudan

Geographical coverage: Sudan

Project language: English and Arabic

Starting date: 1984

Duration: Two years

Donor contribution: US\$2,269,980

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)



Small-Scale Dairy, Poultry and Vegetable Farming  
for Income Generation in Refugee-Affected Areas  
in Eastern and Central Sudan

1. Background and context

Upon the request of the Government of Sudan, the joint UNHCR/ILO Mission visited the Sudan (November-December 1981) with the objective of proposing viable action which could help refugees to attain a situation of self-reliance.

The Mission identified a number of possible income-generating activities. These included among others: poultry and egg farming, vegetable gardens and dairy products. Feasibility studies carried out during a subsequent mission to the country showed that these activities could be successfully undertaken in some refugee settlements and could provide a major source of income to refugee families.

The project proposal comprises four sub-projects incorporating the above activities:

- (a) An integrated scheme (dairy, poultry and vegetable farming) in 4 settlements in Eastern and Central Sudan;
- (b) A poultry cooperative in Port Sudan;
- (c) Individual poultry raising by refugee female-headed households in 15 settlements;
- (d) Backyard vegetable gardening by refugee female-headed households in 15 settlements.

A total of 7,832 refugee households will participate in the 4 sub-projects in Eastern and Central Sudan.

(a) Sub-project no. 1: An integrated scheme of dairy, poultry and vegetable farming in Eastern and Central Sudan

It is proposed in this project that an integrated scheme incorporating the above three activities be implemented. In this scheme small family-run poultry farms (of 100 birds/unit), goat farms (of 10 animals/unit)<sup>1</sup> and vegetable gardens (of 1 feddan each) are to be set up. A producers' cooperative in each settlement or settlement group will run a feed mill and would be responsible for the supply of raw materials and the sale of products (milk, cheese) in the nearby towns and market centres. The area federations of income generating associations would provide the cooperatives with the transportation facilities.<sup>2</sup> The manufacture of garden tools and minor equipment would be undertaken by a blacksmiths' workshop in each settlement/settlement group.<sup>3</sup>

A preliminary choice of settlements for the pilot project are the wage earning settlements of Kilo 7, Awad es Sid, Fath el Rahman (Suki Group), Khashm el Girba and Kilo 26 (Girba Group).<sup>4</sup> Apart from the fact that these settlements have the lowest average incomes from planned activities, (i.e. wage-labour in irrigated schemes) they are settlements in which water availability, a major prerequisite of these types of activities, can be ensured. It is expected that this scheme would be replicated in the other settlements in Eastern and Central Sudan.

(b) Sub-project no. 2: A poultry cooperative for refugees in Port Sudan

Poultry has been shown to have great potential for income generation in the Port Sudan area.<sup>5</sup> The project proposes the establishment of a poultry cooperative providing 200 refugees each with 100-bird poultry farms. The cooperative will run a poultry feed mill plant and will undertake the collection and transportation of poultry products from production areas to the market place. Only the local market is catered for in this project. Based on its success, expansion to provide markets in the other parts of the Sudan could be undertaken by the cooperative.

(c) Sub-project no. 3: Individual poultry raising for refugee female-headed households in settlements in Eastern and Central Sudan

Single women with numerous dependents, constitute one of the most vulnerable groups in refugee settlements in Eastern and Central Sudan. The majority of them live solely on their meagre food rations distributed by WFP. In this project it is proposed to distribute to each female-headed household 30 chickens (28 hens and 2 cocks), which will be raised domestically around their huts.<sup>6</sup>

It is intended to improve in the first place the family diet and remedy the children's deficiency in vitamin A, with the consumption of eggs and chicken meat. However, some additional cash income will be earned by marketing extra products through women's production groups in the settlement markets.

(d) Sub-project no. 4: Backyard vegetable gardening for refugee female-headed households in settlements in Eastern and Central Sudan

In many settlements, the majority of single women with numerous dependents live only on the food rations distributed to them by WFP. The planned daily ration per head to vulnerable groups consists of 200 grammes dura, 40 grammes milk powder, 30 grammes fats and 30 grammes pulse. Even the full ration is to be considered as a meagre diet, however, in practice not all single women are getting the full ration and generally they complained about the lack of fresh vegetables in the daily diet.

Even in the settlements, where communal vegetable gardens were set up to provide refugees with some vegetables at subsidised prices, such as in Suki and Kilo 26, refugees claimed that they had no access to these vegetables either because of the small quantities offered or too high prices.

In some settlements, however, such as Tawawa, Um Gulga and Abuda, refugees are successfully growing some dura grain and vegetables around their huts. In this project, it is proposed to assist the female-headed households in 15 settlements to expand or initiate backyard vegetable gardens in the compounds of their houses.

On average  $400\text{m}^2$  are allotted to refugee households for the construction of the hut and the surrounding area. However this space varies according to the household size and from one settlement to another. For the purposes of the project, it is estimated that each household will have  $200\text{m}^2$  at its disposal for vegetable gardening.

The primary objective would be to improve the family diet by providing highly nutritious vegetables such as onions, potatoes, okra, pepper, eggplant, groundnuts, jewsmallow (mulutchia). But the extra product can be sold in the settlement market and thus generate additional income for the household. Some items can be sun-dried and then taken to the market, such as onions, okras or pepper (sun-dried and ground) or even processed (refugees prepare peanut butter with crushed groundnuts).

## 2. Target groups

- Sub-project No. 1: 2,300 refugee families in 4 settlements
- Sub-project No. 2: 200 refugee families in Port Sudan
- Sub-project No. 3: 2,670 refugee female-headed households
- Sub-project No. 4: 2,670 refugee female-headed households.

## 3. Development objective

Income generation for refugees and satisfaction of their basic needs in Eastern and Central Sudan.



### 3.1 Indicators

- Sub-project No. 1: in five years at least 5,000 refugee families in settlements in Eastern and Central Sudan are earning an income from dairy, poultry and vegetable farming.
- Sub-project No. 2: at least 150 refugees are earning an income from the scheme.
- Sub-projects Nos. 3 and 4:
  - (a) Improvement in the family diet of the refugee household.
  - (b) Reduced children's deficiency in vitamin A.
  - (c) At least 1,500 female-headed households earn additional cash income.

### 3.2 Source of indicator data

- (a) Records of income-generating associations, cooperatives and women's production groups at each settlement or settlement group;
- (b) Household surveys carried out in the settlements;
- (c) Medical records in the settlements' clinics.

### 4. Immediate objective

Small-scale dairy, poultry and vegetable farming for income generation for refugees in Eastern and Central Sudan (4 sub-projects).

4.1 Indicators

Sub-project No. 1:

- (a) At the end of the project a daily output of at least 10,000 eggs and 1,000 litres of milk are produced in the chosen settlements;
- (b) At least 1,000 families in the chosen settlements are participating in the scheme;
- (c) At the end of the project the income generating associations are self-supporting.

Sub-project no. 2:

- (a) In 5 years, the cooperative is able to supply at least 50 per cent of Port Sudan's requirements for poultry products (see Rationale).
- (b) The cooperative is self-supporting at the end of the project.

Sub-project no. 3:

- (a) At least 50 per cent of the settlements demand for eggs (equal to 46,650 eggs) and 20 per cent for chickens (equivalent to 22,393 chickens) are satisfied by individual poultry raising by female-headed households.

Sub-project no. 4:

- (a) A minimum of 1,000 female-headed households are growing vegetables around their huts;
- (b) A minimum of 1,000 women are provided with basic tools, seeds and fertilizers for the cultivation of backyard gardens;
- (c) A minimum of 1,000 women are trained and given advice in better vegetable gardening.

4.2 Sources of indicator data

Records of income generating associations, cooperatives and women's production groups in the towns/settlements where the activities are undertaken.

5. Outputs

5.1 Sub-project no. 1<sup>7</sup>

- (a) A registered poultry and dairy producers' cooperative in each of the two groups of settlements (Suki group and Girba group). This cooperative will have the responsibility for the supply of inputs which will be sold to the members. Outputs will be purchased by the cooperatives and sold in the cooperative-run shops in the urban areas or market centres. The cooperatives would also assume the responsibility for running an animal feed mill in each of the two groups of settlements. (Months 6 - 24)
- (b) A mechanism for the supply of raw materials to the cooperatives is established. This includes arrangements for the supply of products from local industries (e.g. oil cakes from oil-mills and vaccinations from Soba Chemicals and other suppliers), agricultural products from the farms or markets and imported components (such as protein concentrates) from importers. Potential suppliers of essential components are listed in Annex 3. (Months 1 - 3)
- (c) An animal feed plant is set up in each of the two groups of settlements. These will be mills which prepare animal feeds from ingredients such as oil cakes, dura, oyster shells and fish bone meal, protein concentrates, etc. (Months 1 - 3)

- (d) A total of 550 poultry farms each consisting of 100 birds are set up. (Month 3)
- (e) A total of 550 goat farms each consisting of 10 animals are set up. (Month 3)
- (f) 1,200 vegetable gardens of 1 feddan each are set up. (Month 3)
- (g) The producers' cooperatives in each settlement group are affiliated to the corresponding federation of income generating associations. The latter would provide transportation services for raw materials and products. (Month 3)
- (h) Two cooperative-owned shops are established at Girba and Sennar as well as stalls in markets centres of Kawli and Wad Errikane near Suki.<sup>8</sup> (Month 4)
- (i) Refugees from a total of 2,300 families are given extension services and trained in better animal husbandry and vegetable gardening practices. (Months 1 - 24)

5.2 Sub-project no. 2

- (a) A registered poultry farming cooperative. (Month 6)
- (b) A mechanism for the supply of raw materials and other inputs (e.g. one-day old chicks, ingredients for the feed mill and vaccinations for chickens) (Months 1 - 3)
- (c) A total of 200 poultry farms each consisting of 100 birds. (Month 3)
- (d) A poultry feed mill plant using locally available materials (e.g. oil cakes and fish bone/oyster shell meal and dura). (Month 3)
- (e) An equipped shop in the market place for the sale of poultry products. (Month 6)
- (f) Transportation service for collection of poultry products. (Month 3)
- (g) Refugees from 200 families are provided with extension services in poultry raising. (Months 1 -24)

5.3 Sub-project no. 3

- (a) A total number of 79,860 (2,662 x 30) one-day old chicks are distributed to women's production groups in 15 settlements, where they are kept, fed and heated until they are six weeks old. (Month 1)
- (b) Each refugee female-headed household is given 30 six-week old birds (28 hens and 2 cocks). (Month 2)
- (c) Each household is provided with a small bush shelter for 30 birds. (Month 2)
- (d) Chicks are vaccinated against Newcastle disease and Fowl Pox. (Months 1 - 2)
- (e) Women are trained and advised in domestic poultry raising by extension workers. (Months 1 - 6)
- (f) Women are given extension services for the treatment of chickens' diseases. (Months 2 - 18)
- (g) Households in wage-earning settlements are provided with additional chicken feed (sorghum grains). (Months 2 - 13)
- (h) Surplus production of eggs and chickens are sold through women's production groups at the settlement and nearby Sudanese markets. (Months 5 - 18)
- (i) Arrangements are made with the Ministry of Agriculture to provide refugee women with vaccines and other extension services at the end of the project. (Month 18)

5.4 Sub-project no. 4

- (a) 2,670 female-headed households in 15 settlements willing to join the project are identified. (Month 1)
- (b) Women are provided with basic tools, seeds and fertilizers for the cultivation of backyard gardens. (Month 2)

- (c) Women are trained by extension workers in vegetable growing. (Months 2 - 24)
- (d) Activities are supervised in each settlement by women's production groups. (Months 9 - 18)
- (e) Surplus production of vegetables is sold at the settlement markets. (Months 12 - 18)

6. Activities

- (a) Recruit project supervisor. (Month 1)
- (b) Recruit local employees.<sup>9</sup> (Month 1)
- (c) Acquire land space where necessary. (Months 1 - 2)
- (d) Establish supply contacts for raw materials acquisition and make arrangements for the continued supply of these inputs. (Months 1 - 3)
- (e) Purchase vehicles. (Month 1)
- (f) Purchase and install equipment. (Months 1 - 3)
- (g) Purchase initial supply of chickens, goats, seeds, animal feeds, vaccinations, fertilizers and other inputs. (Months 1 - 6)
- (h) Acquire/rent shops and stalls in market centres and towns. (Months 1 - 6)
- (i) Advise and provide extension services to refugees on poultry raising, animal husbandry and vegetable gardening. (Months 1 - 24)
- (j) Make arrangements with the federations of income generating associations for the provision of transportation facilities. (Months 1 - 6)

6.1 Sub-project no. 1

- (a) Construct sheds to house feed mills, goats and poultry.
- (b) Set up and register cooperatives or associations of income generating activities in each group of settlements.

6.2 Sub-project no. 2

- (a) Set up a poultry cooperative. (Month 1)
- (b) Set up poultry feed mill. (Month 2)
- (c) Build sheds for poultry raisers. (Month 2)

6.3 Sub-project no. 3

- (a) Provide women's production groups in each settlement or groups of settlements with the required number of one-day old chicks (see Annex 4), as well as brooders, kerosene lamps, chicken feed and vaccines. (Month 1)  
(In order to reduce the mortality rate, chicks will be kept in the women's production centres until they are six weeks old and then distributed to households.)
- (b) Distribute 30 six-week old chickens (28 hens and 2 cocks) to each female-headed household in the settlements. (Month 2)
- (c) Provide each household with a bush shelter for 30 birds. The birds will be kept inside when laying eggs, released later to hunt for food, and then locked up for the night. (Month 2)
- (d) Train and advise women in domestic poultry raising. (Months 1 - 6)
- (e) Treat chickens' diseases in time to avoid epidemics and high mortality rates which are very common at present. (Months 2 - 18)
- (f) Provide households in wage-earning settlements with additional chicken feed: 30 grammes of sorghum grains per day and per bird, for 12 months. The chickens will be fed by scavenging in the neighbourhood, but in wage-earning settlements where there is less edible waste, the diet will be supplemented by providing some additional grains. (Months 2 - 13)
- (g) Collect and sell the surplus products in settlements and nearby Sudanese markets. (Months 5 - 18)

6.4 Sub-project no. 4

- (a) Identify 2,670 female-headed households in 15 settlements to join the project. Annex 4 gives a preliminary indication on the distribution of households in settlements, however, before the implementation the manager should make sure that the water supply is adequate for vegetable gardening. (Month 1)<sup>10</sup>
- (b) Provide the households with basic tools (hoes), seeds for different kinds of vegetables and fertilizers. The seeds and fertilizers will be distributed according to the appropriate cultivation calendar. (Months 2 - 18)
- (c) Agricultural extension workers train women in 15 settlements in basic principles of vegetable plantation, water and fertilizer requirements, sun drying, storage, etc. Many refugees are of nomadic or urban background and have no previous experience in gardening. (Months 2 - 8)
- (d) Women's production groups in each settlement will oversee the running of activities (distribution of seeds, fertilizers, tools, training by extension workers). (Months 1 -18)
- (e) Sell the surplus products (fresh or dried vegetables, ground pepper, peanut butter) at the settlement markets. (Months 6 - 18)

7. Inputs

A. Donor

A.1 Personnel (locally recruited or UN Volunteers)

1 project manager (24 m/m)

Essential qualifications: University degree in agriculture/agricultural economics. Expert in livestock farming with experience in planning and implementing technical cooperation projects. Knowledge of the



environmental and agricultural conditions in Eastern and Central Sudan.

Duties: General responsibility for the implementation of the 4 sub-projects in the settlements and town in Eastern and Central Sudan. Initiating and supervising the activities listed above.

Duty station: Gedaref, would be required to travel frequently to the project sites.

2 veterinary doctors (48 m/m)

Essential qualifications: University degree in veterinary sciences.

Duties: Vaccinations and treatment of livestock and poultry. Advise refugees on better animal husbandry.

Duty stations: 1 in Port Sudan (to serve sub-project no. 2) and 1 in Gedaref (to serve sub-project nos. 1 and 3) (will be required to travel to the project sites).

6 agricultural and animal husbandry extension workers (216 m/m)  
(to serve the 4 sub-projects).

Essential qualifications: Experience in offering agricultural extension services in livestock and farming to rural areas. Good knowledge of agricultural practices in Eastern and Central Sudan. Knowledge of Tigre, Tigrinya or Amharic would be an advantage.

Duties: Responsibility for training and advising refugees on better animal husbandry and vegetable gardening.

Duty stations: 1 in Port Sudan (sub-project no. 2) and 5 in Gedaref travelling to the project sites in Eastern and Central Sudan (sub-project nos. 1, 3 and 4).

6 employees for feed mill plants<sup>11</sup> (72 m/m)

(2 to serve sub-project no. 2 in Port Sudan and 4 to serve sub-project no. 1 in 2 settlement groups)

2 drivers for project staff vehicles (24 m/m)  
(1 in Port Sudan, sub-project no. 2, and 1 in Eastern Sudan for sub-project nos. 1, 3 and 4)

1 storekeeper (48 m/m)  
(in Port Sudan for sub-project no. 2)

A.2 Equipment and materials

(a) Equipment for poultry farming

<u>Sub-project no. 1</u>	US\$
- 2,200 feeders	11,000
- 2,200 waterers	11,000
- 550 brooders	5,500
- 11,000 egg trays (each of two dozen capacity)	55,000
- 22,000 paraffin lamps (including trays and shield for lamps)	88,000

Sub-project no. 2

- 800 feeders	3,100
- 800 waterers	3,100
- 200 brooders	1,600
- 800 paraffin lamps	1,900
- plastic egg trays	16,000
- miscellaneous equipment	5,000

Sub-project no. 3

Equipment for women's production centres:

- brooders, waterers and feeders (798 brooders, 266 waterers and 266 feeders)	30,000
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(b) Inputs for poultry farming

Sub-project no. 1

- 66,000 one-day old chicks (female)	82,500
- vaccinations for 66,000 chickens for 6 months	66,000
- 6 months feed for the above number of chickens	220,000
- 6 months supply of paraffin for heating chicks until they are developed	1,100

Sub-project no. 2

- 28,000 one-day old chicks (allowing for 60 per cent mortality)	27,000
- vaccinations for the above number of chickens	22,000
- 6 months feed for chickens	80,000
- 6 months supply of paraffin	500

Sub-project no. 3

Inputs to women's production centres:

- 79,860 one-day old chicks (sexed, two males for 28 females)	50,000
- feed for chicks (first six weeks)	66,000
- vaccines and medicines	32,000
- chicken feed (sorghum) for households in wage-earning settlements for one year	80,000
- funds for water transportation <sup>12</sup>	11,200

(c) Equipment for goat farms

Sub-project no. 1

- 1,100 feeders	11,000
- 1,100 waterers	11,000
- 2,200 (4-gallon capacity) milk containers	11,000
- miscellaneous	10,000

(d) Inputs for goat farms

Sub-project no. 1

- 5,500 one- to two-year old goats (4,950 females and 550 males)	127,000
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- vaccinations for 5,500 goats for 6-month period 11,000
- 6 months feed for the above number of goats 161,000

(e) Equipment and inputs for vegetable gardening

Sub-project no. 1

- tools 5,100
- 6 months supply of fertilizers, seeds and pesticides 10,000
- first year irrigation fee (water rate for 1,200 feddans) at 48 £S/feddan 60,000

Sub-project no. 4

- seeds (for 2 years) 42,000
- fertilizers (for 2 years) 8,000
- tools (hoes) 11,000

(f) 3 animal feed mill plants 18,000

- 1 in Port Sudan (sub-project no. 2)
- 2 in Suki and Girba group of settlements (sub-project no. 1)

(g) 2 project vehicles 40,000

- 1 landrover (for project staff in Eastern and Central Sudan)
- 1 truck (for transportation of materials and finished products in Port Sudan)(sub-project no. 2)<sup>13</sup>

A.3 Construction costs and rental of premises

A.3.1 Sub-project no. 1

- rent for 24 months for one shop at Girba and one at Sennar for sale of poultry products 12,000
- funds for construction of market stalls at Kawli and Wad Errikane market centres 300

- 1,100 mud sheds of area  $20\text{m}^2$  each to house goats and poultry<sup>14</sup> 69,000
- 2 mud sheds of area  $30\text{m}^2$  each to house feed mills 400

Sub-project no. 2

- 200 poultry sheds of  $20\text{m}^2$  area (concrete and chicken mesh) 100,000
- rent for 24 months for shop in market place and for feed mill 18,000

Sub-project no. 3

- individual bush shelters for 30 birds around the huts (for 2,662 households) 20,000

A.4 Operation and maintenance of equipment (including fuel) 20,000

B. Government of Sudan

Release of national staff to participate in the coordinating committee and to give extension services to refugee activities at the completion of the project.

Sub-project no. 1

- (a) A total of 1,200 feddans of irrigated land (850 at Kilo 26 and 400 at Suki) for vegetable gardening.
- (b) Land space for the construction of 1,100 sheds (800 at Suki and 300 at Girba) each of  $20\text{m}^2$  area for chicken and goat farming in the vicinity of the huts.
- (c) Land space for the construction of 2 sheds (1 in each settlement group) each of area  $30\text{m}^2$  for housing the feed mills.

C. Implementing Agency

Overall supervision of the project

8. Institutional framework

The project will be organised with the assistance of the Office of the Commissioner for Refugees which will serve as the counterpart Sudanese Government Agency. The project headquarters will be in Gedaref in the Eastern Region. Other collaborating bodies will be the Ministry of Food, Agriculture and Natural Resources and the Cooperative Department.

The Advisory Board on Income Generating Activities for Refugees (ABIGAR) consisting of one representative each from COR, UNHCR, the Regional Government, the implementing agency, as well as the CTA,<sup>15</sup> will act as the coordinating committee.

At the settlement level (as well as in Port Sudan) every family participating in the scheme will belong to a producers' cooperative, income generating association or women's production group. These associations will ensure the supply of inputs to the participants and guarantee the purchase of their products at prices which will be fixed to cover transportation and handling costs. The associations at the settlement level will be affiliated to the federations of income generating associations in each area to benefit from the transportation facilities.<sup>16</sup> A cooperative committee will be elected in each settlement or group of settlements and will assume the ultimate responsibility for running the scheme upon the termination of the project.

All equipment and buildings provided under this project will be handed over to the cooperative at the end of the project life. The posts of employees at the feed mill will be provided for by the cooperative. Extension and veterinary services provided by the Ministry of Food, Agriculture and Natural Resources will be extended to the settlements and Port Sudan scheme.

9. Prior obligations and prerequisites

9.1 Prior obligations

- (a) Allocation by the Government of land for the vegetable gardens and buildings in the vicinity of the settlements.
- (b) Extension of irrigation services to vegetable gardens (sub-project no. 1).

9.2 Prerequisites

- (a) Access to information and statistics on agriculture in the Eastern Region and expert advice afforded by the Ministry of Food, Agriculture and Natural Resources.
- (b) Release of staff from the Cooperative Department to advise the coordinating committee.
- (c) The government poultry farms will provide the required number of one-day old chicks of improved local breed.
- (d) Supply of oil cakes from the oil industries in Port Sudan for use in the feed mills plant (at the moment all the oil cakes are exported).
- (e) At the completion of the project, extensive services will be provided to refugees by the Ministry of Food, Agriculture and National Resources.

10. Assumptions

10.1 Immediate objective to development objective

- (a) There continues to be a market for vegetables, goat milk and cheese, goat kids and poultry products in Eastern and Central Sudan. Existing trends indicate that market demands would remain insatiable in the foreseeable future.<sup>17</sup>
- (b) A source of credit is available to other settlements in the area which want to replicate this scheme. (A

project proposal for the creation of a revolving fund for provision of loans to refugees is being prepared and should be submitted to donors shortly.)

- (c) Income generated from these activities is attractive to refugee families. From a cost analysis each of these activities in sub-project no. 1 will provide an annual income of over £5600 which is well above the minimum wage of £336. Given the present conditions in these settlements these incomes would appear high enough to encourage refugee participation.

For sub-project no. 2 an average annual income of approximately £1,300 is anticipated, which again compared to the existing salaries and wage levels in Port Sudan would be high enough to attract refugees.

Sub-project nos. 3 and 4 aim to improve in the first place the family diet. However, in cash value the benefits would represent an annual income of £300-400.

## 10.2 Outputs to immediate objective

- (a) Water supply in the settlements is as planned (i.e. 26 l/head/day).<sup>18</sup> This quantity of water would adequately provide for the needs of the proposed number of chicken and goats.
- (b) All the raw materials required for production are available to the cooperatives. Many of the raw materials are produced in the Sudan and although some are exported, substantial quantities are sold within the country. The country being mainly agricultural, it can be assumed that supply of essential raw materials for agricultural production would remain a top priority of the government.
- (c) The organisational structure for income generating projects is implemented. Operational links are established between the income generating associations and the area federation for the supply of raw materials



and collection of finished products. The project on the structure is to be implemented in 1983.

- (d) The poultry's mortality rate does not exceed 30 per cent per annum. This should be achieved given proper vaccinations and disease treatments as well as providing training in better poultry keeping to refugees.

### 10.3 Inputs to activities

- (a) Support is obtained through the UNDP to speed up customs facilities for imported components.
- (b) Physical facilities (transportation, fuel, etc.) are available for the supply of materials and the project staff trips to the settlements.

## 11. Rationale

### Sub-project no. 1

The low incomes and poor living standards of refugees in the wage settlements make it imperative that immediate solutions to their problems be sought. In these settlements, where there is no land available to the refugees for dura cultivation and where wages from agricultural schemes seem inadequate, alternative measures for income-generation for the mass of the population become crucial. An agricultural scheme such as the one proposed here can be speedily implemented, since it does not require any high level of skill, prolonged training of the participants or massive importation of equipment. It in fact takes into account that a large percentage of the refugees are of farming and livestock raising background. The choice of goats rather than cows for dairy production is due to the fact that goats are particularly adapted to small-scale production of milk, can be maintained economically in quarters where it would not be possible to keep cows, and are generally more resistant to diseases.

Sub-project no. 2

There is only one poultry farm in Port Sudan which is government-owned, producing a maximum annual output of 0.9 million eggs and 12,000 chickens.<sup>19</sup> It is estimated that an equal amount of both products is produced by individuals. The 6-year plan gives the target daily per capita consumption of eggs in 1982/83 as 7.5 gm (or 0.15 eggs taking average weight of an egg as 50 gm) and of poultry meat at 3.7 gm (0.0037 chickens, assuming an average chicken weight of 1 kg). This gives total annual requirement in Port Sudan as 7.3 million eggs and 180,000 chickens. This means that only 25 per cent and 13 per cent of the demand for eggs and poultry products respectively are being met by the present production.

This project aims at a production of 4.0 million eggs and 20,000 chickens annually thus providing a further 55 per cent and 11 per cent of the total annual demand for eggs and chickens.

The gross revenue from sale of poultry products for two years for each poultry unit is calculated as £\$4,820 (2,948 dozen eggs and 100 chickens). Expenditure for the same period including depreciation is calculated as £\$2,300 giving a net annual income of approximately £\$1,260 per family. Poultry keeping does not require any particular skills and training will be given by an extension officer for the 2 years' duration of the project.

Sub-project no. 3

Domestic poultry raising is one of the most recommendable activities for refugee female-headed households for the following reasons:

- (a) Chickens are easily bred around the huts and thus can be undertaken by all female-headed households including old women or the ones with numerous children who cannot participate in outdoor activities.

- (b) Domestic poultry raising does not require any particular skills, women can be advised by extension workers. Further, given the low cost of the "free range" system, it can be implemented in all types of settlements.
- (c) Chickens are culturally acceptable and appreciated by both Ethiopians and Eritreans.
- (d) Poultry raising helps to improve the family diet by the consumption of eggs and chickens and especially vitamin A which is particularly useful for children. In fact once the project is operational, the large amounts of vitamin A vaccines given to children at present can be greatly reduced since it will be compensated for by the consumption of eggs.
- (e) Sales of surplus products (eggs and chickens) will ensure an additional cash income to the households.
- (f) Market potential:

(i) Sudanese market

At present, the main sources of supply of chickens and eggs are the government-owned chicken farms (Port Sudan, Gedaref, Madani etc.) small private commercial units around Khartoum/Omdurman area, Sudanese/Kuwaiti Poultry Company and traditional backyard flocks in rural areas.

Although the present production figures for eggs and chickens are not available, there is little doubt that local production falls short of satisfying the target consumption of 52,000 tons of eggs (equal to 1,500 million eggs) and 5,200 tons of eggs (equivalent to 36 million birds), for 1982-84.<sup>20</sup> Consequently the prices of eggs and chickens have been rising continuously (an average weight chicken costs between £S4-7 and one dozen eggs between £S1.50-3 depending on the area).

The continuous imports of poultry products (£S134,836 for eggs in 1981)<sup>21</sup> points out that an excellent unfilled market for these products exists within the Sudan.

(ii) Settlements' markets

The refugee settlements' markets constitute important outlets for the sale of surplus production of eggs and chickens by female-headed households. Investigations in the consumption of basic commodities in refugee settlements carried out during the field survey<sup>22</sup> indicated that an average household of 5-6 persons consumes 6 chickens and 5-6 eggs per year.<sup>23</sup> The total population of 15 settlements being 93,300 (18,660 households) and assuming annual consumption of 5 eggs and 6 chickens per household, the total demand in the settlements would be 93,300 eggs and 111,960 chickens.

(g) Expected profits

Given the climatic and environmental conditions of the Sudan, the production level of domestic poultry raising is low and a realistic assumption would be an average of 100 eggs/per year and per hen of improved local breed. If we assume 30 per cent mortality rate, the annual production per household would be 1,940 eggs, 20 hens and 20 cockerels, which represents a cash value of £\$451.<sup>24</sup> Nevertheless, if we assume that 80 per cent of egg production and 60 per cent of chickens are consumed within the household and 20 per cent and 40 per cent respectively taken to markets, not only the main objective of improving deficient diet of vulnerable refugees would be achieved, but each household will earn an additional annual income of £\$122, as is shown in Table 1a. Further, the annual production of eggs will satisfy 100 per cent of settlements' markets allowing a surplus for Sudanese markets, and the production of chickens will satisfy 45 per cent of the settlements markets.

Table 1a: Expected annual production and income per female-headed household<sup>1</sup>

	<u>Annual production</u>	<u>Annual consumption</u>	<u>Marketed products</u>	<u>Annual additional income (£S)</u>
Eggs	1,940	80% of production = 1552	388	388 x 0.15 = 58.2
Chickens	40	60% of production = 24	16	16 x 4 = 64
<u>Total</u> =				£S122.2

<sup>1</sup> It has been assumed that chickens will be kept mainly for their egg production and only some eggs will be hatched in order to replace the hens which do not lay any more. Taking into account 30 per cent mortality rate, each household will own 20 hens which will produce 2,000 eggs annually, of which 60 will be hatched giving birth to 30 female and 30 male chicks. Assuming again 30 per cent mortality for chicks, 20 females will replace the non-laying hens and 20 cockerels consumed or sold in the market. Thus the total annual production per household will be 1,940 eggs and 20 non-laying hens and 20 cockerels.

Table 1b: Total annual production and income in all settlements

	<u>Total demand of households in 15 settlements (other than female-headed households)</u>	<u>Total annual production in 15 settlements</u>	<u>Marketed products</u>	<u>Settle-ments market share<sup>1</sup></u>	<u>Total annual income (£S)<sup>2</sup></u>
Eggs	5x15,998=79,990	5,164,280	20%=1,032,856	100%	154,928
Chickens	6x15,998=95,998	106,480	40%=42,592	44.38%	170,368
<u>Total</u> =					<u>352,296</u>

<sup>1</sup> Annual demand in settlements: 93,300 eggs; 111,960 chickens.

<sup>2</sup> The annual income per female-headed household would be £S122.20.

Sub-project no. 4

Although in the refugee settlements in the Southern Sudan refugees have set up small vegetable gardens in the compounds of their huts, in Eastern and Central regions several factors have prevented such activities:

- (a) many refugees of nomadic background have no experience in vegetable gardening;
- (b) the climatic conditions and scarcity of water in Eastern Sudan. However, some refugees in Tawawa, despite the unsatisfactory level of water supply, have established small gardens around the huts;
- (c) no access to materials (seeds, fertilizers, tools).

In this project it is proposed to train women household heads in basic principles of vegetable gardening, and water saving devices and provide them with the materials. The activity will provide the family with fresh vegetables all year round, improving the nutritional status of one of the most vulnerable groups, as well as providing some additional cash income from the sale of the surplus products at the settlement markets.

The minimum cash value of the production is estimated at £S376 per annum.<sup>25</sup>

Table 2 summarises the production costs, yields and prices of a sample of vegetables.

If we assume a total area of 200m<sup>2</sup> under cultivation planting 5 varieties of common vegetables (onions, pepper, potatoes, mulukhya and eggplants), the expected annual profits would be as shown in Table 2a.

Table 2a

Vegetables	Cost of seeds (40m <sup>2</sup> )	Fertilizer (40m <sup>2</sup> )	Yields <sup>1</sup> (40m <sup>2</sup> ) in kg.	Earnings (£S)
1) Onions	0.095	0.38	95.05	119.04
2) Pepper	0.076	0.38	19.05	152.38
3) Potatoes	2.00	0.38	76.19	60.95
4) Mulukhya	0.609	0.38	63.49	31.75
5) Eggplants	0.457	0.38	44.45	17.78
Total production cost (seeds and fertilizer) = £S5.137				
Total earnings = £S381.9				
Annual profit = £S376.7				

<sup>1</sup> It has been assumed that the yields will be two-thirds of normal commercial yields for given vegetables.

Table 2b: Production cost, yields and prices of vegetables

Vegetables	Cost of seeds (per feddan) £S	Fertilizer (per feddan) £S	Yields (commercial) per tonne	Expected yields per tonne	Price <sup>1</sup> per kg. £S
Potatoes	210	40	12	8	0.8
Okra	50	40	5	3.3	0.6
Onions	10	40	15	10	1.26
Groundnut	7	-	0.4	0.26	1.5
Eggplant	48	40	7	4.6	0.4
Pepper	8	40	3	2	8
Jews mallow (Mulukhya)	64	40	10	6.6	0.45

<sup>1</sup> Market prices collected during January, February 1983.

## Significance to the Government of Sudan

The project is also in line with the Government policy for the agricultural and industrial sectors. The 6-year Plan of Economic and Social Development 1977/78 to 1982/83 states as part of the Government's strategy for the development of agriculture the setting up of dairy and poultry farms especially near urban centres and 'integrating livestock with crop production schemes' (Vol. 2, p. 11). For the industrial sector the plan gives as one of its general objectives the 'development of small-scale industries based on local materials' (Vol. 2, p. 54). The products from this scheme will also serve as import substitutes since dairy and poultry products are imported into the country.

### 12. Reporting, monitoring and evaluation schedules

#### 12.1 Reports

- 24 monthly financial reports
- 1 terminal financial report
- 8 three-monthly progress reports
- Evaluation reports (one at the end of the first year and the other at the end of the project)
- 1 terminal report

#### 12.2 Evaluation plan

##### (a) Frequency and timing

The project is to be evaluated by 2 joint ILO/UNHCR Missions envisaged within the project on the Organisational Structure for the Promotion of Self-Reliance among Refugees. (At mid-term and at the end of the project).



(b) Evaluation participants

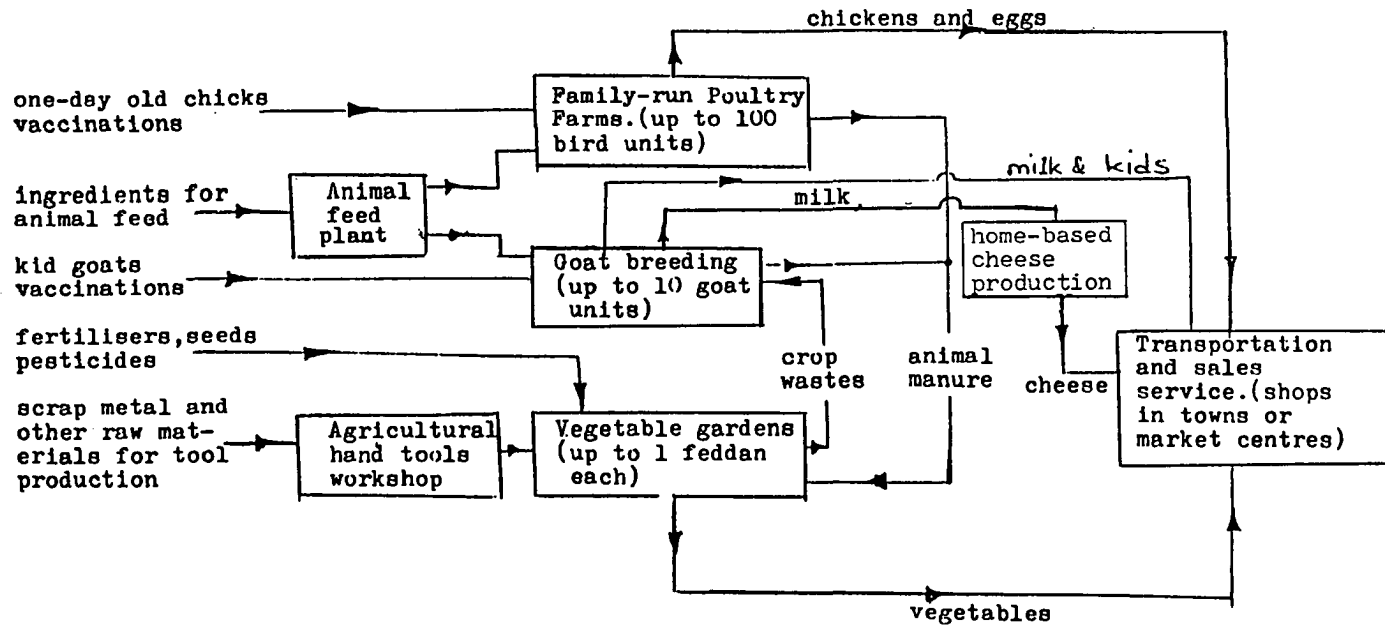
See the above-mentioned project document.

(c) Collection of data

The project supervisor will assume the responsibility for the collection of data.



BLOCK DIAGRAM OF INCOME GENERATING SCHEME FOR WAGE-EARNING SETTLEMENTS OF EASTERN AND CENTRAL SUDAN



Notes

1. The functions of supply of inputs, running of the animal feed plant provision of transportation and sales services are to be undertaken by a producers' cooperative in each group of settlements.
2. This cooperative will sell inputs to the individual units and purchase the outputs from them.

Distribution of Activities in the Settlements

Name of Settlement	Approx. Number of Families	% Participation (10 goats each)	No. of Goat Farms	No. of Poultry farms (100 chickens each)	No. of Vegetable Gardens (1 feddan each)
<b>A. <u>Suki Group</u></b>					
Awad es Sid	400	100%			
Fath el Rahman	400	100%	400	400	400
Kilo 7	400	100%			
<b>B. <u>Girba Group</u></b>					
Kashm el Girba	1,200	25%	150	150	-
Kilo. 26	800	100%	-	-	800
<b>TOTAL</b>			<b>550</b>	<b>550</b>	<b>1,200</b>

Potential Suppliers of Inputs

<u>Inputs</u>	<u>Suppliers</u>
1. 1-day old chicks	Government poultry farm at Wad Medani. Also private farms in Khartoum
2. Goats	Omdurman market
3. Seeds, fertilizers and pesticides	Ministry of Food, Agriculture and Natural Resources, and markets
4. Feed ingredients	Oil mills and local markets for oil cakes, market and nearby farms for dura. Flour mills for wheat bran. Molasses from sugar factories.
5. Vaccinations	Soba laboratories (near Khartoum)

Sub-projects 3 and 4

Distribution of Female-Headed Households in  
Refugee Settlements in Eastern and Central Sudan

<u>Wage-earning settlements</u>	<u>Population</u>	<u>Total number of households</u>	<u>Female-headed households</u>
Khashm-el-Girba	5,500	1,100	220
Kilo 26	4,000	800	160
Tawawa	10,000	2,000	400
Um Gulga	7,500	1,500	300
Es Suki	7,300	1,460	292
Tenedba	3,500	700	140
Abu Rakham	4,000	800	160
Wad Awad	3,000	600	120
 <u>Land settlements</u>			
Um Gargur	6,000	1,200	120
Karkora	1,500	300	30
Abuda	5,000	1,000	100
Um Ali	3,500	700	70
Um Rakhoba	5,500	1,100	110
Qala el Nahal	20,000	4,000	400
El Hawata	2,000	400	40
		<u>Total</u>	<u>2,662</u>

Footnotes

<sup>1</sup> The chickens and goats are to be housed in sheds.

<sup>2</sup> See the project on "Organisational Structure for the Promotion of Self-Reliance among Refugees in Eastern and Central Sudan".

<sup>3</sup> A separate project proposal on a "Network of Electrical, Mechanical and Blacksmith's Workshops" envisages the establishment of such workshops in most of the settlements/settlement groups.

<sup>4</sup> The feasibility study had examined the viability of the sub-project in these settlements. However, these activities could be undertaken in other settlements provided that: (a) the refugees in those camps have some experience with animal husbandry and vegetable farming; (b) water is available; and (c) the potential demand for vegetables and dairy products in that area is high enough to ensure the sale of products.

<sup>5</sup> For details see under Rationale (paragraph 11).

<sup>6</sup> In the settlements where sub-project no. 1 is implemented refugee women should not be discriminated against and should be provided with poultry farms of 100 birds. Sub-project no. 2 is proposed for other settlements or for women who for personal reasons would prefer the "free range" system around their huts.

<sup>7</sup> The outputs, activities and inputs are given on the basis of a pilot scheme catering for 100 per cent of the families in the Suki group and Kilo 26 and 25 per cent of the families at Khashm el Girba. The suggested distribution is given in Annex II. Redistribution might be inevitable at the implementation stage.

<sup>8</sup> It is estimated that up to 35 lorries come from Wad Medani, Sennar, Sas el Laz and Dinder to these centres to purchase agricultural products.

<sup>9</sup> These would be local personal from the refugee and Sudanese population. A number of refugees with the required education and training (namely veterinary doctors, agricultural extension officers, administrators and drivers) were identified at the Refugee Counselling Services in Khartoum.

<sup>10</sup> In some settlements this activity would be undertaken during the rainy season only. However, in the others water is available and could be transported round the year.

<sup>11</sup> The salaries of the employees for the feed-mill plants and the drivers are provided for the first year. It is expected that from the second year they will be paid from the profits of the associations.

12 In many settlements old and sick women can not fetch water themselves and they pay £0.25 for the transportation of 20 litres to the hut. Given the fact that 30 chickens drink 7 to 15 litres per day, it is proposed to provide these particularly vulnerable households (20 per cent of total female-headed households) with additional funds for water transportation.

13 For the other sub-project the Organisational Structure and the corresponding federations of income-generating associations will provide the transportation facilities.

14 The construction fund provided within the project covers only 50 per cent of the real cost. It is expected that refugees will build most of the sheds voluntarily as a self-help scheme.

15 The CTA will be responsible for the implementation of the project on Organisational Structure for the Promotion of Self-Reliance among Refugees and coordination of all the income-generating projects.

16 For details see the project on the Organisational Structure.

17 See, for instance, World Bank Report No. 1836A-SV Sudan Agricultural Sector Survey, Vol. III, Annex 4, 1979.

18 Precise information was not available. In some settlements the water supply varies between 0 and 25 l/head/day.

19 They now have 4,000 laying chickens.

20 The Six-Year Plan of Economic and Social Development, 1977/78-1982/83, Vol. 2, p.8.

21 Department of Statistics, Foreign Trade Statistics, 1981.

22 Interviews with a small number of refugee households in Tawawa and Um Gulga settlements in Eastern Sudan during October-November 1982.

23 If we consider as well, the demand for eggs as it is reflected in the household expenditure survey 1978-80 for Khartoum area; and if we assume the same consumption pattern for refugees in the same low annual income bracket of £500-1,000 we find an annual consumption of 5.33 eggs in urban areas and 4.4 in rural areas. Average annual household expenditure for income groups in Khartoum province of £500-1,000 is £0.07 in urban areas and £0.66 in rural areas.

24 Minimum prices of £0.15 per egg and £4 per chicken have been taken into account (see Table 1a).

25 This does not take into consideration the possible sale of ground pepper or peanut butter which will provide higher profits to the household.



Country: Sudan

Project Budget Covering Contribution from Donor  
(In US Dollars)

Project No:

Title: Small-scale dairy, poultry and vegetable farming for income generation  
in Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
16	PROJECT PERSONNEL										
16	Administrative Support Personnel		9,000		4,500		4,500				
17	NATIONAL PROFESSIONAL STAFF										
17.01	Project Manager	24.0	20,000	12.0	10,000	12.0	10,000				
17.02	Veterinary Doctors (2)	48.0	14,000	24.0	7,000	24.0	7,000				
17.03	Agricultural and animal husbandry extension workers (6)	144.0	28,000	72.0	14,000	72.0	14,000				
17.04	Employees for Feed Mill Plant (6)	72.0	7,000	36.0	3,500	36.0	3,500				
19	COMPONENT TOTAL		78,000		39,000		39,000				
40	EQUIPMENT		1,505,600		1,200,000		305,600				
43	Construction costs and rentals		220,000		200,000		20,000				
49	COMPONENT TOTAL		1,725,600		1,400,000		325,600				
50	MISCELLANEOUS										
51	Operation and Maintenance of eqt.		20,000		10,000		10,000				
53	Sundries		5,000		2,500		2,500				
59	COMPONENT TOTAL		25,000		12,500		12,500				
60	SUB-TOTAL		1,828,600		1,451,500		377,100				
62	Programme Support Costs (13%)		237,720		188,700		49,020				
	TOTAL PROJECT		2,066,320		1,640,200		426,120				
71	Provision for cost increase (8% - 84, 17% - 85)*		203,660		131,220		72,440				
89	GRAND TOTAL		2,269,980		1,771,420		498,560				

\*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.



INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: A Fishing Co-operative for Refugees in  
and Around Port Sudan

Geographical coverage: Sudan

Project languages: English and Arabic

Starting date: 1984

Duration: Two years

Donor contribution: US\$682,170.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
Ministry of the Interior



A Fishing Co-operative for Refugees  
in and Around Port Sudan

1. Background and context

Feasibility studies performed in the Sudan by the ILO and other agencies show that fishing has potential for income generation in Port Sudan area: where the estimated refugee population is 55,000.<sup>1</sup>

It is proposed in this project to set up a fishing co-operative in Port Sudan. Four hundred refugees would be provided with motorised fishing boats (4 persons per boat), nets and lines. The co-operative will run a boat production repair workshop and an ice production plant. It will also be responsible for the collection and transportation of the fish from the wharves, and sale of these at the market place (see annex). Only the local market is catered for in this project. Based on its success, expansion to provide markets in the other parts of the Sudan could be undertaken by the co-operative. It would be necessary to embark on fish processing or to purchase cold storage vehicles for transportation of frozen fish. The project should be implemented in co-ordination with on-going activities such as SUDAN/UK Red Sea Fisheries Development Project.

2. Target group

400 refugee families in and around Port Sudan.

3. Development objective

Income generation for refugees in Eastern and Central Sudan.

3.1 Indicator

At least, 150 refugees are earning an income from the scheme.

### 3.2 Source of indicator data

Cooperative records.

## 4. Immediate objective

Scheme for supply of fish by refugees in and around Port Sudan.

### 4.1 Indicators

- (a) At the end of the project a weekly sales of at least two tons of fish by the co-operative.
- (b) In 5 years the cooperative is able to supply at least 20% of Port Sudan's requirement for fish.
- (c) The co-operative is self-supporting at the end of the project.

### 4.2 Source of indicator data

Records from the project management and co-operative.

## 5. Outputs

- (a) A registered fishing co-operative. (Month 1)
- (b) A mechanism for the supply of raw materials and other inputs. (Months 1 - 2)
- (c) Boat production/repair workshop. (Month 6)
- (d) 100 fishermen equipped with motorised boats, nets and lines. (Months 2 - 5)
- (e) An ice production plant. (Month 2)
- (f) A cold-storage room in the market place for storage of fish. (Month 2)
- (g) A shop equipped with knives and scales for sale of fish. (Month 2)
- (h) Transportation service for collection of fish. (Month 2)
- (i) 400 refugee fishermen receive extension services in fishing. (Months 1 - 24)

6. Activities

- (a) Order equipment to be imported (before the project).
- (b) Recruit personnel (before the project).
- (c) Set up a fishing co-operative. (Month 1)
- (d) Identify sources and make arrangements for the supply of raw materials and other inputs. (Months 1 - 2)
- (e) Set up a boat production/repair workshop. (Months 1 - 6)
- (f) Purchase and supply equipment to co-operative members. (Months 2 - 5)
- (g) Acquire/rent shop in the market place. (Month 2)
- (h) Install ice-making plant and cold storage room. (Month 2)
- (i) Set up transportation system for collection of products and supply of materials. (Month 2)
- (j) Train and give extension services on fishing to participants of the scheme. (Months 1 - 24)

7. Inputs

A. Donor

A.1 Personnel (locally recruited)

1 expert/project manager (24 m/m)

Essential qualifications: Expert in fisheries: with experience in planning and implementing technical co-operation projects.

Duties: Overall responsibility for the implementation and supervision of the project.

Duty station: Port Sudan

1 fisheries development extension officer (24 m/m)

Duties: Under the guidance of the project manager, offering extension services to refugee fishermen.

2 drivers for project vehicles<sup>2</sup> - 24 m/m (1 year)

2 employees for ice-making plant - 24 m/m (1 year)

1 storekeeper - 12 m/m (1 year)

6 Messengers, accountant (24 m/m)  
5 employees of boat repair unit  
4 carpenters - 48 m/m (1 year)  
1 mechanic - 12 m/m (1 year)  
Other personnel

<u>A.2 Building and rent</u>		US\$
(a)	Rent for 24 months for shop in market place, and for urban workshop	16,000
(b)	Buildings to house ice-making plant at Suakin (20 m <sup>2</sup> floor space)	4,000
<u>A.3 Equipment and inputs</u>		
<u>A.3.1 Equipment</u>		
(a)	1 truck for daily trips to collect products	28,000
(b)	1 landrover for transportation of project personnel	12,000
(c)	1 complete set of carpentry tools for the boat repair unit	10,000
(d)	1 set of mechanic tools and welding set (with parts)	5,000
(e)	1 ice-making plant (capacity 20 tons of ice a day)	60,000
(f)	1 cold room in market place (20 m <sup>3</sup> capacity)	40,000
(g)	100 fishing boats equipped with engines (this could either be purchased or built in the workshop)	240,000
(h)	fishing nets (see item A.3.2 (d))	
(i)	fishing lines (see item A.3.2 (d))	
(j)	stalls, tables and chairs for shop	2,000
(k)	2 scales of capacity of 1,000 kg.	2,000
(l)	miscellaneous equipment	5,000



A.3.2 Funds for the purchase of inputs

- (a) For repair workshop  
assorted nails, screws, rivets, nuts,  
bolts and other parts for boat repair  
(250 kg) 250  
wooden planks 1,000
- (b) Operation and maintenance cost for vehicles  
for 12 months (including fuel 200 km a  
day for truck, 100 km a day for landrover) 10,000
- (c) 1 month supply of fuel for boats (see item d)
- (d) Initial supply of nets, 1 month harbour  
charges, bait, fuel, etc. for 100 boats 50,000

A.4 Charges

- (a) Electricity charges for ice-making plant  
of approximately 10 kw capacity working  
12 hours a day for 1 year 5,000
- (b) Electricity charges for ice box of  
capacity approximately 5 kw working 24 hours  
a day and lighting for shop (1 year)
- (c) Water supply (construction of well) to  
supply ice-making plant 5,000
- (d) Harbour charges (see item A.3.2 (d))

B. Government of Sudan

- (a) Land space in the vicinity of the harbour for  
construction of ice-making plant.
- (b) Release of national staff: one senior official from the  
Office of the Commissioner for Refugees, one from the  
Ministry of Food Agriculture and Natural Resources, and  
one from the Ministry of Co-operation to serve in the  
project co-ordinating committee.

C. Implementing Agency

Overall supervision of the project.

8. Institutional framework

The project will be organised with the assistance of the Office of the Commissioner for Refugees which will serve as the counterpart Sudanese Government Agency. This office will provide office facilities for personnel working on this project at the regional office in Port Sudan. Other collaborating bodies will be the Ministry of Food, Agriculture and Natural Resources and the Ministry of Co-operation.

A co-ordinating committee composed of the members of the Advisory Board on Income Generating Activities for Refugees (ABIGAR)<sup>3</sup>, officials from the Ministry of Food, Agriculture and Natural Resources and Ministry of Co-operation and representative of the implementing agency will be set up. The function of this Committee will be the initiation and supervision of the project at the macro level. Every family participating in the scheme will belong to a producers' co-operative. A membership fee of £5 will be levied per family. This co-operative will ensure the supply of inputs to the participants and ensure the purchase of their products at prices which will be fixed to cover organisational transportation and handling costs. The co-operative will be managed by the project manager.

A co-operative committee will consist of 6 elected representatives of the participating members, the project manager, and other project personnel acting as ex-officio members during the life of the project. This committee will assume the ultimate responsibility of running the scheme upon termination of the project. During the project life the function of this committee will be mainly organisational.

All equipment and buildings provided under this project will be handed over to the co-operative at the end of the project. The

drivers, employees in the ice-making plant, the boat building and repair workshop and shop, will be paid by the co-operative. The participants will benefit from extension services provided by the Ministry of Food, Agriculture and Natural Resources.

9. Prior obligations and prerequisites

9.1 Prior obligation

Granting of the Government of fishing rights to the refugees.

9.2 Prerequisite

Release of one senior official each from the Ministry of Food, Agriculture and Natural Resources, the Office of the Commissioner for Refugees and the Ministry of Co-operation to serve in the project co-ordinating committee.

10. Assumptions

10.1 Immediate objective to development objective

- (a) There continues to be a demand for fish in and around Port Sudan. With the rising price of beef it is likely that this demand will increase.
- (b) A source of credit is available to the co-operative for expansion of its activities to supply both local markets and markets in other parts of the Sudan. In Southern and Western Sudan fish is very scarce. Even in Kassala, the capital of the eastern region, which is 1,400 km away, fish availability is negligible.
- (c) Income generated from these activities is attractive to refugee families. An average annual income of approximately £\$1,300 is anticipated from this activity. Given the existing salary and wage levels it is felt that this income would be high enough to encourage refugee participation.

## 10.2 Outputs to immediate objective

All the equipment and raw materials required for production are available to the co-operatives. Many of the raw materials are produced in the Sudan.

## 10.3 Inputs to activities

Support is obtained through the UNDP to speed up customs formalities for imported components.

## 11. Rationale

### 11.1 Fishing - Assessment of feasibility

Fishing in and around Port Sudan is done by the Government Fisheries and a few private fishermen. Under a British Government financed project the fisheries give loans to fishermen<sup>4</sup> for the purchase of boats and other inputs and buy their catches which are sold in the Fisheries-owned shop at the market place. In Mohammed Qual, Port Sudan and Suakin the catch for 1981/82 by the Fisheries was 247 tons. A further estimated 80 tons were caught by private fishermen, bringing the total supply in 1981/82 to 327 tons.

Port Sudan being near the sea, per capita consumption of fish is much greater than many areas of the Sudan. The 1967/68 Household Survey shows that annual per capita fish consumption in Port Sudan was 3.4 times that of the average per capita consumption for the whole country. Taking this into account, the target planned figure for fish consumption in the Sudan which was given in the 6-year plan as 8.6 gm. can be multiplied by 3.4 to give the target per capita consumption in Port Sudan of 29.3 gm. A figure of 30 gm. is assumed here to account for requirements by hotels and ships embarking at the Port. The annual estimated demand for fish in Port Sudan<sup>5</sup> is then 1,450 tons, which means that only 23 per cent of the demand is being met by existing fishing activities.<sup>6</sup> The long queues in the market place for fish and its general scarcity in hotels and other eating places are evidence of this large unfulfilled demand.

The average catch per boat for a 6-day week was given by the Fisheries Department as (200 - 700) kg. Taking the lower figure of 200 kg, for 100 boats with 4 crew members the total annual catch assuming a 40-week year (allowing for maintenance and repair of boats, days lost through storms and feasts and other celebrations) is estimated at 800 tons. This would be adequate to supply a further 55 per cent of the local estimated demand for fish.

The socio-economic survey of Port Sudan<sup>7</sup> showed that 0.4 per cent of the refugee population were fishermen in Eritrea. For a population of 55,000 this represents 220 persons who could benefit immediately from this project. There are also other refugees with experience in fishing and some would learn the job while serving as trainees under skilled fishermen. Each boat will have four crew members, bringing the total number of fishermen as 400. The total gross annual income to be earned by the sale of 800 tons of fish is £\$600,000 or £\$1,500 per individual.<sup>8</sup>

## 11.2 Significance to the Government of Sudan

The 6-year plan of Economic and Social Development gives as part of the Government strategy for the development of the agriculture sector the "organising fisheries co-operatives to supply services and guidance to fishermen". The project is thus in line with the Government objectives.

## 12. Reporting, monitoring and evaluation schedule

### 12.1 Reporting

- 24 monthly financial reports
- 1 terminal financial report
- 8 three-monthly progress reports
- evaluation reports at the end of the first year and at the end of the project
- 1 terminal report

12.2 Evaluation plan

(a) Frequency and timing

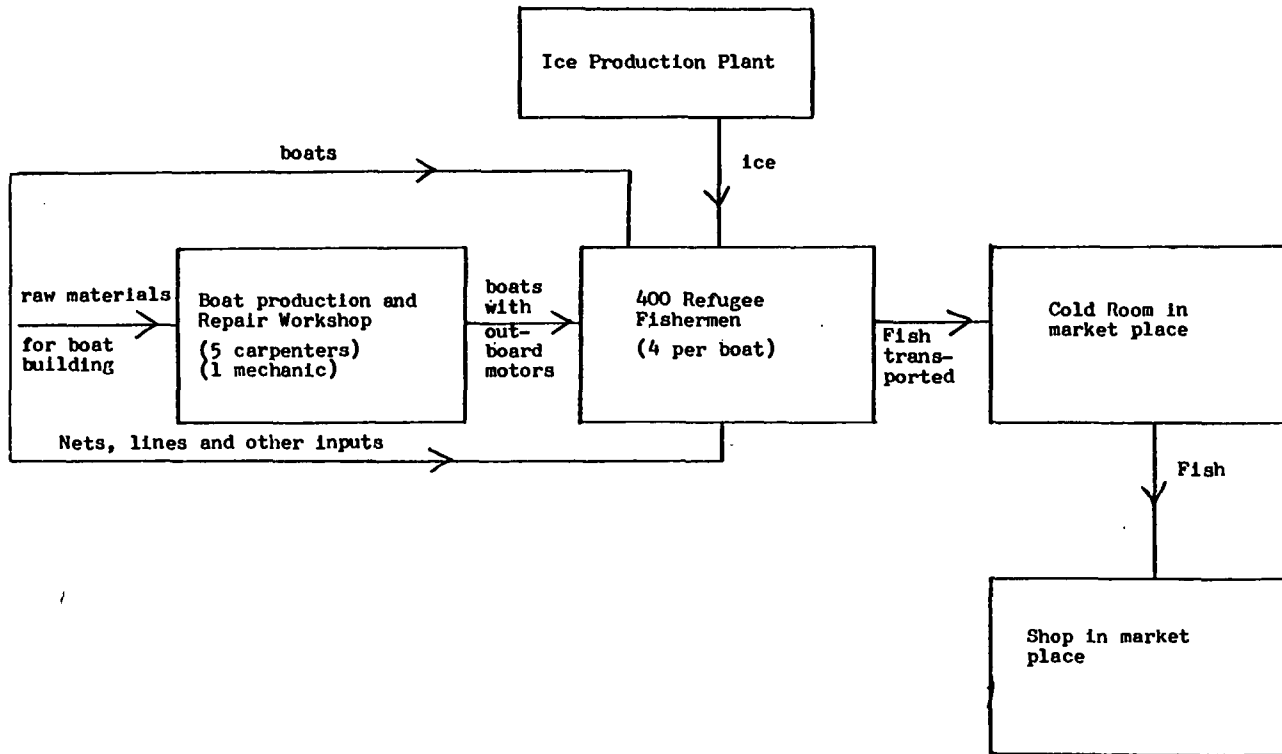
The project is to be evaluated by the UNHCR/ILO joint Mission, at the end of the first year, provided within the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees".

A self-evaluation review will be carried out by the project management at the end of the project.

(b) Evaluation participants<sup>9</sup>

(c) Collection of data

The project manager will assume entire responsibility for the collection of data necessary for the evaluation review.







Footnotes

1 See under Rationale.

2 For the second year of the project, the truckdrivers, employees of ice-making plant and storekeeper will be paid by the cooperative.

3 ABIGAR is composed of representative of COR, UNHCR, the regional Government and the Chief Technical Adviser of the Project on the Organisational Structure for the Promotion of Self-Reliance.

4 Refugees are not eligible for such loans.

5 The population of Port Sudan is taken as 132,632.

6 The mayor of Port Sudan estimated that only 10 - 20 per cent of the demand is being met. (See Keflemariam's report on 'Self-Help Activities in the Red Sea Province', 1980.)

7 Socio-Economic Survey of Port Sudan, Economic and Social Research Council, 1980.

8 Retail price to the co-operative will be £0.75 per kilogram (the market price ranges between £1.25 and £1.50).

9 See the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: A fishing co-operative for refugees in and around Port Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
13	Administrative Support Personnel		16,300		9,300		7,000				
17	NATIONAL PROFESSIONAL STAFF										
17.01	Expert in Fisheries	24.0	12,000	12.0	6,000	12.0	6,000				
17.02	Fisheries Development extension	24.0	2,000	12.0	1,000	12.0	1,000				
17.03	Employees for ice-making plant <sup>officer</sup>	24.0	4,000	12.0	2,000	12.0	2,000				
17.04	Employees for boat repair unit	60.0	6,000	30.0	3,000	30.0	3,000				
17.05	Other personnel		5,000		2,500		2,500				
19	COMPONENT TOTAL		45,300		23,800		21,500				
40	EQUIPMENT		410,000		350,000		60,000				
43	Construction costs and rentals		20,000		20,000						
	COMPONENT TOTAL		430,000		370,000		60,000				
50	MISCELLANEOUS										
51	Operation and maintenance of eqt.		70,000		50,000		20,000				
53	Sundries		5,000		2,500		2,500				
59	COMPONENT TOTAL		75,000		52,500		22,500				
90	SUB-TOTAL		550,300		446,300		104,000				
68	Programme Support Costs (12%)		71,540		58,020		13,520				
	TOTAL PROJECT		621,840		504,320		117,520				
71	Provision for cost increase (8% - 84, 17% - 85)*		60,330		40,350		19,980				
99	GRAND TOTAL		682,170		544,670		137,500				

\*The provision for cost increase will only be if prices increase above the calculated level. It will not be used to increase project inputs.



INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Small-Scale Vegetable Oil Production  
in Refugee Settlements in Eastern and  
Central Sudan

Geographical coverage: Sudan

Project languages: English and Arabic

Starting date: 1984

Duration: One year

Donor contribution: US\$171,350.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)



Small-Scale Vegetable Oil Production  
in Refugee Settlements in Eastern  
and Central Sudan

1. Background and context

The problem of refugees in the Sudan is not a transient one and long-term solutions are called for which enable refugees to attain a self-reliant existence. This was the conclusion of both the Arusha Conference of Refugees in Africa (1979) and the International Conference on Refugees in the Sudan (1980). Following these two conferences a UNHCR/ILO multidisciplinary team visited the Sudan and, as a result of this mission, a project for the identification of feasible income-generating activities for refugees was undertaken. This proposal emerged as a result of feasibility studies done in the Sudan under the above project.

There already exists in Qala en Nahal an oil production unit utilising camel power at an efficiency of about 30 per cent.

Vegetable oil production within the settlements, apart from providing income for the refugees, will also mean that the oil used is freshly prepared. This is particularly important for oil prepared by traditional methods as these tend to deteriorate fast during the storage. Also the by-products from these activities can be used as manure and animal feed within these settlements.

It is proposed in this project that engine-operated ghanis initially imported from India be used for the production of sesame oil.<sup>1</sup> However, it is expected that these ghanis could be manufactured within the country in the future.<sup>2</sup> Alternatively both hand-operated screw presses and hydraulic presses could be manufactured locally and used in oil production.<sup>3</sup> The number of such units which could be installed would depend to a large extent on the availability of oil seeds. The production of sesame seeds is therefore to be encouraged in the allotted lands in the land settlements of Qala en Nahal.

2. Target group

Refugees in the settlements of Qala en Nahal, Tawawa and Um Gulga, some of whom are already preparing sesame oil using camel powered ghanis.

3. Development objective

Income generation for refugee families in Eastern and Central Sudan.

3.1 Indicator

In five years at least 100 refugee families are earning an income from vegetable oil production.

3.2 Source of indicator data

- Surveys of households in the settlements
- Records of project management.

4. Immediate objective

Family run vegetable oil production in the refugee settlements of Qala en Nahal, Tawawa and Um Gulga.

4.1 Indicators

- (a) At least 20 families in the settlements of Qala en Nahal, Tawawa and Um Gulga are producing vegetable oil for settlements and nearby markets by the end of the project.
- (b) At least one vegetable oil production unit in each of the eight<sup>4</sup> settlements of the project.
- (c) In five years refugees in the settlements in sesame producing areas (Qala en Nahal, Tawawa, Um Gulga, el



Hawata) are able to provide 80 per cent of the settlements' requirements for vegetable oil.

- (d) In five years at least 20 per cent of refugee families in the land settlements of Qala en Nahal are growing sesame in their allocated land.

#### 4.2 Sources of indicator data

- Household surveys in the settlements
- Records of project management.

### 5. Outputs

- (a) 50 family-run vegetable oil production units in Qala en Nahal, Tawawa and Um Gulga.<sup>5</sup> (Months 1 - 2)
- (b) 8 mills for crushing oil seeds in the eight settlements. (Month 2)
- (c) 50 families trained in the production of vegetable oil production using engine operated ghanis. (Months 1 - 12)
- (d) A machinery for the supply of oil seeds from nearby farms established. (Month 1)
- (e) Extension service in sesame production is extended to refugees in the land settlements. (Months 1 - 12)

### 6. Activities

- (a) Recruit project manager.
- (b) Select households to benefit from the project. (Month 1)
- (c) Construct sheds to house mills and ghanis. (Months 1 - 2)
- (d) Purchase and install equipment. (Months 1 - 3)
- (e) Establish supply contacts for oil seeds. (Month 1)
- (f) Purchase initial supply of oil seeds. (Months 1 - 2)
- (g) Train refugee families in method of oil preparation. (Months 1 - 12)

7. Inputs

A. Donor

A.1 Personnel (locally recruited)

1 project manager (12 m/m)

Qualifications required: degree/diploma in chemical/engineering. Experience in small-scale vegetable oil production.

Languages: Arabic, English and/or an Ethiopian language an asset.

Duties: responsible for setting up the project and training the families in the production of oil using engine-operated ghanis.

Duty station: Gedaref

8 employees at grinding mills (96 m/m)

<u>Equipment and construction funds</u>	<u>US\$</u>
50 sheds to house engine ghanis 20m <sup>2</sup>	8,000
8 sheds to house grinding mills	1,500
50 engine-operated ghanis	50,000
8 grinding mills (to mill sesame seeds, <sup>6</sup> could be hired out for milling other products.)	40,000
<u>Materials</u>	
Sesame for 1 month's production	12,000
Diesel for 1 month's production	5,000
Sesame seeds and other inputs for cultivation in land settlements	3,000
<u>Other costs</u>	
Travel fund for the project staff	5,000

B. Government of Sudan

Extension services to sesame cultivators and vegetable oil producers at the end of the project.

C. Implementing Agency

Overall supervision of the project

8. Institutional framework

The project will be implemented with the assistance of the Office of the Commissioner for Refugees and its sub-offices in Eastern and Central Sudan. The ABIGAR (Advisory Board on Income Generating Activities for Refugees) will oversee the activity.

A coordinating committee composed of the CTA of the Project on the Organisational Structure for the Promotion of Self-Reliance among Refugees, the project manager and one official from the Ministry of Food, Agriculture and Natural Resources will supervise the smooth running of the project.

The family-run units would be affiliated to the area Federation of Income Generating Associations<sup>7</sup> for the provision of transportation facilities for the supply of raw materials.

9. Prerequisite

The Ministry of Agriculture provides services to sesame cultivators and vegetable oil producers at the end of the project life.

10. Assumptions

10.1 Immediate objective to development objective

- (a) The Sudanese Government continues to encourage income-generating activities for refugees in Eastern and Central Sudan.
- (b) The revolving fund is made available to refugee households for further expansion or replication of the activity.
- (c) Raw material (sesame seeds) will be available to the refugees to enable them to increase their production. It is envisaged that a small percentage of the refugees will be able to grow sesame in their allotted land as a result of the incentive created by this project and

extension service in sesame production to be provided under this project.

- (d) Income obtained from this activity is attractive to refugee families. Expected income from the processing of 5 tons of sesame a year is estimated to be £S2,000.

#### 10.2 Outputs to immediate objective

- (a) Refugee families are willing to embark upon sesame oil production. In Qala en Nahal this is not a new activity and, since the proposed method of production would prove more profitable (higher oil extraction rate) than the methods in use, it can be assumed that the refugees will be interested in the project.
- (b) The organisational structure for the provision of transportation facilities is set up.

#### 10.3 Activities to outputs

- (a) Supply of oil seeds can be arranged by the agricultural federations in the settlements concerned.

#### 10.4 Inputs to activities

- (a) Physical facilities (transportation, fuel, etc.) are available for the supply of raw materials and for trips by the project staff.
- (b) The UNDP renders all assistance in the importation of equipment.

### 11. Rationale

Vegetable oil forms an important constituent of the refugee diet. Most of the sesame oil produced by the large oil mills is exported and cotton seed oil which is produced by the government-owned oil mills has been scarce due to very low production brought about by constant breakdown of old and obsolete equipment.<sup>8</sup> The above situation has led to the importation into Sudan of palm-oil for

domestic use. Palm oil is, however, not popular, both among the Sudanese and the refugees and both sesame oil and cotton seed oil are very much in demand.

In the settlement of Qala en Nahal a number of refugees have formed into a group for the purpose of sesame oil production using a camel operated ghani. This method of production, however, has the following setbacks:

- high expenditure on upkeep of camels;
- low oil extraction efficiency (estimated at 30 per cent);
- small capacity per charge.

This project seeks to eliminate some of these setbacks by replacing the camel with a small 2 h.p. engine with very low fuel consumption and also to extend this activity in the settlements.<sup>9</sup>

The expected profitability from the preparation of sesame seed oil is as follows: (It is assumed that 5 tons of sesame seeds are processed annually.)

<u>Expenditure</u>	<u>Sesame oil</u>
	£S
1. Cost of seeds	4,650.00 <sup>10</sup>
2. Cost of transportation, processing losses and other expenditure	1,000.00
3. Cost of fuel for 1 year production	120.00
4. Depreciation of buildings	20.00
5. Maintenance and repair of machinery (20%)	200.00
6. Depreciation of machinery (10%)	<u>100.00</u>
TOTAL EXPENDITURE	6,090.00
<u>Income</u>	
1. Sale of oil	7,425.00
2. Sale of oilcake	<u>770.00</u>
TOTAL INCOME	8,195.00
ANNUAL PROFIT	2,105.00

The production of sesame by a number of households in Qala en Nahal is to be encouraged in this project. While sesame production in rained mechanised farms showed a negative profitability in Gedaref in 1980/81,<sup>12</sup> it was found that rained traditional farming of the crop gave a profitability of 26 per cent for average yields in Western Sudan.<sup>13</sup>

12. Reporting and evaluation schedule

12.1 Reporting

- 4, 3-monthly financial reports.
- 2, 6-monthly progress reports.
- 1 terminal report.

12.2 Evaluation plan

(a) Frequency and timing

The project is to be evaluated upon termination, by the joint ILO/UNHCR Mission envisaged within the project on the Organisational Structure for the Promotion of Self-Reliance among Refugees.

(b) Evaluation participants<sup>14</sup>

(c) Collection of data

The project manager will assume absolute responsibility for the collection of data.

Footnotes

1 It should be stressed that the introduction of engine-operated ghanis does not preclude the use of the traditional method which could be expanded too within the project.

2 The manufacture and maintenance of equipment would be undertaken by the proposed project on a Network of Electrical, Mechanical and Blacksmith's Workshops in Eastern and Central Sudan.

3 The introduction of the new technology could benefit as well the Sudanese small-scale oil producers.

4 Six settlements in Qala en Nahal, Tawawa and Um Gulga.

5 The number of units producing sesame oil would be made by the project manager after full consideration has been given to availability of the oil seeds.

6 The sesame seed should be milled before using the engine-operated ghanis or screw presses.

7 See the project on the Organisational Structure for the Promotion of Self-Reliance among Refugees in the Sudan.

8 Production of cotton seed oil by the government oil corporations dropped from 6,600 T in 1974/75 to 170 T in 1979/80 (statistical abstracts, 1981, Sudan Department of Statistics).

9 However, it is envisaged that if some refugees were reluctant to use the new technology, the traditional method could be expanded along with the implementation of pilot engine-operated ghanis.

10 This is the commercial price. However, sesame in small quantities can be bought cheaper. 1 sack (83 kgs) of sesame seeds costs fS21.60 at the 'farmgate'. Study of Cost of Production and Comparative Advantage of Crops in Sudan, Ministry of Finance and Economic Planning, Khartoum, 1982.

11 This assumes an oil extraction of 45 per cent by weight of seeds or 2.25 T of oil.

12 Study of Cost of Production and Comparative Advantage of Crops in Sudan, op. cit.

13 For high yields, profitability was as high as 154 per cent.

14 See the above-mentioned project on the Organisational Structure.





Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Small-scale vegetable oil production in refugee settlements in  
Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
16	Other costs (local travel fund)		5,000		5,000						
17	NATIONAL PROFESSIONAL STAFF										
17.01	Project Manager	12.0	8,000	12.0	8,000						
17.02	Employees (8)	96.0	7,400	96.0	7,400						
19	COMPONENT TOTAL		20,400		20,400						
40	EQUIPMENT										
41	Equipment		107,000		107,000						
43	Premises		8,000		8,000						
49	COMPONENT TOTAL		115,000		115,000						
50	MISCELLANEOUS										
51	Operation and Maintenance of Eqt.		5,000		5,000						
59	COMPONENT TOTAL		5,000		5,000						
90	SUB-TOTAL		140,400		140,400						
60	PROGRAMME SUPPORT COSTS										
68	Programme Support Costs (13%)		18,260		18,260						
	TOTAL PROJECT		158,660		158,660						
70	Provision for cost increases*										
71	8% v 84		12,690		12,690						
99	GRAND TOTAL		171,350		171,350						

\*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.



INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: A programme to develop carpentry workshops for income generation for refugees in Eastern and Central Sudan

Geographical coverage: Sudan

Project languages: English and Arabic

Starting date: 1984

Duration: Two years

Donor contribution: US\$309,580.00

Cooperating Government Agency in the Sudan: Office of the Commissioner for Refugees (Ministry of Internal Affairs)



A Programme to Develop Carpentry Workshops  
for Income Generation for Refugees in  
Eastern and Central Sudan

1. Background and context

The refugees have brought with them many skills and an ability to work in a wide variety of agricultural, industrial and service activities. The settlements given the right combination of technical and financial assistance could become positive poles of growth and development providing the refugees with a ready income and reducing their dependence on imported products.

It is proposed in this project to look at one of the small-scale activities that the refugees are keen to develop to meet both a local demand and to provide employment. During the preliminary survey of activities in the settlements at least ten carpenters were identified, five of whom were in Um Gargur and four in Tawawa. There are clearly far more carpenters than this among the total refugees but many of them are not employed because of the difficulties in obtaining a cash fund to purchase tools, equipment and wood. Sudan Aid have set up a small carpentry workshop in Tawawa which is being supported for a few more months before being left on their own. This project will pursue a similar idea, building on the existing informal network of carpenters, developing the markets and improving their skills.

2. Target group

It is assumed that 16 carpentry workshops will be established, one in each settlement preferably from those who are already set up in business. The target group will be 96 with 6 participants in each workshop.

3. Development objective

Income generation for refugees in Eastern and Central Sudan.

### 3.1 Indicator

In five years time, a minimum of 120 refugee artisans will be earning income from carpentry work.

### 3.2 Source of indicator data

Surveys and records of workshops in all the settlements.

## 4. Immediate objective

Development of small-scale workshops producing a number of wooden goods such as household and office furniture as well as other appropriate technology items.

### 4.1 Indicators

- (a) At the end of the project each workshop produces at least 1,000 - 2,000 wooden items.
- (b) The project employs a minimum of 80 artisans.
- (c) Each workshop is self-supporting at the end of the project.
- (d) In five years' time these workshops should be supplying a significant proportion (80 - 90 per cent) of the local purchases of furniture and other wooden items in the settlements.

### 4.2 Sources of indicator data

- Surveys of the output, costs and prices of wooden projects and total sales throughout the settlements.
- Assessment of the financial viability of each business.
- Records of project management.

5 Outputs

- (a) Buildings, tools and equipment are provided for 16 carpentry workshops. (Months 1 - 2)
- (b) The skills of the established carpenters are upgraded. (Months 2 - 24)
- (c) New apprentices are trained in carpentry. (Months 2-24)
- (d) Various combinations of items are produced annually in each workshop such as:
  - 1,200 small tables
  - 840 household tables
  - 96 office tables
  - 12 sideboards
  - 12 wardrobes
- (e) A raw material supply system is created and where appropriate the workshops individually or collectively are affiliated to the area federation for the provision of transportation facilities.<sup>1</sup> (Months 3 - 24)
- (f) New appropriate technology items such as improved spinning wheels, looms<sup>2</sup> and solar drying appliances are produced. (Months 6 - 24)

6. Activities

- (a) Recruit expert and other personnel and install equipment. (Months 1 - 2)
- (b) Identify the 16 master craftsmen eligible for assistance and interested in expanding production and training others. (Month 1)
- (c) Build the workshops. (Months 1 - 2)
- (d) Set up a system for the procurement of the raw materials possibly through the area Federation of Income Generating Associations. (Months 3 - 24)
- (e) Train the carpenters (2 months per group) in producing a better quality and wider range of products and in book-keeping and accounting. (Months 2 - 24)
- (f) Investigate the demand for making other appropriate technology products in wood. (Months 6 - 24)

7. Inputs

A. Donor

A.1 Personnel (locally recruited)

1 project manager/expert (24 m/m)

Duties: A carpentry expert to identify the needs and resources of the target groups, to organise the production of household and other goods, to set up a raw material procurement mechanism, to provide training in improved carpentry techniques and to investigate new appropriate technology products such as spinning charkas and solar heaters.<sup>3</sup>

Qualifications required: diploma in carpentry, experience with appropriate technologies in Africa; knowledge of setting up small-scale businesses, book-keeping and simple accounting.

2 local extension workers/experts in carpentry to assist with the training programme (48 m/m)

1 driver (24 m/m)

A.2	<u>Building</u>	<u>£S</u>	<u>US\$</u>
16	workshops at £S5,000 each		80,000

A.3 Equipment

A.3.1 Vehicle

1	Land Rover for the project staff		12,000
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A.3.2 Carpentry equipment:

3 x 16	benches at £S200	9,600	
16	lathes at £S2,000 each	32,000	
2 x 16	ordinary vices at £S85	2,720	
16	long vices (2m) at £S90	1,440	
16	knife sharpeners at £S16	256	
10 x 16	metal-planes at £S75	12,000	



	<u>£S</u>	<u>US\$</u>
16 wheelbarrows at £S100	1,600	
4 x 16 long saws at £S7	448	
4 x 16 small saws at £S5	320	
3 x 16 large jowls (vice) at £S80	3,840	
3 x 16 small jowls (vice) at £S30	1,440	
2 x 16 drills at £S30	960	
6 x 6 chisels at £S1.50	144	
2 x 16 sets of files at £S5/set	160	
4 x 16 small hammers at £S2	128	
4 x 16 medium hammers at £S3	192	
4 x 16 large hammers at £S7	448	
2 x 16 pliers at £S5	160	
16 spirit levels at £S10	160	
2 x 16 small metal tape measures at £S7	224	
16-50 metre tape measures at £S15	240	
16 angle irons at £S5	80	
16 movable angle irons at £S10	<u>160</u>	
Total	<u>148,720</u>	<u>114,400</u>

A.2.3 Raw materials

For the initial 4 months:

(2 months training period and 2 months initial production)

160 x 16 planks of wood (4mx7cmsx2cms)		
at £S8 each (1 plank weighs 0.142 kgs)	20,480	
200 x 16 planks of wood (4mx21cmsx2cms)		
at £S13 each (1 plank weighs 0.427 kgs)	41,600	
32 x 16 plyboards at £S6.50	3,328	
8 x 16 formica sheets at £S19	2,432	
96 x 16 kgs of nails at 60 pts/kg	922	
32 x 16 litres of glue at £S4.50/litre	2,304	
4 x 16 gallons of paint at £S28/gallon	1,792	
2 x 16 lots of brackets, bolts, hinges, locks, etc. at £S12/lot	<u>768</u>	
Total	<u>73,626</u>	<u>56,636</u>

A.3 Other costs

A.3.1 <u>Stipend</u>	<u>£S</u>	<u>US\$</u>
A stipend of £50 per month for 2 months for each of the 96 carpenters and apprentices:		
£50 x 96 x 2 months	9,600	7,385
A.3.2 <u>Product development fund</u>		
For market research, experimental work and testing pilot products		8,000
A.3.3 <u>Operation and maintenance of equipment</u>		7,200

B. Government of Sudan

- (a) Land space for the construction of workshops in the settlements.
- (b) Overall assurance to sanction and support the project to expand and develop carpentry products.
- (c) Provision of business licences registered with the Ministry of Industry.
- (d) Participation in the project coordinating committee.

C. Implementing Agency

Overall supervision of the project

8. Institutional framework

The project will be implemented with the assistance of the Office of the Commissioner for Refugees and its sub-offices in Eastern and Central Sudan. The ABIGAR (Advisory Board on Income Generating Activities for Refugees) will oversee the activity.

A coordinating Committee composed of the CTA of the Project on the Organisational Structure, the project manager and one official

from the Ministry of Industry will supervise the smooth running of the project, and particularly provide legal and administrative help in obtaining business licences and in negotiating raw material prices.

The workshops at the settlement level would be managed according to cooperative principles and could be affiliated to the Area Federations of Income Generating Associations<sup>4</sup> (F.I.G.A. for non-agricultural activities) in order to benefit from the transportation facilities and bulk purchase of inputs.<sup>5</sup>

9. Prior obligations

- (a) The provision of business licences.
- (b) Freedom of movement granted to the refugees for training, raw material purchases and marketing.

10. Assumptions

10.1 Immediate objective to development objective

- (a) Continued government support for income-generating activities for refugees and their integration into the development of the country.
- (b) The carpentry products (services) are competitive with those offered elsewhere.
- (c) Revolving funds will be provided for further expansion and for other start-up businesses outside the target group.

10.2 Outputs to immediate objective

- (a) The workshops become commercially viable within six months.
- (b) The drop out rate does not exceed 20 per cent.
- (c) The benefits are sufficient to attract and retain the carpenters.

- (d) The organisational structure for all income generating activities is set up.

10.3 Inputs to activities

- (a) Support from UNDP to facilitate the import of tools and equipment.
- (b) The required number of refugees can be identified and motivated by the expert and extension officers.
- (c) That support is assured from the ILO/UNHCR for the legal aspects of the project.

11. Rationale

Carpentry skills exist but are not being utilised due to the lack of resources to start up in business. There is great scope for mobilising these skills:

- in the building and construction industry which is still expanding;
- in supplying schools and offices;
- in providing furniture, hand tools and other household items for the settlements;
- in developing new appropriate technology products.

(a) The market

It is extremely difficult to quantify the demand for wooden products as it tends to be rather sporadic. Carpenters work closely with builders making doors and window frames. They also supply schools and offices with tables, desks, chairs and cupboards, and for the home they make beds, sideboards, wardrobes and small tables - usually to order. For the carpenters working near Sudanese towns, there is also a considerable demand for small stools and trading tables for selling cigarettes and other items. For most carpenters, the main problem is not the lack of demand but rather the difficulty in obtaining the capital to purchase the raw materials and the basic tools and equipment.

(b) Raw materials

Wood is such an expensive material that it is difficult for the refugee carpenters to even get started. First, they are forced to buy in very small quantities and, secondly, their purchase costs are far higher than the established workshops, who are buying in bulk at wholesale prices.

The main materials used in quantity are the following:

Planks of white wood 4m x 7cms x 2cm at £8

Planks of white wood 4m x 21cms x 2cm at £13

Sheets of plyboard at £6.50

Sheets of formica at £19

Nails at 60 pts/kg

Glue at £4.50/litre

Paint at £28/gallon

Bolts at £2.50 each

Hinges at 10 pts

Brackets at 75 pts

Locks at £1.10

Wire mesh at £1.50/m<sup>2</sup>

(c) Equipment

Carpenters need proper workshops with benches, racks and boxes to store their tools and space for storing all the raw materials. The building and tools required for a workshop with 8 employees would be:

	<u>£S</u>
Workshop of 5m <sup>2</sup> at £200/m <sup>2</sup> with a concrete floor and open area for working outside	5,000
3 benches at £200	600
1 lathe	2,000
2 ordinary vices at £85 each	170
1 long vice (2m) at £90	90
1 knife sharpener at £16	16
10 metal planes at £75 each	750
1 wheelbarrow at £100	100

	<u>£S</u>
4 long saws at £S7	28
4 small saws at £S5	20
3 large jowls (vice) at £S80	240
3 small jowls (vice) at £S30	90
2 drills at £S30 each	60
6 chisels at £S1.50 each	9
2 sets of files at £S5/set	10
4 small hammers at £S2	8
4 medium hammers at £S3	12
4 large hammers at £S7	28
2 pliers at £S5 each	10
1 spirit level at £S10	10
2 small metal tape measures at £S7 each	14
1 50 metre measure at £S15	15
1 angle iron at £S5	5
1 movable angle iron at £S10	<u>10</u>
Total	<u>9,295</u>

(d) Labour

Skilled carpenters in full time employment might expect to earn £S100/month and their assistant £S75/month. A small workshop with 6 carpenters would have the following wage bill.

3 master craftsmen at £S100/month	300
1 assistant at £S75/month	75
2 apprentices at £S45/month	<u>90</u>
Total	<u>465</u>

(e) Prices and revenues

It is important that the prices of the items made in the refugee settlements are cheaper than those made in Gedaref or other nearby towns. This price differential will vary according to the transport costs to the nearest town and the ease or difficulty of refugee movements. Profit margins will be lower but should still be sufficient to pay for a reasonable salary.

Table 1: Prices of main carpentry products

	<u>£S</u>
Window frame	4.50
Small cigarette seller's table	3.00
Wire mesh cupboard	15.00
Household table	15.00
Office table	100.00
Sideboard	150.00
Wardrobe	150.00

Assuming a small workshop makes the following combination of products, it will have a monthly sales turnover of about £S2,450:

	<u>£S</u>
100 small cigarette tables at £S3	300
70 household tables at £S15	1,050
8 office tables at £S100	800
1 sideboard at £S150	150
1 wardrobe at £S150	<u>150</u>
Total	<u>2,450</u>

The costs of production for this rate of turnover are estimated at:

	<u>£S</u>
Labour costs	465
Raw materials:	
40 planks at £S8	320
50 plans at £S13	650
8 plyboards at £S6.50	52
2 formica sheets at £S19	38
24 kgs of nails at 60 pts/kg	14.40
8 litres glue at £S4.50/kg	36
1 gallon paint at £S28	28
Bolts, hinges, brackets, locks, etc.	12
Building depreciated over 10 years	42
Equipment depreciated over 5 years	70
Transport	<u>150</u>
Total	<u>1,877.40</u>

Even after allowing for depreciation and transport costs the carpentry workshop appears to be quite profitable. It will need a reasonably large working capital fund of about £6,000 over 3 months (the period between outgoings and the payment for the items sold). In order to build up this fund from retained earnings the workshop will need to draw on assistance from the revolving fund for a period of 1 -2 years.

12. Reporting, monitoring and evaluation schedule

12.1 Reporting

- 8, three monthly financial reports
- 4, six monthly progress reports
- 1 terminal report

12.2 Evaluation plan

(a) Frequency and timing

The project is to be evaluated at mid-term and upon termination by the two joint ILO/UNHCR Missions envisaged within the project on the Organisational Structure for the Promotion of Self-Reliance among Refugees. (End of 1984 and 1986).

(b) Evaluation participants<sup>6</sup>

(c) Collection of data

The project manager will assume the responsibility for the collection of data.



Footnotes

1 For details, see the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees".

2 The production of these items could benefit other income generating project such as the "Support and Expansion of Refugee Spinning and Weaving Activities".

3 According to UNHCR, the VSO staff would provide such expertise in Sudan.

4 See the project on The Organisational Structure for the Promotion of Self-Reliance among Refugees.

5 Once the workshops are commercially viable and self-supporting, the artisans and area federations would agree on the modalities for the financial participation of the former in the recurring costs of the organisational structure.

6 See the above-mentioned project on the organisational structure.



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: A programme to develop carpentry workshops for income generation for refugees in Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
13	Administrative Support Personnel		2,200		1,100		1,100				
16	Other costs (prod. dev. fund)		8,000		8,000		-				
17	NATIONAL PROFESSIONAL STAFF										
17.01	Expert in Carpentry	24.0	16,000	12.0	8,000	12.0	8,000				
17.02	Extension Workers	48.0	25,000	24.0	12,500	24.0	12,500				
19	COMPONENT TOTAL		51,200		29,600		21,600				
30	TRAINING										
33	In-service Training		8,000		8,000		-				
39	COMPONENT TOTAL		8,000		8,000		-				
40	EQUIPMENT										
41	Equipment		104,000		90,000		14,000				
43	Premises		80,000		80,000		-				
49	COMPONENT TOTAL		184,000		170,000		14,000				
50	MISCELLANEOUS										
51	Operation and maintenance of Eqt.		7,200		3,600		3,600				
59	COMPONENT TOTAL		7,200		3,600		3,600				
90	SUB-TOTAL		250,400		211,200		39,200				
60	PROGRAMME SUPPORT COSTS										
68	Programme Support Costs (13%)		32,560		27,460		5,100				
	TOTAL PROJECT		282,960		238,660		44,300				

Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: A programme to develop carpentry workshops for income generation for refugees in Eastern and Central Sudan (contd.)

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
70	PROVISION FOR COST INCREASES*										
71	8% - 1984		19,090		19,090						
	17% - 1985		7,530				7,530				
99	GRAND TOTAL		309,580		257,750		51,830				
*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.											

INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Brickmaking Associations for Income  
Generation for Refugees in  
Khashm-el-Girba

Geographical coverage: Eastern Sudan

Project languages: English and Arabic

Project sites: The riverbank areas of Khashm-el-Girba

Starting date: 1984

Duration: Two years

Donor contribution: US\$145,220.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)



Brickmaking Associations for Income Generation  
for Refugees in Khashm-el-Girba

1. Background and context

The joint ILO/UNHCR mission to Sudan in October/November 1981 identified brickmaking as one of the possible income-generating activities that could be undertaken by refugees. Feasibility studies were carried out during November 1982 confirming the potential profitability of the activity.

It is proposed in this project to set up several brickmaking groups in Khashm-el-Girba the only settlement area with a suitable sub-soil and silt for the production. The project should create employment for more than 65 people and supply the Eastern region with bricks which are currently in short supply.

2. Target group

Refugee families in and around Khashm-el-Girba.

3. Development objective

Income generation and self-sufficiency for refugees in Eastern Sudan.

3.1 Indicator

At least 40 refugees are earning a living from brickmaking in the Khashm-el-Girba area.

3.2 Source of indicator data

Records of project management and of the associations.

4. Immediate objective

Five brickmaking associations in the Khashm-el-Girba area.

4.1 Indicators

- (a) At the end of the project each association should be making at least 100,000 bricks per month.
- (b) The project employs over 65 refugees who from their earnings may be capable of investing funds into other family/business activities.
- (c) Each association is self-supporting at the end of the project.
- (d) In five years these brickmaking associations should be producing over six million bricks a year making a significant contribution to the country's total output and offering improved techniques and materials.

4.2 Sources of indicator data

Survey of the output, costs and prices of bricks produced in each group and an assessment of the financial viability of each business.

Survey of the overall production in the country (optional).

5. Outputs

- (a) 5 brickmaking associations are established in Khashm-el-Girba. (Month 3)
- (b) 65 jobs are created. (Month 3)
- (c) 65 people are trained in brickmaking and in basic management principles. (Months 3 - 24)
- (d) 500,000 bricks are produced and sold every month. (Month 12)
- (e) 65 incomes of £S100-125 each or £S6,500-£S8,125 per month are generated. (Month 12)<sup>1</sup>



- (f) New cheaper and improved methods of brick production with particular emphasis on fuel conservation are produced. (Month 24)

6. Activities

- (a) Recruit expert and other personnel. (Month 1)
- (b) Identify target groups willing and able to work as brickmakers. (Month 1)
- (c) Negotiate on the cost and allocation of land. (Months 1 - 2)
- (d) Purchase equipment and vehicles. (Months 1 - 2)
- (e) Procure one month's supply of raw materials. (Months 1 - 2)
- (f) Conduct training courses in brickmaking and in basic management, finance and accounting. (Months 2 - 24)
- (g) Arrange market distribution with brick wholesalers who collect directly from the sites. (Months 3 - 24)
- (h) Secure a suitable procurement system for all the raw materials. (Months 3 - 24)

7. Inputs

A. The Donor

A.1 Personnel (locally recruited)

Expert/project manager (24 m/m)

Duties: to implement the project, to provide training in setting up small business, financial and stock control, management, book-keeping and accounting and to improve the methods of production.

Qualifications required: training in small business management, and accounting; experience with appropriate technologies in the building and construction industry and with fuel conservation techniques.

Duty station: Khashm-el-Girba

2 local extension workers/experts in brickmaking to assist in the training programme (24 m/m)

2 drivers (24 m/m)

A.2 Equipment and materials

A.2.1 Raw materials

The provision of one month's supply of raw materials (assuming a monthly output of 100,000 bricks):

	<u>£S</u>	<u>US\$</u>
- 5 x 5 lorries of animal waste	5,625	
- 5 lorries of sand at £S200/lorry	1,000	
- Water fund	500	
- 200 x 5 contars of wood at £S5.25/contar (approximately 1/2 tonne)	<u>5,250</u>	
	<u>12,375</u>	10,000

A.2.2 Equipment

- 16 x 5 tins at £S4 each	320	
- 2 x 5 carriers at £S5	50	
- 2 x 5 mud carriers at £S8	80	
- 8 x 5 axes at £S4.50	180	
- 5 shovels at £S9	45	
- 4 x 5 brick frames at £S3	60	
- 8 x 5 frame bases at £S1.50	<u>60</u>	
	<u>795</u>	612

Vehicles (2 pick-up trucks plus  
1 motobike)

58,000

A.3	<u>Other costs</u>	<u>£S</u>	<u>US\$</u>
(a)	A research and product development fund to examine improvements in production techniques and fuel conservation		5,000
(b)	Operation and maintenance of equipment (over the length of the project)		10,000
(c)	Stipend for trainees: £S20 x 65 x 2 months for each	2,600	2,000
(d)	Rent for an administrative office in Khashm-el-Girba (for 12 months)		1,000

B. Government of the Sudan

- (a) Overall support and sanction for the project to manufacture bricks in 5 groups on Khashm-el-Girba.
- (b) Provision of business licences registered with the Ministry of Industry and a negotiated contract to use the land where the silt is found, established through a committee with members from the project and the Government.

C. Implementing Agency

Overall supervision of the project

8. Institutional framework

The project will be implemented with the assistance of the Office of the Commissioner for Refugees. The ABIGAR (Advisory Board on Income Generating Activities for Refugees) will oversee the activity. It will act as a coordinating committee and will assist the project manager for obtaining the land for the sites which may involve considerable legal and administrative work.

The project manager and the two local brickmakers will work as a team in setting up the training programmes and getting the associations off the ground.

The associations will be managed according to cooperative principles, although individually they can not qualify for full-fledged cooperative society status.<sup>2</sup> They could be affiliated to the area Federation of Income Generating Associations for the provision of services such as extra transportation facilities, arrangements for the supply of raw materials, etc.

At the end of the project any equipment will become the property of the groups.

9. Prior obligations

- (a) The allocation of land to the 5 associations.
- (b) The provision of business licences.
- (c) The support and sanction of all local government officials in Khashm-el-Girba and Gedaref.

10. Assumptions

10.1 Immediate objective to development objective

- (a) Continued government support for income generating activities for refugees and their integration into the development of the country.
- (b) The bricks offered by the associations are competitive with those produced elsewhere.
- (c) The refugees are given land at a reasonable and not too high a cost.
- (d) Revolving funds will be made available for future expansion and for the establishment of new units.

10.2 Outputs to immediate objective

- (a) The associations become commercially viable within 3 months.

- (b) The trainee drop-out rate does not exceed 20 per cent.
- (c) The associations benefits are enough to attract and retain members.

### 10.3 Inputs to activities

- (a) That the expert and brickmakers can motivate the refugees and obtain their support for the scheme, although it is physically difficult work.
- (b) That the refugees are allocated the necessary land, water and business rights to make bricks.
- (c) That support is assured from the ILO/UNHCR for the legal aspects of the project.

## 11. Rationale

The land is available for brickmaking and there is an abundant demand. It is a highly labour intensive and profitable activity with all the benefits going directly to the group members. It should therefore provide the members and their families with self-sufficient incomes and the skills to develop other business activities.

### (a) The market for bricks

In spite of the marked effect of the recession on many sectors in Sudan, building and construction remains relatively buoyant. Remittances from migrant workers abroad are increasingly being channelled into real estate and house building. It is estimated that the contribution to the national income made by the construction sector will double in real terms between 1975 and 1985 from £\$45 million to £\$90 million. The supply of key building materials particularly bricks and cement is not sufficient to meet demand. The shortage of bricks in Gedaref and Khartoum has led to a 50 per cent increase in their price over the past few years and to frequent stories of bricks being transported hundreds of miles cross-country due to local shortages.

(b) Labour costs

In a brick factory, the employees usually work in small teams and are paid on a piece-rate basis, which ranges between £S10-15 per 1,000 bricks giving a monthly salary of £S100-125. Few skills are required, except that for cooperative management, the employees will need to learn about the basic principles of accounting, saving and investment.

(c) Raw materials

Animal waste or wood shavings and sand are mixed in with the special silt found along the river banks. The associations may, in addition, have to pay for water, as well as for significant quantities of wood.

(d) Equipment

Very little equipment is required in brickworks - only a few buckets, carriers, axes and brickframes. The oven is simply built out of the bricks themselves, in a special formation.

(e) Price and revenue

The price of bricks varies according to the level of demand, local shortages and with the distance from the major markets. Top quality bricks are now selling at £S50 per 1,000 from Showak and at £S30 for the second quality. Out of every batch of 100,000 bricks:

2,000 are broken  
80,000 are top quality  
18,000 are 2nd quality

The net annual earnings of a small brickworks even after allowing for the costs of a supervisor are estimated at £S10,522, as shown in table 1. It is a lucrative business, which is very labour intensive and requires little capital investment. The only difficulty is in gaining access to the river bank land.

Table 1: Estimated production costs of brickmaking

(For making a batch of 1,000 bricks)

<u>Output:</u>	1 block of 100,000 bricks every 20 days (or 1,000 bricks in 0.2 days)	Unit cost per 1,000 bricks £S
<u>Employees:</u>	12 employees (average earnings of £S100-125/month)	15,000
	Carrying bricks from the site to the oven	2,500
	Supervision	2,500
	Carrying bricks to the lorry for despatch	2,000
<u>Raw materials:</u>		
Animal waste:	1 lorry £S225 makes 20,000 bricks	1,125
Sand:	Provided it can be found near the brickworks - costs	2,000
Water:	For mixing	2,500
Wood:	Uses about 1 contar per 1,000 bricks (including transport)	5,250
<u>Equipment:</u>	16 zinc tins (buckets) specially made for carrying water at £S4 each	<u>£S</u> 64
	2 carriers/barrows at £S5	10
	2 mud carriers at £S8	16
	8 axes at £S4.50	36
	1 shovel at £S9	9
	4 brick frames at £S3	12
	8 frame bases at £S1.50	<u>12</u>
	TOTAL	159
	Equipment depreciated over 2 years at £S8.83 per month (only 9 months per working year)	<u>88</u>
	TOTAL	32,963

	£S
<u>Price:</u> £S50 per 1,000 bricks No. 1 grade	
£S30 per 1,000 bricks No. 2 grade	
<u>Total unit revenue per 1,000</u>	
80% grade 1 at £S50	40.00
18% grade 2 at £S30	5.40
TOTAL	45.40
Less cost per 1,000	<u>32.96</u>
	12.44
Less cost of 2,000 bricks lost per 100,000	<u>66</u>
Average unit revenue	11.78
Average annual earnings (9 months at 20 days per 100,000)	10,602.00
Less annual depreciation	<u>79.50</u>
Net annual earnings	10,522.50

Net earnings per person employed = £S876.87

## 12. Reporting, monitoring and evaluation schedule

### 12.1 Reports

- 4 progress reports every 6 months.
- 24 monthly financial reports.
- 1 terminal report.
- 1 self evaluation report produced by the project.



12.2 Evaluation plan

(a) Frequency and timing

The project is to be evaluated at the end of the first year by the joint ILO/UNHCR Mission envisaged within the project on the Organisational Structure for the Promotion of Self-Reliance among Refugees (at the end of 1984); and by the project management at the completion of project status.

(b) Evaluation participants<sup>3</sup>

(c) Collection of data

The project manager will assume the responsibility for the collection of data.



Footnotes

<sup>1</sup> See Table 1 (paragraph 11 "Rationale".)

<sup>2</sup> The registered cooperative society requires a minimum of 50 members.

<sup>3</sup> See the project on the Organisational Structure.



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Brickmaking Associations for Income Generation for Refugees in Khashm-el-Girba

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
13	Administrative Support Personnel		2,200		2,200		-				
16	Other Costs (prod. dev. fund)		5,000		2,500		2,500				
17	National Professional Staff										
17.01	Expert in Brickmaking/Proj. Mgr.	24.0	16,000	12.0	8,000	12.0	8,000				
17.02	Extension workers	48.0	12,000	24.0	6,000	24.0	6,000				
19	COMPONENT TOTAL		35,200		18,700		16,500				
30	TRAINING										
33	In-Service Training		2,000		2,000		-				
39	COMPONENT TOTAL		2,000		2,000		-				
40	EQUIPMENT										
41	Equipment		69,000		69,000		-				
43	Premises		1,000		1,000		-				
49	COMPONENT TOTAL		70,000		70,000		-				
50	MISCELLANEOUS										
51	Operation and Maintenance of eqt.		10,000		5,000		5,000				
59	COMPONENT TOTAL		10,000		5,000		5,000				
90	SUB-TOTAL		117,200		95,700		21,500				
60	PROGRAMME SUPPORT COSTS										
68	Programme Support Costs (13%)		15,240		12,440		2,800				

**Project Budget Covering Contribution from Donor**  
**(In US Dollars)**

Country: Sudan

Project No:

Title: Brickmaking Associations for Income Generation for Refugees in Khashm-el-Girba

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
	TOTAL PROJECT		132,440		108,140		24,300				
70	PROVISION FOR COST INCREASES*										
71	8% - 1984		8,650		8,650						
	17% - 1985		4,130				4,130				
99	GRAND TOTAL		145,220		116,790		28,430				
	*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.										

INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: A network of electrical, mechanical and blacksmith's workshops for income generation of refugees in Eastern and Central Sudan

Geographical coverage: Sudan

Project languages: English and Arabic

Starting date: 1984

Duration: Two years

Donor contribution: US\$1,262,660.00

Cooperating Government Agency in the Sudan: Office of the Commissioner for Refugees (Ministry of Internal Affairs)





A Network of Electrical, Mechanical and  
Blacksmith's Workshops for Income-Generation  
for Refugees in Eastern and Central Sudan

1. Background and context

Upon the request of the Government of Sudan, a UNHCR/ILO multidisciplinary team visited the Sudan and as a result of this mission a project for the identification of feasible income-generating activities for refugees was undertaken. This proposal emerged as a result of feasibility studies carried out in the Sudan within the above-mentioned project.

Many of the refugees possess skills as mechanics, electricians and blacksmiths. These skills were acquired both in the home country and in the Sudan. However, not all of these skilled technicians are practising their trade. In Khartoum, an examination of the applications for employment at the UNHCR Refugee Orientation and Counselling Services showed that of a total of 250 applicants, 7.6 per cent had trained in mechanical engineering,<sup>1</sup> while 4 per cent were electricians.<sup>2</sup>

The socio-economic survey of Port Sudan undertaken by the Economic and Social Research Council revealed that 1.4 per cent of the refugees were electricians in their home country, while 1.2 per cent are at present practising the trade. This means that at least 0.2 per cent<sup>3</sup> of the refugee population have skills in electrical engineering which are not being utilised. The corresponding figure for automechanics was 0.8 per cent.<sup>3</sup>

A refugee skills survey was undertaken in 1982 by the ILO in 9 settlements and in Kassala, Gedaref and Khashm el Girba town. Tables 1 and 2 give the percentages of the refugee population who had trained, worked or are presently employed in the above trades.

As can be seen from the tables, in most cases there are unutilised skills in both trades.

Table 1: Skills in mechanical trades of refugees

Settlement/Town	Percentage trained	Percentage worked previously in mechanical trades	Percentage at present employed in mechanical trades	Percentage possessing unutilised skills as mechanics/blacksmiths
Kassala	2.05	1.40	1.06	0.99 (297)
Gedaref	1.24	1.12	0.84	0.40 (120)
Tawawa	0.74	0.25	0.49	0.25 (25)
Khashm el Girba	2.21	1.28	1.44	0.77 (46)
Kilo 26	0.48	0.48	0	0.48 (20)
Um Gargur	0.43	0.65	0	0.65 (33)
Abuda	0.72	0.72	0.48	0.24 (12)
Um Ali	0	0.27	0	0.27 (11)
Tenedba	1.74	1.16	0	1.74 (63)
Wad Awad	1.74	2.17	0.43	1.74 (35)
Fath el Rahman	0.57	0.57	0.57	0 (0)

Note: Figures in brackets are absolute numbers out of the total population.

Table 2: Skills in electrical trades of refugees in the towns of Kassala and Gedaref and Settlements of Tawawa and Abuda\*

Settlement/Town	Percentage trained in electrical trade	Percentage worked previously in electrical trade	Percentage at present employed in electrical trade	Percentage with unutilised skills in electrical trades
Kassala	0.213	0.180	0.170	0.043 (13)
Gedaref	0.230	0.090	0.140	0.090 (27)
Tawawa	0.250	0.120	0	0.250 (25)
Abuda	0.240	0.240	0.240	0 (0)

\*The other settlements had no electricians.

A recent review of self-help activities of refugees in the settlements <sup>4</sup> and urban areas showed that even those who are self-employed in these trades lacked the necessary capital to make full use of their skills. They did not possess or have access to the necessary equipment, or premises. In the settlements raw materials were found to be unavailable to blacksmiths and other artisans. As a result many of them could only perform minor repairs of equipment with resulting incomes far below the minimum in the Sudan.

A block diagram of the network proposed is given in the Annex. This project seeks to gainfully employ existing skills in mechanical and electrical engineering by providing employment opportunities within equipped workshops for 220 refugees, as well as providing workshop facilities for others not employed in these workshops.

The network will be set up at three levels:

(a) Two large electrical and mechanical workshops in Khartoum and Port Sudan for the repair of television, radio, compressors, household/industrial equipment as well as production of bolts and nuts and simple machine spares.

All the above activities will be carried out by the main wings of the workshops. These main wings would undertake repair work on equipment brought in by the general public. Manufacture of equipment, bolts, nuts and spares, will be both for sale and by order (according to given specifications). The equipment for sale will be exhibited at the showroom/shop which will be in the workshop premises.

Each workshop will contain a second wing which will take the form of 'open' mechanical workshops. These will be used by mechanics who are working in a private capacity. To register for use of the facilities an annual charge of £5 will be levied per individual. Additional small charges will be made for the use of the equipment (this will vary according to the equipment and period of use).

(b) Smaller workshops will be set up in Gedaref and Kassala which will undertake mainly electrical and mechanical repairs.

(c) At the settlement level, simple equipment for agricultural, small-scale industrial and domestic use will also be manufactured in the proposed workshops. It is expected that the manufacture of items such as hoes, axes, hand ploughs, groundnut lifters, weeding attachments for ploughs, carts, cooking stoves, lamps, coffee pots as well as miscellaneous repairs and welding could be carried out in the settlement workshops. More sophisticated equipment such as oil presses, groundnut shellers and threshers and mills for dura grains will be manufactured in the urban workshops.

There will be short training programmes in each of the sections of the workshop at the start of the project. Since the target group are trained and/or skilled technicians these courses will be 'refreshers' or 'reorientation' courses in which employees will be trained in the use of specific apparatus and machines in the appropriate sections.

It is also proposed that the workshops in the towns provide practical training to refugee students in the fields of mechanical and electrical engineering. This will take place during the long vacations.

In the settlements the blacksmiths will also be able to train apprentices (one per workshop) over a period of two years.

Although electrical and mechanical installations contracting services are not catered for in this project, it is expected that these could be undertaken in subsequent years.

## 2. Target group

Refugee mechanics, electricians and blacksmiths in Eastern and Central Sudan.

3. Development objective

Income generation for refugee mechanics, electricians and blacksmiths in Eastern and Central Sudan.

3.1 Indicators

- (a) In five years 50 per cent of the unemployed refugees (according to the 1982 skills survey) in Gedaref and Kassala with skills as electricians and blacksmiths are earning an income from this scheme.
- (b) In five years 50 per cent of the unemployed refugees with skills as electricians and mechanics in Port Sudan (according to the 1980 socio-economic survey) are earning an income from this scheme.
- (c) In five years 80 per cent of the refugees with mechanical skills in the settlements are gainfully employed in this scheme.

3.2 Source of indicator data

Records of the workshop management committee.

4. Immediate objective

Network of electrical/mechanical and blacksmith's workshops in Eastern and Central Sudan.

4.1 Indicators

- (a) At least 10 per cent of local demand for bolts and nuts in Khartoum and Port Sudan are produced in these workshops.
- (b) At least 12,000 electrical/electronic/mechanical equipment is repaired annually in these workshops.

- (c) At least 10,000 agricultural handtools and household items are produced annually from these workshops.
- (d) At least two types of improved equipment for use in agricultural production for food processing activities are introduced in the rural areas of Sudan.
- (e) The network is self-sufficient by the end of the project.

#### 4.2 Source of indicator data

Workshop management records, import/export statistics and survey of local manufacturing industries utilising bolts and nuts and other outputs.

### 5. Outputs

- (a) A Co-ordinating Committee composed of project supervisor and experts, as well as representatives of ABIGAR, Labour Department and Small-scale Industries Board is set up. (Month 1)
- (b) Two Mechanical and Electrical Engineering Workshops are set up in Khartoum and Port Sudan with the following sections:
  - Motor/generator/transformer coil winding section;
  - Radio and television repair section;
  - Refrigerator, air conditioner and air cooler repair section;
  - Bolts, nuts and simple spares manufacturing section;
  - Equipment manufacturing section;
  - 'Open' mechanical section for use by clients.(Month 3)
- (c) Two mechanical and electrical engineering workshops in Gedaref and Kassala with the following sections:
  - Radio and television repair section;
  - Refrigerator, air conditioner and air cooler repair section;
  - Equipment assembly/manufacturing section (some component parts provided from (b) above);

- 'Open' mechanical section for use by clients. (Month 3)
- (d) A blacksmiths' workshop is set up in 20 settlements for:
  - Repair of agricultural and household equipment;
  - Manufacture and final assembly of agricultural tools and equipment (some component parts manufactured in the workshops of (b) and (c) above);
  - Manufacture of household equipment such as stoves, coffee pots, lamps and items of furniture. (Month 3)
- (e) Four showrooms/shops for sale of workshop products are set up in Khartoum, Port Sudan, Kassala and Gedaref. (Month 3)
- (f) 180 refugees are trained in mechanical, electrical and blacksmiths' skills to provide high-level repair services. (Month 6)
- (g) 10 refugees are trained in manufacture of bolts and nuts and simple machine spares. (Month 6)
- (h) 10 refugees are trained in the manufacture of improved equipment for use in rural areas. (Month 6)
- (i) Practical training is afforded to refugees undertaking courses in electrical and mechanical engineering. (Months 3-24)
- (j) Apprenticeship training is afforded to 20 refugees in metalwork in 20 settlements. (Months 3-24)
- (k) Transportation services are provided by the Federations of Income-Generating Associations in each area. (Months 1-24)<sup>5</sup>

6. Activities

- (a) Recruit the project personnel (engineers). (Month 1)
- (b) Set up Project Co-ordinating Committee. (Month 1)
- (c) Acquire premises to house the workshops. (Month 1)
- (d) Identify trainees<sup>6</sup> (later to serve as employees). (Month 1)
- (e) Acquire and install equipment. (Months 1-3)



- (f) Arrange for the supply of raw materials and other inputs. (Months 1-3)
- (g) Train the refugees in repair and manufacturing services.<sup>7</sup> (Months 3-6)
- (h) Arrange transportation service with the area Federations of Income-Generating Associations. (Months 1-24)
- (i) Embark upon manufacture, and repair and contracting services. (Months 6-24)
- (j) Choose annually, and instruct the refugee students to benefit from practical training. (Months 6-24)

7. Inputs

A. Donor

A.1 Personnel

1 Project Supervisor (locally recruited) (24 m/m)

Essential qualifications: University degree in electrical/mechanical engineering and experience in the setting-up and organisation of engineering workshops. Knowledge of English and Arabic.

Duties: General responsibility for setting-up and managing the whole network of electrical/mechanical and blacksmiths' workshops.

Duty station: Khartoum, will be required to travel frequently to the other project sites in Eastern Sudan.

1 Expert in mechanical design (international) (12 m/m)

Essential qualifications: Degree in mechanical engineering or a higher technical diploma in design.

Duties: Develop appropriate designs for the manufactured items at the different levels of the network (machines, agricultural tools, screws, bolts and nuts, etc.). Supervise the training of refugee in the manufacture of these items.

Duty station: Khartoum, will be required to travel frequently to the other project sites in Eastern Sudan.

1 Mechanical engineer (locally recruited) (24 m/m)

Essential qualifications: University degree in mechanical engineering (design) or a higher technical diploma in design. Experience in equipment design and manufacture. Knowledge of English and Arabic. Knowledge of one or more of the Ethiopian languages desirable.

Duties: Work in close cooperation with the design expert and the project supervisor, in order to perform the activities listed above. Train refugees in repair/manufacture of various items in the workshops.

Duty station: Khartoum, will be required to travel frequently to the other project sites in Eastern Sudan.

1 Electrical engineer (locally recruited) (24 m/m)

Essential qualifications: University degree or higher technical diploma in electrical/electronics engineering. Experience in repair of electrical equipment. Knowledge of English and Arabic. Knowledge of one or more of the Ethiopian languages desirable.

Duties: The same as the mechanical engineer.

Duty station: Khartoum, will be required to travel frequently to the project sites, in Eastern Sudan.

4 Foremen (locally recruited) (48 mm)

Essential qualifications: Diploma in electrical/mechanical engineering. Knowledge of English and one of the Ethiopian languages would be desirable.

Duties: Work under the guidance of the project supervisor and experts. Responsible for the management of the main workshops in 4 towns (Khartoum, Port Sudan, Kassala, Gedaref) and nearby settlements involved in the project.

Duty station: 1 each in Khartoum, Kassala, Port Sudan and Gedaref.

Drivers and assistant drivers

Secretaries

A.2	<u>Equipment</u> <sup>8</sup>	<u>US\$</u>
-	20 complete sets of metal-working equipment for blacksmiths' workshops, each set containing: forge, anvil, tongs, sledge hammer, ball pein hand hammer (1 kg), set of cold chisels, hot chisel, cold set, hot set, hardie, hot punches, drifts, work bench, leg vice, wire frame hacksaws, tin snips, files, breast drill, set of twist drills centre punch, soldering iron (1 kg straight type), combination pliers, self-grip pliers, pipe grip, cross point screwdriver, open-ended spanners, adjustable spanner, set squares, caborundum wheel for sharpening tools, steel and brass rules, scribe, fullers, flatter, swages, bench vice, pipe vice and cutters, guillotine, hand drill, ratchet brace and twist drill bits, dividers, bevel, calipers, metal bending equipment, sheet metal folder, benders, tap and dies, thread restoring files and oxyacetylene welding and cutting set.	100,000
-	4 sets of equipment for equipment manufacturing sections of the workshops in Khartoum, Port Sudan and Kassala and Gedaref. (Each set containing: equipment as above as well as bench and floor mounted drilling machines, bench grinder with attachments, angle grinder, power hacksaw, air-cooled transformer, a.c. welder).	40,000
-	2 sets of equipment for motor/generator and transformer rewinding sections of workshops in Khartoum and Port Sudan.	60,000
-	2 sets of equipment for 'open' mechanical sections of workshops in Khartoum and Port Sudan.	20,000

US\$

- 4 sets of equipment for repair of refrigerators, air conditioners and air coolers for workshops in Khartoum, Port Sudan, Kassala and Gedaref. 40,000
- 2 sets of equipment for steel nuts, bolts and screws manufacturing sections of workshops in Khartoum and Port Sudan (each set contains equipment as above as well as: 1 centre lathe and 4 ward 2A Capstan lathe). 70,000
- 4 sets of equipment for radio and television repair sections in Khartoum, Port Sudan, Kassala and Gedaref (each set containing soldering irons, electric drills, measuring meters, power supplies, component, testers, etc.). 36,000
- 2 trucks for transportation of materials (1 for the Port Sudan area and 1 for Khartoum)<sup>9</sup> 56,000
- 1 land rover for use of the project staff 12,000

A.3 Building and Rent

- Rent for buildings to house workshops and showrooms/shops in Khartoum,, Port Sudan, Kassala and Gedaref for 1 year. 30,000
- Construction of 20 blacksmiths' workshops 20 m<sup>2</sup> space each. 10,000

A.4 Initial Supply of Raw Materials and Components

- 40 tons of iron material (rods, sheets and pipes at average price of f\$900 per ton. 36,000
- Assorted vehicle scrap metal. 10,000
- Initial stock of electrical and mechanical components (transistors, transformers, capacitors, resistors, coils, conducting cables, switches) in 4 electrical repair sections. 20,000

US\$

- Initial supply of other materials (bracing rods, soldering wire, soldering acid, gas for welding, refrigerants, etc.). 10,000
- Stationery, including supply of job cards and inventory sheets. 10,000

A.5 Fuel and Electricity (excluding gas)

- Fuel for trucks for 2 years. 11,500
- Fuel for land rover for project personnel for 2 years (visit by project supervisor and experts to Port Sudan, Kassala, Gedaref and settlements). 16,600
- Electricity charges for workshops in Khartoum, Port Sudan, Kassala and Gedaref (first year). 20,000
- Maintenance of vehicles for 1 year (trucks and land rover). 6,800

A.6 Other costs

- Stipend/salaries for trainees/employees in the urban workshops (130 mechanics and electricians for first year). 200,000
- Stipend/salaries for 40 blacksmiths from 20 settlements for 1 year. 47,000

B. The Government of the Sudan

- (a) Land space for construction of blacksmiths' workshops in 20 settlements.

C. Implementing Agency

Overall supervision of the project.

8. Institutional framework

The project will be organised with the assistance of the Office of the Commissioner for Refugees which will serve as the counterpart Sudanese Government Agency. This Office will provide office facilities for personnel working on the project at the main office in Khartoum and the regional offices in Port Sudan, Kassala and Gedaref. Other collaborating government bodies will be the Small-Scale Industries Board and the Labour Department.

A co-ordinating committee consisting of members of ABIGAR (Advisory Board on Income-Generating Activities for Refugees), representatives from the above three government bodies, the expert, the mechanical and electrical engineers will be set up. The function of this committee will be the initiation and supervision of the project. At the end of the project life, a management committee will be elected in each workshop and will assume the responsibility for running the activities. All equipment and buildings will be handed over to this Committee.

It is expected that the workshops will be run according to cooperative principles and will be affiliated to the corresponding area Federation of Income-Generating Associations for the supply of raw materials and collection of finished goods.

9. Prior obligations and prerequisites

9.1 Prior obligations

Granting of the government of business licences in the 4 towns of Khartoum, Port Sudan, Kassala and Gedaref.

9.2 Prerequisites

- (a) Release of senior officials of the Office of the Commissioner for Refugees, the Small-Scale Industries

Board and the Labour Department to serve in the Coordinating/Management Committee.

- (b) Arrangements with importers to maintain a steady supply of raw materials and other components.

## 10. Assumptions

### 10.1 Immediate objective to development objective

- (a) There continues to be a demand for high-quality mechanical and electrical repair and a market for bolts, nuts and simple machine spares and equipment in and around Khartoum, Port Sudan, Kassala and Gedaref.
- (b) There continues to be a market for hand tools and household equipment in the settlements and nearby Sudanese villages.
- (c) A source of credit is available for expansion of the network depending on the initial success obtained by this project.

### 10.2 Outputs to immediate objective

- (a) That import licences are made available to the workshop administration for importation of equipment and spare parts.
- (b) That income generated from this activity remain attractive to the refugees. It is estimated that an average annual income of £1,500 could be realised from this scheme.

### 10.3 Activities to outputs

- (a) Arrangements are made with the area Federation of Income-Generating Associations for the utilisation of transportation facilities.

#### 10.4 Inputs to activities

- (a) Support is obtained through the UNDP to speed up customs formalities for imported components.
- (b) That the required number of refugees trained in electrical and mechanical skills will be interested in the scheme.

#### 11. Rationale

A survey of repair shops in existence in the towns showed that there is a need for high quality repair in Khartoum, Port Sudan, Kassala and Gedaref. The repair workshops are in general not properly equipped both in terms of equipment and personnel. Judging from the large stock of equipment awaiting repair the numbers of repair shops were found to be far from adequate. The most common domestic electrical and mechanical equipment in use are refrigerators, air conditioners, air coolers, radios and televisions and the workshops to be set up by this project will undertake repair of these items as well as electric irons and cookers.

Motors, generators and transformers as well as being separate equipment, form a vital component of many electrical and mechanical devices. For many domestic equipment, rewinding of motors, generators and transformers form the most usual repair work required. This project undertakes to establish coil winding facilities which would make it possible to repair motors, generators and transformers for industries as well as domestic appliances such as food mixers and washing machines.

Nuts, bolts, screws and other simple machine spares are mainly imported into the Sudan. In 1981 a total of 1,415,156 kg of nuts, bolts, screws and washers were imported from 10 different countries at an average price of £0.9 per kilogram,, thus costing the country £1.26 m. in foreign exchange. At the same time the price of



imported steel rods and raw material required for production of these items cost an average £50.2 per kilogram. Even after personnel, other costs and depreciation are taken into account foreign exchange could be saved by the manufacture of these items within the Sudan. Another advantage of local production of the above components is that apart from standard sizes, they could be produced to specifications for specialised functions. The price of imported non-standard items made to specifications are usually several times the price of standard products. This project proposes a very small-scale manufacture of bolts, nuts, screws and other simple machine spares on a pilot basis.

## 12. Reporting, monitoring and evaluation schedule

### 12.1 Reports

- 24 monthly financial reports
- 1 terminal financial report
- 8, three monthly progress reports
- 1 terminal report

### 12.2 Evaluation plan

#### (a) Frequency and timing

The project is to be evaluated by 2 joint ILO/UNHCR Missions envisaged within the project on the Organisational Structure for the Promotion of Self-Reliance among Refugees. (At mid-term and at the end of the project).

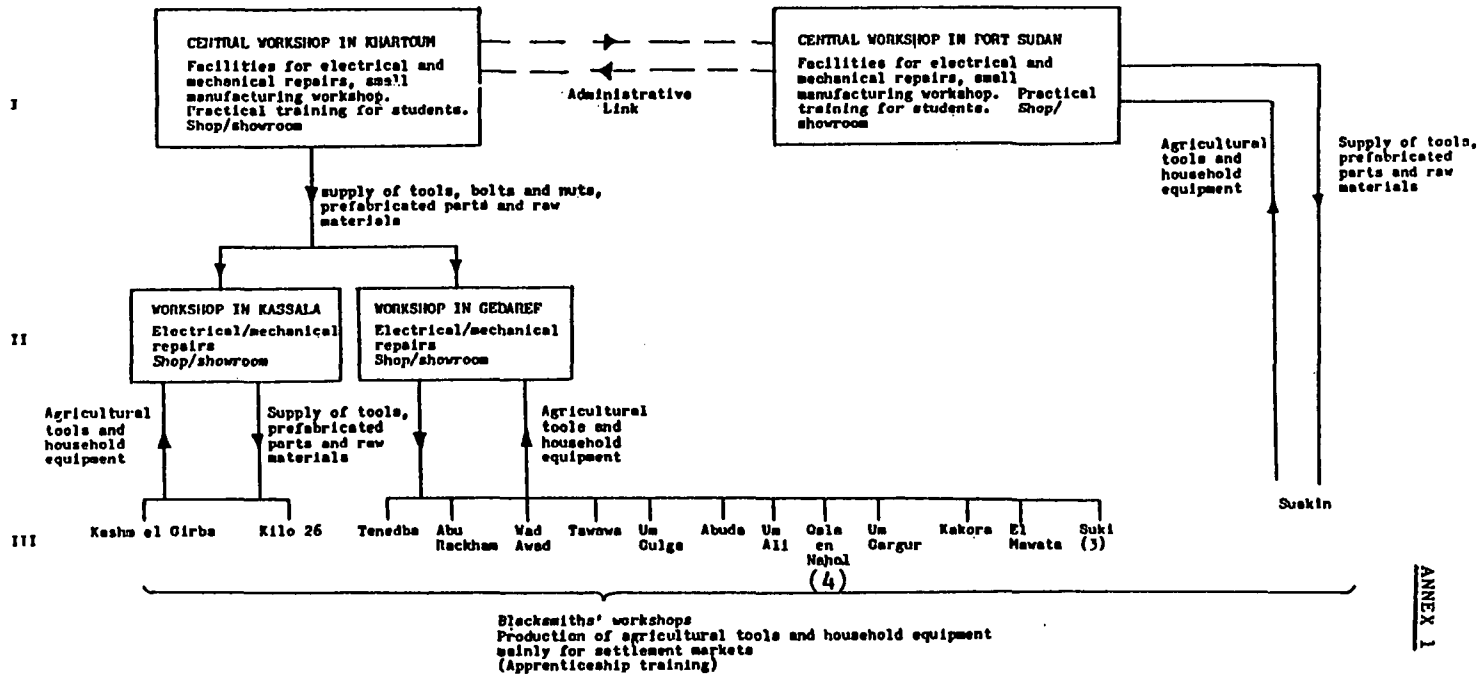
#### (b) Evaluation participants

See the above-mentioned project document.

#### (c) Collection of data

The project supervisor will assume the responsibility for the collection of data.







Footnotes

1 Of these 10.5 per cent were university graduates, 26.3 per cent had trained in technical institutes and 63.2 per cent had received on-the-job training.

2 30 per cent of the electricians had finished technical institute, 30 per cent had had vocational training and 40 per cent had received on-the-job training.

3 These figures will in reality be greater since some refugees acquired these skills in the Sudan.

4 Self-Help Activities and Self-Employment of Refugees in Eastern and Central Sudan, Y. Stevens, ILO (mimeographed).

5 See the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

6 As a first step trainees would be drawn from refugees applying for employment at the UNHCR Refugee Orientation and Counselling Services in Khartoum and Port Sudan and from registered blacksmiths in the settlements.

7 ILO Training Modules of Employable Skills (MES) could be utilised for training.

8 These are estimated costs.

9 For the other workshops in Kassala, Gedaref and in the settlements the "Organisational Structure" would provide the transportation facilities.



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: A network of electrical, mechanical and blacksmith's workshops for income generation of refugees in Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
11	EXPERTS										
11.01	Expert in Mechanical Design	12.0	86,500	12.0	86,500		-				
13	Administrative Support Personnel		17,000		8,500		8,500				
15	Travel on Official Business		10,000		5,000		5,000				
17	NATIONAL PROFESSIONAL STAFF										
17.01	Project Supervisor	24.0	16,000	12.0	8,000	12.0	8,000				
17.02	Mechanical Engineer	24.0	8,000	12.0	4,000	12.0	4,000				
17.03	Electrical Engineer	24.0	8,000	12.0	4,000	12.0	4,000				
17.04	Foremen	48.0	7,500	48.0	7,500		-				
19	COMPONENT TOTAL		153,000		123,500		29,500				
30	TRAINING										
33	In-Service Training		250,000		250,000		-				
39	COMPONENT TOTAL		250,000		250,000		-				
40	EQUIPMENT										
41	Equipment		520,000		500,000		20,000				
43	Premises		40,000		30,000		10,000				
49	COMPONENT TOTAL		560,000		530,000		30,000				
50	MISCELLANEOUS										
51	Operation and Maintenance of Eqt.		55,000		40,000		15,000				
53	Sundries		10,000		5,000		5,000				
59	COMPONENT TOTAL		65,000		45,000		20,000				

Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: A network of electrical, mechanical and blacksmith's workshops for income generation of refugees in Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
90	SUB-TOTAL		1,028,000		948,000		79,500				
60	PROGRAMME SUPPORT COSTS										
68	Programme Support Costs (13%)		133,640		123,310		10,330				
	TOTAL PROJECT		1,161,640		1,071,810		89,830				
70	PROVISION FOR COST INCREASES*										
71	8% - 1984		85,750		85,750						
	17% - 1985		15,270				15,270				
99	GRAND TOTAL		1,262,660		1,157,560		105,100				
*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.											



INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Small-scale Leatherwork Factories for  
Employment of Refugees in Eastern and  
Central Sudan

Geographical coverage: Sudan

Project languages: English and Arabic

Starting date: 1984

Duration: Two years

Donor contribution: US\$729,300.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)



Small-scale Leather Factories for Employment of  
Refugees in Eastern and Central Sudan

1. Background and context

The joint ILO/UNHCR mission to Sudan in October/November 1981 identified leather tanning and leather goods production as possible income-generating activities which could be undertaken by the refugees. Feasibility studies on these two activities were made during two subsequent ILO missions to the Sudan, in November/December 1982, confirming the potential profitability of the activities.

1.1 The leather industry in the Sudan

A UNIDO/FAO expert's report 'Utilisation of the Raw Materials of the Hides and Skins in the Development of the Footwear Industry' had estimated that out of 6.5 million animals slaughtered annually in the Sudan, rural tanneries processed about 1.93 million; mechanised tanneries 1.28 million; 2.8 million are exported raw, leaving about 0.6 million pieces as waste. Many of these wasted hides are thought to be in rural areas which do not possess tanneries or appropriate collection and transport facilities.

The traditional tanning methods utilised by the existing rural tanneries produce poor quality leather which is badly processed and sometimes even damaged. In many areas outside the main towns, this is the only type of leather available in the market, resulting in poor quality leather goods which cannot compete with imported products and which sell at very low prices.

The three large tanneries in the Sudan were expected to produce 4 million hides and skins by 1975 but percentage production has been as low as 10 per cent of the total capacity due to a variety of reasons. One such reason is the poor availability of well-cured hides and skins. Since they, of necessity, have to purchase in bulk they depend for their supply on the slaughter houses and merchants, who buy dried hides from the urban centres. Hides from the rural areas are

usually defective due to poor handling, insect attacks and putrefaction caused by long periods of storage and are thus not attractive to these tanneries. Damage to these hides could be avoided if they were handled by trained artisans and if they could be tanned fresh locally to avoid insect attacks and putrefaction.

The large leather goods industries in the Sudan produce mainly footwear. There are two large nationalised industries, including Bata, 18 medium ones in the private sector and a large number of small shoemakers. The problem with the hand-made shoes produced by the shoemakers is that the standard and quality is poor, compared to international standards and prices are high compared to those of imported shoes from Egypt and Taiwan.

Other leather goods such as suitcases, handbags, purses, belts and bicycle seats are particularly suited for small-scale production as complete mechanisation is unnecessary and specialisation in one single line can be achieved.

### 1.2 Skills in leatherworks among refugees

The ILO refugee skills survey undertaken in August/September/October of 1982 revealed that skills in leatherworking exist among the refugees. In Kassala 0.13 per cent of the respondents possessed unutilised skills as leather goods makers while the corresponding figure for the settlements was 0.03 per cent (see table 1). Thus, judging from the figures, there is a significant number of refugees both in Kassala and the settlements with skills in leather goods production.

There does not appear to be many trained or skilled refugees in tanning but this skill can be acquired over a short period of time.

During a study undertaken on self-help activities of refugees in the settlements and towns, it was found that highly experienced master craftsmen in shoemaking can be found. In Kassala, and the settlements the shoemakers complained of lack of resources to rent

Table 1: Tanners and leather goods makers in Kassala and the Settlements

Town/ Settlement	Percentage trained	Percentage worked previously	Percentage working	Percentage unutilised skills
<u>Leather goods makers</u>				
Kassala	0.34	0.43	0.3	0.13 (39)
Settlements (total in 9)	0.09	0.06	0.06	0.03 (450)
<u>Tanners</u>				
Kassala	0.043	0	0	0.043 (13)
Settlements (total in 9)	0	0	0	0 (0)

Note: Figures in brackets are absolute numbers out of total population.

proper workshop facilities, to buy raw materials or to take on apprentices. The master craftsmen expressed their willingness to train apprentices and also to receive training which will enable them to improve and diversify their products.

### 1.3 Feasibility of small-scale leatherwork factories for refugees

This project plans to set up small-scale leatherworks in Kassala and in 9 settlements. Each factory will consist of its own tanning unit which caters for hides produced within the settlements/towns and nearby rural areas. The unit in Kassala will

handle 10 hides a day while those in the settlements will each aim at a daily production of 2 hides.

The reason for including tanneries is that the costs of leather products can be considerably reduced. Thus using the types of technology suggested,<sup>1</sup> it is estimated that the production cost of 1 kg. of tanned leather would be £2 as compared to prices of tanned leather ranging between £2.90 and £3.50 per kilogram in the local market. Thus, assuming a total annual production of 8,400 hides (126,000 kgs.) an annual total saving of at least £113,400 can be made. This would make it possible for the refugees to sell at lower prices than those of competing imported products in the market.

Within the settlement groups a daily supply of 2 hides can be ensured as cows are slaughtered in the settlements and in nearby Sudanese villages. In Kassala it would be necessary to arrange for supply of hides from the slaughter house and from nearby rural areas.

The tanneries in the settlements will employ two workers each while those in Kassala will employ ten.

In leather goods production, specialisation in product types will be made by settlement/town. It is also envisaged that both males and females will be involved. The suggested breakdown of project types by settlement and sex is shown in table 2.

Annex 1 gives a breakdown of estimated leather use for the different products as well as the total requirements in terms of number of hides. A complete analysis of the annual leather requirements from the tanneries and the overall profitability of the scheme is given in Annex 2.

As it is doubtful whether these products would have a market within the settlements,<sup>3</sup> outlets will be sought through merchants in Gedaref and Kassala. In Port Sudan and Khartoum small shops will be opened for the sale of these products.

Table 2: Suggested breakdown of leather product types by settlements/town and sex<sup>4</sup>

Town/ settlement	Sex	Shoes/ Sandals	Bags	Purses	Bicycle Seats	Belts	Suit- cases
Kassala	M	20	-	-	-	-	5
	F	-	-	5	-	5	-
Tawawa	M	-	10	-	10	-	-
	F	-	-	-	-	-	-
Abuda	M	10	10	-	-	-	-
	F	-	-	10	-	5	-
Khashm el Girba	M	-	10	-	-	-	-
	F	-	-	5	-	-	-
Kilo 26	M	-	10	-	-	-	-
	F	-	-	-	-	-	-
Um Gargur	M	-	10	-	-	-	-
	F	-	-	5	-	-	-
Karkora	M	-	10	-	-	-	-
	F	-	-	5	-	-	-
Qala en Nahal	M	10	-	-	-	-	-
	F	-	-	-	-	-	-
Salmin	M	10	-	-	-	-	-
	F	-	-	-	-	-	-
Wad Awad	M	10	-	-	-	-	-
	F	-	-	-	-	-	-
<b>Total</b>		<b>175</b>	<b>60</b>	<b>60</b>	<b>30</b>	<b>10</b>	<b>5</b>

Training courses for the tanners and leatherworkers would be run in Kassala, a possible venue for such courses being the vocational training centre. The courses will be practical ones as many of the trainees would be illiterates (45 per cent of the refugee population with leatherworking skills are illiterate). It is expected that such courses would last up to six months. As different groups of participants would need to be trained for the different products, the courses would be staggered to meet the capacity of the training facilities and personnel. An initial 2-3 months training of the 'trainers' (master craftsmen) will precede that of the other trainees. Butchers in the settlements and nearby Sudanese villages will be trained in proper flaying of hides to minimise damage. It should be stressed that Sudanese craftsmen will be associated in the training courses and will benefit from the experts' advise on improved methods of tanning and improved designs for leather products.

## 2. Target group

203 refugees from Eastern Sudan. A large percentage with existing skills in leather tanning and leather products manufacture. The refugees are to be drawn from Kassala, Tawawa, Abuda, Khashm el Girba, Kilo 26, Um Gargur and Karkora, Qala en Nahal, Salmin and Wad Awad.

## 3. Development objective

Income generation for refugees in Eastern Sudan.

### 3.1 Indicators

80 per cent of refugees with leatherworking skills in the 9 settlements are employed in leather goods production.

### 3.2 Source of indicator data

Examination of registered skills in the settlements and records of the workshops.



4. Immediate objective

Leather goods production workshops for refugees in Kassala and 9 settlements producing a wide range of products which are currently imported to the country.

4.1 Indicators

- (a) By the end of the project at least 100 refugees are working in the workshops.
- (b) The workshops are self-sufficient at the end of the project life.

4.2 Source of indicator data

Records of the workshops.

5. Outputs

- (a) A tannery producing 10 hides a day in Kassala and 9 tanneries producing 2 hides a day are set up in the settlements of Tawawa, Abuda, Khashm el Girba, Kilo 26, Um Gargur, Karkora, Qala en Nahal, Salmin and Wad Awad. (Month 3)
- (b) Leather production workshops are set up in Kassala and the above settlements. (Month 3)
- (c) 28 refugees are trained in leather tanning. (Month 6)
- (d) 60 refugees are trained in leather shoe production. (Month 12)
- (e) 60 refugees are trained in leather bag production. (Month 12)
- (f) 30 refugees are trained in leather purse production. (Month 12)
- (g) 10 refugees are trained in bicycle seat production. (Month 12)
- (h) 10 refugees are trained in leather belt production. (Month 12)

- (i) 5 refugees are trained in leather suitcase production. (Month 12)
- (j) A mechanism for the supply of hides and skins, chemicals and other raw materials is set up. (Month 3)
- (k) Arrangements are made for the sale of products through merchants in Kassala and Gedaref. (Month 3)
- (l) Small shops in Khartoum and Port Sudan are set up for sale of the products. (Month 6)
- (m) The workshops in each are all affiliated to the corresponding Federation of Income Generating Associations which will provide the transportation facilities for the supply of raw materials and collection of finished goods.<sup>4</sup> (Month 3)
- (n) Butchers in the settlements are trained in the proper flaying of hides to reduce damage and hence increase their quality (an inducement price will be paid for well-flayed hides). (Month 6)

6. Activities

- (a) Recruit expert and other personnel. (Month 1)
- (b) Purchase and install equipment. (Months 1-3)
- (c) Arrange with importers for supply of chemicals. (Months 1-2)
- (d) Rent premises in Kassala for workshop. (Month 1)
- (e) Select a venue in Kassala for training. (Months 1-2)
- (f) Choose refugee trainees. (Months 1-2)
- (g) Conduct training courses as listed under 'Outputs'. (Months 2-12)
- (h) Construct workshops in the 9 settlements. (Month 3)
- (i) Set up project coordinating committee. (Month 2)
- (j) Arrange market channels through merchants in Gedaref and Kassala and cooperative shops in Khartoum and Port Sudan. (Months 3-6)
- (k) Make arrangements with the area Federation of Income Generating Associations to ensure the transportation facilities for the supply of raw materials and distribution of products. (Month 3)

7. Inputs

A. Donor

A.1 Personnel:

1 Project supervisor (locally recruited) (24 m/m)

Essential qualifications: Diploma in business administration or equivalent. Experience in setting up small-scale business in the urban and rural areas in Sudan, preferably in leather work activities.

Languages: Fluency in Arabic and English. Knowledge of Tigre, Tigrinia or Amharic would be an advantage.

Duties: General responsibility for the implementation and management of the project in Kassala and 9 settlements. Supervision of the training courses.

Duty station: Kassala, would be required to visit frequently the other project sites in the settlements.

1 Expert in leather goods production (international) (6 m/m)

Essential qualifications: Degree in Chemical Engineering/diploma or certificate in leather goods production. Experience in small-scale leather industries.

Languages: Fluency in English and Arabic. Knowledge of Tigre, Tigrinya or Amharic would be an advantage.

Duties: Responsibility for the training of refugees in the production of a range of leather goods, and improving the current designs and methods of production. The improved designs should take into account local tastes and purchasing power.

Duty station: Kassala, would be required to travel to project sites in the settlements.

1 Chemical Engineer (locally recruited) (24 m/m)

Essential qualifications: Diploma in Chemical Engineering with specialisation in leather tanning. Experience in small-scale non-mechanised tanning processes and in training.

Languages: Fluency in Arabic, knowledge of Tigre, Tigrinya or Amharic would be an advantage.

Duties: Train refugees in the improved small-scale tanning.

Duty station: Kassala, would be required to travel to the settlements.

1 Technician in leather goods production (locally recruited)  
(24 m/m)

Essential qualifications: Experience in design and manufacture in small-scale semi-mechanised factories and in training.

Languages: Fluency in Arabic, knowledge of Tigre, Tigrinya or Amharic would be an advantage.

Duties: Assist the international expert in the identification of new designs and improvements in methods of production. Responsible for the training of refugees in leather goods production.

Duty station: Kassala, would be required to travel to project sites.

2 shop attendants (locally recruited) (48 m/m)

2 assistant shop attendants (locally recruited) (48 m/m)

Drivers, secretaries and messengers.

Equipment<sup>5</sup> and materials

(a)	Equipment	US\$
	Equipment for main tannery in Kassala (10 hides a day)	5,000
	Equipment for 9 small tanneries in the settlements (2 hides a day)	9,000
	Equipment for shoemakers' sections in Kassala, Qala en Nahal, Salmin, Abuda and Wad Awad	20,000

	<u>US\$</u>
Equipment for 5 leather bag-making sections (each with 10 employees)	8,000
Equipment for 8 purse and leather belt sections (with total of 45 women)	9,000
Equipment for 1 bicycle seat manufacturing section (10 employees)	4,000
Equipment for suitcase manufacture (5 employees)	4,000
1 landrover for the project staff	<u>12,000</u>
 (b) Initial supply of raw materials:	
Supply of hides (1 year)	35,000
1 year's supply of chemicals for tanning <sup>6</sup> (including training period)	78,900
Buckles, zippers, cotton and fasteners and other inputs	40,000
 A.3 <u>Construction costs and rental premises</u>	
Construction of 60m <sup>2</sup> workshops in 9 settlements	83,100
1 year's rent for premises in Kassala	9,240
1 year's rent for shops in Khartoum and Port Sudan	9,240
 A.4 <u>Other costs</u>	
(a) Operation and maintenance of equipment	
Charges and fuel (for first year):	
Water and electricity (Kassala)	2,000
Fuel and maintenance cost for vehicle	6,200
 (b) Stipend and salaries as follows:	
6 refugee master craftsmen to serve as trainers and later as foremen (1 year)	11,000

US\$

6-month stipend for 220 refugees during training £S50 per month per individual (allowing for 10 per cent drop out rate)	50,770
6 months salary average £S100 for 197 leather workers	91,000

B. Government of Sudan

- (a) Land for building of workshops in settlements.
- (b) One official each from the Small-scale Industries Board, the Labour Department and the Office of the Commissioner for Refugees to serve on the project coordinating committee.

C. Implementing Agency

Overall supervision of the project.

8. Institutional framework

The project will be organised with the assistance of the Office of the Commissioner for Refugees which will serve as the counterpart Sudanese Government Agency. This Office will provide office facilities for personnel working on the project in Kassala and the settlements. Other collaborating government bodies will be the Small-scale Industries Board and the Labour Department.

A coordinating committee consisting of representatives from the above three government bodies, from ABIGAR<sup>7</sup>, the expert, the project manager, the chemical engineer and technician in leather goods production and two refugee representatives will be set up. The function of this committee will be the initiation and supervision of the project. At the end of the project life, this committee (excluding the chemical engineer and expert) would assume full

responsibility for running the workshops. It is expected that these workshops will be managed according to cooperative principles and will be affiliated to the Organisational Structure<sup>8</sup> for the provision of services. All equipment and buildings under this project will be handed over to the cooperative management committees.

9. Prior obligations and prerequisites

9.1 Prior obligations

- (a) Granting of business licenses for these activities in Kassala and the settlements.
- (b) Freedom of movement be granted to refugees for training, raw material acquisition and marketing purposes.

9.2 Prerequisites

- (a) Release of one official each from the Office of the Commissioner for Refugees, the Small-scale Industries Board and the Labour Department to serve in the project coordinating committee.
- (b) The Government will supply the necessary support to facilitate the supply of equipment and raw materials.
- (c) Permission be granted for the use of the vocational training school in Kassala during convenient periods for training of refugees.

10. Assumptions

10.1 Immediate objective to development objective

- (a) The Sudanese Government will continue to support income-generating activities for refugees and their integration in the development of the country.
- (b) There continues to be a market for leather products in the Eastern Sudan and that the products are competitive

to imported varieties. The calculated production costs taking into account local tanning, are low enough to justify prices much lower than those of imported products.<sup>9</sup>

- (c) Revolving funds will be provided for the future expansion of the production units to other settlements and towns.
- (d) That incomes from these activities are attractive to the refugees. The Skills Survey revealed an average annual of £813.00 for shoemakers. The salaries ranging from (£1,200 to £2,400) offered in this scheme would therefore seem to be appealing.

#### 10.2 Outputs to immediate objective

- (a) Trainees drop-out rate does not exceed 10 per cent.
- (b) At least 80 per cent of the trained craftsmen stay to work in the workshops.
- (c) Water availability for tanning (1 m<sup>3</sup> per day in the settlements) can be ensured.

#### 10.3 Activities to outputs

- (a) Support obtained from UNDP to speed up customs facilities.
- (b) The required number of craftsmen interested in the scheme can be found among the refugees.

### 11. Rationale

Many of the refugee craftsmen face problems in lack of initial capital, equipment and raw materials, inadequate marketing facilities and low skills. This project seeks to provide solutions to these problems as well as to increase the income of these craftsmen. It is envisaged that Sudanese artisans will also benefit from the training courses in improving methods of production as well as from the development of new designs.



11.1 Significance to the Sudan

The scheme will provide leather products of higher quality than those locally produced by small craftsmen. It is hoped that these products will displace imported items since the proposed prices are much lower. The main imported components are chemicals for tanning and equipment costs. This scheme is also in line with the general objectives for the industrial sector in the six-year development plan, namely "the development of small-scale industries based on local materials".

12. Reporting, monitoring and evaluation schedule

(a) Reporting

8 three-monthly progress reports

24 monthly financial reports

1 terminal report

(b) Evaluation plan

The project is to be the subject of one evaluation mission at the end of 1984, provided within the Project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees", and one self-evaluation by the project management at the completion of the project status.

(c) Evaluation participants

See the above-mentioned project.

(d) Parties responsible for the collection of data

The project manager will have the primary responsibility for the collection of data necessary for the evaluation review.



Annex 1

Estimated lather use for different products

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Product	Unit requirements of leather
Sandal	1 sq. foot for uppers 0.5 sq. foot for soles
Bag	3 sq. ft.
Purse	0.3 sq. ft.
Bicycle seat	2 sq. ft.
Belt	0.5 sq. ft.
Suitcase	25 sq. ft.

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Annex 1 (cont'd)

Leather requirements in Kassala and Settlements

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<u>Town/Settlement</u>	<u>Annual production</u>	<u>Total requirement (number of hides)<sup>10</sup></u>
Kassala	6,000 pairs of shoes	450
	3,000 purses	35
	3,000 belts	58
	750 suitcases	750
		1,293
Tawawa	3,000 bicycle seats	231
	3,000 bags	347
		578
Abuda	3,000 bags	347
	6,000 purses	70
	3,000 belts	58
	3,000 pairs of shoes	225
		700
Khashm el Girba	3,000 bags	347
	3,000 purses	35
		382
Kilo 26	3,000 bags	347
	3,000 purses	35
		382
Um Gargur	3,000 bags	347
	3,000 purses	35
		382
Karkora	3,000 bags	347
	3,000 purses	35
		382
Qala en Nahal	3,000 pairs of shoes	225
Salmin	3,000 pairs of shoes	225
Wad Awad	3,000 pairs of shoes	225

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Annex 1 (cont'd)

Total requirement of hides	4,196
Annual output from 10 hides per day plant in Kassala (assuming 300 working days)	3,000
Annual output from 2 hides per day plant in 9 settlements	<u>5,400</u>
	<u>8,400</u>
Total of tanned hides available for sale	<u>4,204</u>

Annex 2

Profitability of the scheme

(a)	<u>Annual expenditure</u>	£S
	Rent for workshops in Kassala	12,000
	Rent for shops in Port Sudan and Khartoum	12,000
	Depreciation of workshops in 9 settlements (5%)	5,400
	Depreciation of equipment (including vehicle) (10%)	9,893
	Annual supply of raw materials:	
	8,400 hides (£S0.201/kg.) <sup>11</sup>	33,768
	Chemicals	102,570
	Zippers, buckles, cotton and other raw materials	52,000
	Salaries for:	
	Workshop manager	3,120
	1 technician in leather products design	4,020
	2 drivers	2,405
	2 assistant drivers	2,028
	2 shop attendants	2,405
	2 assistant shop attendants	2,028
	6 master craftsmen	14,400
	197 craftsmen	330,960
	Fuel and electricity	10,660
	Transportation cost of inputs	<u>5,000</u>
	Total	604,657
(b)	<u>Annual revenue</u>	
	18,000 pairs of sandals (60 craftsmen each producing 1 pair a day at £S15.00 per pair)	270,000
	18,000 bags (ladies and schoolbags) (60 craftsmen each producing 1 bag a day at £S7.00 each)	126,000

	£S
18,000 purses (30 craftsmen producing 2 purses a day at £S3.00 each)	54,000
3,000 bicycle seats (10 craftsmen producing 1 bicycle seat a day at £S6.00 each)	18,000
6,000 belts (10 craftsmen producing 2 belts a day at £S3.00 each)	18,000
750 suitcases (5 craftsmen producing 1 case in 2 days at £S40.00 each)	30,000
Sale of 4,204 tanned hides at £S25.00 per kg.	<u>157,650</u>
	<u>673,650</u>
(c) Excess of income over expenditure:	<u>68,993</u>
Return to capital which could be used for the expansion of activities or replication of the scheme in other towns/settlements	

Annex 3

Existing market prices

Plastic Products:

Sudanese

Ladies handbags	£S 4.50
Schoolbags	£S13.50
Suitcases	£S(20-30)
Ladies	£S 4.00

Imported

Ladies handbags	£S(12-15)
Schoolbags	£S16.75
Suitcases (large)	£S(45-70)

Leather Products:

Sudanese

Men's sandals	£S8-15
Ladies sandals	£S12
Suitcases	£S(45-50)
Ladies handbags	£S(6-7.50)

Imported

Ladies sandals	£S35
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Annex 4

Equipment for tanneries and leather working factories

(a)	<u>Tanneries (2 hides a day plant)</u> <sup>12</sup>	£S
	1 movable weighing machine (weighing up to 100 kg.)	390.00
	2 x 250 litre soaking vessels (concrete)	200.00
	1 piece rubber tubing for syphon drainage of vessels	5.00
	1 mortar-lined liming pit, 2.2m. x 1m. x 1m.	100.00
	3 x 10 litre buckets	9.00
	1 tanners beam	50.00
	1 fleshing/unhairing knife	10.00
	1 x 250 litre delimiting vessel (concrete)	100.00
	1 mortar lined pit 2.2m. x 1m. x 1m.	100.00
	1 working knife	10.00
	1 setting/oiling table 2m. x 1.2m.	30.00
	1 slicker	10.00
	15m. rail 1.2m. high for drying hides	40.00
	1 mixing basin for oil mixtures	10.00
	1 wooden pallet	20.00
	4m <sup>2</sup> sacking or plastic sheeting	8.00
	simple woodworking tools	<u>100.00</u>
		<u>920.00</u>
	Allowing for furniture	1,000.00
(b)	<u>Leather goods manufacturing sections</u>	
	1 complete set of basic leather working tools for 20 workers containing: hammers, forms, pliers, skivers, sewing needles and piins, anvils, etc. cost approximately	1,500.00
	1 hand-operated sewing machine for leather cost approximately	600.00

ES

Equipment for each: shoemakers workshop,  
bicycle seat, manufacturing workshop, and  
suitcase manufacturing workshop:

1 complete set of leather working tools	1,500.00
3 sewing machines	<u>1,800.00</u>
	3,300.00
furniture and other miscellaneous expenses	<u>700.00</u>
	<u>4,000.00</u>

Equipment for each bag-making workshop  
(10 employees)

tools	750.00
1 sewing machine	<u>600.00</u>
	1,350.00
furniture and other miscellaneous expenses	<u>150.00</u>
	<u>1,600.00</u>

Equipment for each purse and belt manufacturing unit  
(5 employees)

tools	375.00
1 sewing machine	600.00
furniture and other miscellaneous expenses	<u>150.00</u>
	<u>1,125.00</u>

Annex 5

Chemicals for each 2 hides a day plant

	<u>Daily requirement</u>
Sodium sulphide (solid)	11.8 kg.
Anionic wetting agent, e.g. teepol	0.1 kg.
Salt (sodium chloride)	3 kg.
Hydrated lime	23.3 kg.
Sodium bisulphite	3 kg.
Ammonium sulphate	1 kg.
Mimosa extract (solid)	10 kg.
Sulphited whale oil, e.g. cremol SW	40 kg.
(2 kg. can be replaced by cottonseed oil)	



Footnotes

1 See Tanning of Hides and Skins, Technical Memorandum No. 1, Technology Series, ILO, Geneva (and VS 2 hides a day). These technologies require very little foreign inputs (only 5 per cent of total equipment cost) and negligible fuel use.

2 There could be redistribution of these figures at the initiation stage of the project

3 Given the level of incomes in the settlements, and the preference for cheaper rubber and plastic products, (only such products are to be found in the shops in the marketplace) one can conclude that unless there is a significant rise in the incomes outside markets would have to be sought.

4 See the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees".

5 See Annex 4

6 See Annex 5.

7 Advisory Board on Income Generating Activities for Refugees.

8 See the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees".

9 The prices proposed are in fact comparative to corresponding products in plastic and imitation leather. (See Annexes 2 and 3).

10 One tanned hide weighs approximately 15 kgs. and measures 26 sq. ft.

11 Information obtained from Khartoum tannery.

12 For 10 hides a day the requirement of each item is 5 times that quoted.



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Small-scale leatherwork factories for employment of refugees in  
Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
11.01	Expert in Leather Goods Prod.	6.0	43,250	6.0	43,250						
13	Administrative support costs		7,000		3,500		3,500				
15	Travel on official business		5,000		5,000		-				
17	NATIONAL PROFESSIONAL STAFF										
17.01	Project Supervisor	24.0	16,000	12.0	8,000	12.0	8,000				
17.02	Chemical Engineer	24.0	8,000	12.0	4,000	12.0	4,000				
17.03	Technician in Leather Goods Prod.	24.0	6,200	12.0	3,100	12.0	3,100				
17.04	Shop Attendants	48.0	4,000	24.0	2,000	24.0	2,000				
17.05	Assistant Shop Attendants	48.0	3,200	24.0	1,600	24.0	1,600				
19	COMPONENT TOTAL		92,650		70,450		22,200				
30	TRAINING										
33	In-Service Training		153,000		153,000		-				
39	COMPONENT TOTAL		153,000		153,000		-				
41	EQUIPMENT		230,000		200,000		30,000				
43	Construction Costs and Rental		102,000		90,000		12,000				
49	COMPONENT TOTAL		332,000		290,000		42,000				
50	MISCELLANEOUS										
51	Operation and maintenance of eqt.		9,000		4,500		4,500				
53	Sundries		5,000		2,500		2,500				
59	COMPONENT TOTAL		14,000		7,000		7,000				
90	SUB-TOTAL		591,650		520,450		71,200				

Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Small-scale leatherwork factories for employment of refugees  
in Eastern and Central Sudan (contd.)

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
68	Programme Support Costs (13%)		76,920		67,660		9,260				
	TOTAL PROJECT		668,570		588,110		80,460				
71	Provision for cost increases										
	(8% - 84, 17% - 85)*		60,730		47,050		13,680				
	GRAND TOTAL		729,300		635,160		94,140				
<p>*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.</p>											



INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Rubber sandals manufacture in refugee settlements in Eastern and Central Sudan

Geographical coverage: Eastern and Central Sudan

Project languages: English and Arabic

Project Site or Venue: Refugee settlements in Eastern and Central Sudan

Starting date: 1984

Duration: One year

Donor contribution: US\$148,770.00

Cooperating Government Agency in the Sudan: Office of the Commissioner for Refugees (Ministry of Internal Affairs)



Rubber Sandals Manufacture in Refugee Settlements  
in Eastern and Central Sudan

1. Background and context

About 20 per cent of Sudan's estimated 637,000 refugees are settled in settlements which vary in size from 800 to 12,000 inhabitants. Within the rural settlements the planned source of income is from agricultural activities either on land allocated to households in land settlements or in the agricultural schemes in the wage-earning settlements. However, several individuals have succeeded in setting up small businesses which cater for the needs of the settlements. Rubber sandals manufacture is one such activity being undertaken in one of the settlements. The method of production is simple and the costs are very low.

Following the ILO/UNHCR joint mission to Sudan in November/December 1981 and subsequent missions (1982) for the identification of income-generating activities for refugees, this project plans to set up rubber shoe manufacturing workshops in twenty settlements, each providing employment for four persons. It is expected that with the training provided the quality of these sandals will improve, thus resulting in long-lasting inexpensive footwear for the refugees.

2. Target group

Four refugees in each of the twenty settlements in Eastern and Central Sudan, preferably refugees with experience in shoe-making. However, since training can be carried out within a short period of time other interested refugees can participate.

3. Development objective

Income generation for refugees in settlements in Eastern and Central Sudan.

### 3.1 Indicators

At least 100 refugees in the settlements are earning an income from rubber sandals manufacture.

### 3.2 Source of indicator data

- Survey of self-help activities in the settlements.
- Project management registration records.

## 4. Immediate objective

Rubber sandals manufacture by refugees in settlements in Eastern and Central Sudan.

### 4.1 Indicators

- (a) Survey of rubber sandals manufactured in the settlements.
- (b) Records of the project management.

## 5. Outputs

- (a) Small workshops for rubber shoe manufacture are set up in 20 settlements. (Month 1)
- (b) Eighty refugees are trained in the manufacture of good quality rubber sandals. (In each of the 20 settlements, one person trained in sewing of the cloth uppers and three persons in the preparation of rubber soles.) (Months 1-12)
- (c) Equipment provided for production of rubber sandals to two refugees in 20 settlements. (Month 2)
- (d) Trainees are provided with initial aid for raw material procurement. (Month 6)

6. Activities

- (a) Set up workshops in 20 settlements. (Month 1)
- (b) Identify 4 refugees in each settlement to participate in the project. (Month 1)
- (c) Train refugees in manufacture of good quality sandals from rubber tyres and cloth. (Months 1-12)
- (d) Provide equipment for workshops. (Months 1-3)
- (e) Provide initial funds for raw material procurement. (Month 6)

7. Inputs

A. Donor

A.1 Personnel (locally trained)

1 Project Supervisor (12 m/m)

Essential qualifications: experience in running small-scale business.

Languages: English and Arabic. Knowledge of Tigre, Triginya or Amharic would be an advantage.

Duties: setting up the workshops and overall supervision of the project.

Duty station: Gedaref, will be required to travel frequently to project sites.

1 hand-made footwear expert (6 m/m)

Essential qualifications: Extensive experience in labour-intensive footwear production.

Languages: Arabic, knowledge of Tigre, Tigrinya or Amharic would be an advantage.

Duties: Train 40 refugees in manufacture of good-quality rubber footwear.

Duty station: Gedaref, will be required to travel frequently to project sites.

A.2	<u>Construction costs</u>	US\$
	1 hut of an area of 20m <sup>2</sup> in each of the 20 settlements	4,000
A.3	<u>Equipment and materials</u>	
	(a) Equipment:	
	Furniture (chairs and tables for workshops)	1,000
	60 basic sets of equipment for shoemakers	6,000
	20 sewing machines for sewing cloth uppers	7,700
	(b) Materials (for training and 3 months supply):	
	A total of 10,800 used rubber tyres for 3 months' production in 20 workshops	45,000
	Cotton, nails and tacks, etc. (3 months' supply)	15,000
	Cloth/canvas for production of uppers (3 months' supply)	16,900
A.4	<u>Other costs</u>	
	(a) Stipend for 80 refugees during 3 months training at £\$60 per month	11,200
	(b) Operation and maintenance of equipment (including transportation costs)	2,500
	(c) Local travel fund for the project staff	2,000
B.	<u>Sudanese Government</u>	
	20m <sup>2</sup> land space in each settlement for construction of mud huts.	
C.	<u>Implementing Agency</u>	
	Overall supervision of the project.	
8.	<u>Institutional framework</u>	
	The project will be implemented in collaboration with the Office of the Commissioner for Refugees which will act as the	

counterpart Sudanese Government Agency. This Office will provide office accommodation for the project personnel in Gedaref and the settlements.

The project will be run by the supervisor who will be given all the necessary assistance and support by the Commissioner's Office. The training expert will travel from one settlement group to the next to train the participants.

The workshops in each area would be affiliated to the corresponding federation of income generating associations,<sup>1</sup> which will provide the transportation facilities for the supply of inputs.

## 9. Prior obligations and prerequisites

### 9.1 Prior obligation

Freedom of movement for the purchase of materials will be given to the participating refugees.

### 9.2 Prerequisite

Office of the Commissioner assists in alleviating problems related to purchase and transportation of equipment and materials.

## 10. Assumptions

### 10.1 Immediate to development objective

That there continues to be a market for rubber sandals. The expected sale price for these sandals is estimated to be fS2 a pair, a price which caters for a large percentage of the refugees, given the existing level of income.

### 10.2 Outputs to immediate objective

That trainees continue to manufacture rubber/cloth sandals after training.

11. Rationale

The production of inexpensive footwear affordable by the refugee population in the settlements and Sudanese families from nearby villages would reduce the incidence of diseases caused by vectors which enter the body through the feet. Some sandals made with rubber soles and cloth uppers (of the type proposed in this project) are at present being produced in one settlement (Tawawa) but the volume of this operation is not large enough to meet the demand for the product even within the settlement. There is also the scope to extend this activity to other settlements where relatively unskilled refugees will be able to earn a living from it.

The following figures from the shoemaker in Kassala can be used to assess the profitability:

For each workshop -	£S
(a) <u>Equipment</u>	
Cost of basic shoemaker's tools (for use by 3 shoemakers)	300
Cost of sewing machine	500
Furniture for workshop	<u>300</u>
Total equipment	<u>1,100</u>
(b) <u>Building</u>	
1 mud hut (20m <sup>2</sup> )	200
(c) <u>Annual running cost</u>	
3 rubber tyres a day of £S8 each <sup>2</sup> (300 day-year)	9,000
Cloth and canvas upper 1m. material <sup>2</sup> at £S5 a day	1,500
Cotton and nails, etc. <sup>2</sup>	2,000
Depreciation on equipment (10 per cent)	110
Depreciation on building (5 per cent)	<u>10</u>
Total	<u>11,820</u>



<u>Income</u> from sale of 30 rubber sandals a day at £2 each	18,000
Net profit	<u>5,180</u>
Profit/individual	<u>1,295</u>

12. Reporting, monitoring and evaluation schedule

(a) Reporting

- 4, three-monthly progress reports
- 12, monthly financial reports
- 1 terminal report.

(b) Evaluation plan

The project is to be the subject of one evaluation mission at the end of 1984, provided within the Project on the Organisational Structure.

(c) Evaluation participants

See the above-mentioned project.

(d) Parties responsible for the collection of data

The project manager will have the primary responsibility for the collection of data necessary for the evaluation review.



Footnotes

<sup>1</sup> See the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees".

<sup>2</sup> These costs include cost of transportation.



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Rubber sandals manufacture in refugee settlements in  
Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
17	National Professional Staff										
17.01	Project Supervisor	12.0	6,000	12.0	6,000						
17.02	Expert in footwear	6.0	2,400	6.0	2,400						
19	COMPONENT TOTAL		8,400		8,400						
30	TRAINING										
33	In-service Training		12,000		12,000						
39	COMPONENT TOTAL		12,000		12,000						
40	EQUIPMENT										
41	Equipment		92,000		92,000						
43	Premises		4,000		4,000						
49	COMPONENT TOTAL		96,000		96,000						
50	MISCELLANEOUS										
51	Operation and Maintenance of eqt.		2,500		2,500						
53	Sundries (incl. local travel fund)		3,000		3,000						
59	COMPONENT TOTAL		5,500		5,500						
90	SUB-TOTAL		121,900		121,900						
60	Programme Support Costs (13%)		15,850		15,850						
	TOTAL PROJECT		137,750		137,750						
70	Provision for cost increases*										
71	8% - 1984		11,020		11,020						
99	GRAND TOTAL		148,770		148,770						

\*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.



INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Pilot handicraft production for income-generation by handicapped refugees in settlements in Eastern and Central Sudan

Geographical coverage: Sudan

Project languages: English and Arabic

Starting date: 1984

Duration: 18 months

Donor contribution: US\$211,200.00

Cooperating Government Agency in the Sudan: Office of the Commissioner for Refugees (Ministry of Internal Affairs)





Pilot Handicraft Production for Income  
Generation by Handicapped Refugees in  
Settlements in Eastern and Central Sudan

1. Background and context

In the settlements the main source of employment for the refugees is in agricultural production. Five to ten feddans of land are allocated to refugee families for dura and sesame cultivation in the land settlements while in the wage-earning settlements labour is hired out in the neighbouring agricultural schemes.

The handicapped refugees in most cases cannot participate in farming activities and thus are deprived of a source of income. Many of them are at present receiving food subsidies from voluntary agencies. If and when such aids are withdrawn these people, some of them heads of households, would find it difficult to subsist. Unless alternative income-generating activities suited to the capabilities of groups of handicapped people can be embarked upon, this group would thus remain a strain on the already fragile economy of the settlements.

The ILO/UNHCR joint Mission to Sudan (November 1981) paid a special attention to the most vulnerable groups of refugees and potential employment opportunities for them. Subsequent feasibility studies on possible income generating activities were carried out in October-December 1982. They concluded that efforts made thus far by the Sudan Aid in developing handicraft projects for handicapped refugees should be strengthened and extended. This voluntary agency has started a small workshop which has trained five handicapped refugees in t-shirt printing, macramé or rope work (for production of hammocks and flower vase holders) and embroidery. These refugees are at present housed at a residential workshop in Tawawa settlement.

Printed t-shirts from the above project have found a thriving market within the Sudan and it is felt that expert advice on the design and preparation of prints, as well as identification of

suitable dyestuffs for cotton would be invaluable. For the other activities, marketing studies to reveal the types of products that have potential outlets, as well as training and advice for their production is also required.

It is acknowledged that a comprehensive programme for handicapped refugees should aim to integrate them to the extent possible in the general development of the community and income generating activities which will be implemented. However, in the absence of a survey to reveal the nature and types of disabilities, a project of the type suggested can be immediately implemented as a pilot exercise since it caters for only a small proportion (5 per cent) of disabled refugees and since it would serve to boost the morale of this group within the settlement.

## 2. Target group

Handicapped refugees in settlements in Eastern and Central Sudan.

The ILO skills survey undertaken in August to October 1982 in nine refugee settlements<sup>1</sup> and three urban areas,<sup>2</sup> revealed that 2 per cent of the refugees are disabled. If this figure is applied to the refugee population in the settlements, the following figures are obtained:

Khashm el Girba (rural)*	120
Tawawa*	240
Um Gulga*	160
Qala en Nahal* (6 villages)	700
Es Suki* (3 villages)	132
Kilo 26	80
Um Gargur*	116
Karkora	24
Abuda*	86
Um Ali*	70
Wad Awad	36

Tenedba	60
Abu Rackham*	64
Um Rakoba*	120
El Hawata	<u>10</u>
Estimated Total	<u>2,018</u>

The extent and types of the disabilities are not known but it is assumed that at least 10 handicapped refugees in each of the ten largest settlements (settlement groups) shown with asterisks, would be able to participate in handicrafts of the types suggested in this project. These would represent 5 per cent of the total estimated disabled persons.

### 3. Development objective

Income generation for handicapped refugees in Eastern and Central Sudan.

#### 3.1 Indicators

At least 10 per cent of handicapped refugees in each settlement is earning an income from handicrafts production.

#### 3.2 Source of indicator data

Survey of disabled refugees in the settlements.

### 4. Immediate objective

Handicraft workshops for handicapped refugees in the settlements in Eastern and Central Sudan.

#### 4.1 Indicators

(a) Workshops for handicapped are set up in at least five settlements.

- (b) At least five handicapped refugees in each settlement are working in the handicrafts workshop.
- (c) Handicraft workshop for handicapped is self-sufficient by the end of the project.

#### 4.2 Source of indicator data

Records of workshops.

##### Outputs

- (a) Handicraft products with prospective markets are identified. (Month 2)
- (b) Improved designs for t-shirt printing and macrame work are produced. (Month 3)
- (c) Technical advice on the use of dyestuffs for t-shirt printing is provided. (Month 6)
- (d) 10 refugees are trained to be instructors in handicrafts production. (Month 6)
- (e) 100 handicapped refugees are trained in handicraft production. (Months 6-18)
- (f) Handicraft workshop for handicapped in Tawawa extended to include training facilities. (Month 6)
- (g) Workshops for handicapped are constructed in ten settlements. (Month 3)
- (h) Trained handicapped refugees receive six months initial funding for production. (Month 6)
- (i) Mechanism for the supply of raw materials to the workshops is established. Arrangements are made with the area Federation of Income Generating Associations for this purpose.<sup>3</sup> (Month 3)
- (j) Handicrafts shop is opened in Khartoum for sale of products. (Month 6)

6. Activities

- (a) Recruit experts. (Month 1)
- (b) Identify products with prospective markets. (Months 1-2)
- (c) Improve designs for t-shirt printing and macramé work. (Months 1-3)
- (d) Advise refugees on the use of dyestuffs for t-shirt printing. (Months 3-6)
- (e) Train ten refugees to act as trainers to the handicapped. (Months 3-6)
- (f) Train 100 handicapped refugees in handicraft production (t-shirt printing, macramé work etc.).<sup>4</sup> (Months 6-18)
- (g) Extend handicraft workshop for handicapped in Tawawa to include training facilities. (Month 6)
- (h) Construct workshops for handicapped in ten settlements. (Month 3)
- (i) Provide funding for one year initial production to the handicapped.
- (j) Establish a mechanism for the supply of raw materials to the workshops. (Month 3)
- (k) Arrange transportation services for raw materials and products. (Months 1-3)
- (l) Open handicrafts workshop in Khartoum for sale of the products. (Month 6)

7. Inputs

A. Donor

A.1 Personnel

1 Project supervisor (locally recruited) (18 m/m)

Essential qualifications: Degree /diploma in Business Administration/Marketing. Experience in organisation of handicapped groups would be an asset.

Languages: Fluency in English and Arabic. Knowledge of Tigre, Tigrinya or Amharic would be an advantage.

Duties: Overall project supervision and identification of handicraft products with a high market potential.

Duty station: Gedaref, will be required to travel to project sites.

A.2	<u>Equipment and materials:</u>	<u>US\$</u>
(a)	Equipment for training and initial production	10,000
(b)	Raw materials for training and initial production	20,000
A.3	<u>Construction cost and rentals</u>	
(a)	Huts for the workshops in 20 settlements and for residence of trainees and their families in Tawawa during the training period	10,000
(b)	Funds for extending the workshop in Tawawa	2,000
(c)	Rent of a small shop in Khartoum for the sale of products (for 12 months)	2,550
A.4	<u>Other costs</u>	
(a)	Stipend for handicraft trainers (15 m/m) (12 at £S140/month) <sup>5</sup>	19,400
(b)	Stipend for trainees over 9 months (120 at £S100/month) <sup>5</sup>	84,100
(c)	Local travel fund for the project staff and trainees.	5,000
B.	<u>Government of Sudan</u>	
	Land space within the settlements for the building of workshops.	
C.	<u>Implementing Agency</u>	
(a)	Overall supervision of the project.	
(b)	Experts in the following fields: <sup>6</sup>	

1 Handicraft Training Expert (6 m/m)

Essential qualifications: Degree/diploma in handicraft production. Experience training in production of items identified in a market survey.

Duties: Instruction of trainers in production of items identified by the project supervisor.

Duty station: Gedaref.

1 Expert in printing design and dyestuffs (3 m/m)

Essential qualifications: Diploma/certificate in textile design and printing. Experience in non-mechanised textile printing processes.

Duties: Production of design for t-shirt and cloth printing; advice on printing methods and types of dyestuffs.

Duty station: Gedaref

8. Institutional framework

The project will be implemented with the assistance of the Commissioner for Refugees, which will act as the counterpart Sudanese Government agency.

The project will support activities already initiated by Sudan Aid. A Coordinating Committee composed of the project supervisor, members of ABIGAR (Advisory Board on Income Generating Activities for Refugees), and a Sudan Aid official will be formed.

The workshop in various settlements will be affiliated to the area Federation of Income Generating Associations which will provide the transportation facilities for the supply of raw materials and collection and distribution of finished products in market centres.

At the end of the project it is expected that management committees will be elected to run the workshops according to cooperative principles.

Payment will be on a piece-work basis after the initial training and production period covered by this project.<sup>7</sup>

9. Prerequisites

- (a) Release of official of the Office of the Commissioner for refugees to serve in the project coordinating committee.
- (b) Land space provided within the settlements for the building of workshop huts.

10. Assumptions

10.1 Immediate to development objective

- (a) A proposed survey of handicapped refugees to determine types and degree of handicapped is carried out and from this survey it is revealed that at least 10 per cent of the refugees can be involved in handicrafts production of the types identified under this project.
- (b) That the proposed revolving fund would benefit the activities of the handicapped for reasons of extension of these activities and diversification of products.
- (c) There continues to be a market for the products identified in this project.
- (d) That incomes from these activities remain attractive to the refugees. The profits obtained from an initial survey on t-shirt printing and macramé work indicate that incomes could be above £Sl,200 per annum.<sup>8</sup>

10.2 Outputs to immediate objective

- (a) Handicapped refugees with required ability are prepared to work in workshops.
- (b) The project on the Organisational Structure for the Promotion of Self-Reliance among Refugees is implemented



on time. The workshops are affiliated to the Federations of Income Generating Associations for the provision of raw materials.

10.3 Outputs to activities

- (a) Drop-out rate for trainees and trainers does not exceed 20 per cent.

10.4 Inputs to activities

- (a) That materials for production of products identified can be obtained locally. The experts would be required to give due consideration to this aspect.
- (b) Support would be obtained through UNDP to speed up customs formalities if required.

11. Rationale

The disabled represent a target group which requires special attention in the consideration of self-sufficiency for the refugees.

The 1975 International Labour Conference Resolution concerning Vocational Rehabilitation and Social Reintegration of Disabled or Handicapped Persons is particularly relevant for it and states that "a high proportion of disabled or handicapped persons in society is a serious strain on the national economy and undermine the prosperity of the country and therefore the welfare of the population unless effective measures are taken."

In addition in 1975 the United Nations General Assembly adopted a Resolution No. 3447 (XXX) entitled "Declaration on the Rights of Disabled Persons". This resolution states, inter alia, that "Disabled persons are entitled to the measures designed to enable them to become as self-reliant as possible" and that among other things they have the rights to "social rehabilitation, education, vocational training and rehabilitation counselling, placement and other services which will

enable them to develop their capabilities and skills to the maximum that will hasten their social integration or reintegration. They have the right to economic and social security and to a decent standard of living. They have the right according to their capabilities to secure and retain employment or to engage in a useful productive and remunerative occupation .... They are responsible to have their special needs taken into consideration at all stages of economic and social planning."

Following the above resolutions the year 1982 was declared the year of the disabled.

12. Reporting, monitoring and evaluation schedule

(a) Reporting

6 three-monthly progress reports  
18 monthly financial reports  
1 terminal and self-evaluation report

(b) Evaluation plan

The project is to be the subject of one evaluation mission at the end of 1984, provided within the Project on the Organisational Structure for the Promotion of Self-Reliance among Refugees, and one self-evaluation by the project management at the completion of project status.

(c) Evaluation participants

See the above-mentioned project.

(d) Parties responsible for the collection of data

The project manager will have the primary responsibility for the collection of data necessary for the evaluation reviews.

Footnotes

1 Khashm el Girba, Kilo 26, Um Gargur, Abuda, Um Ali, Wad Awad, Tenedba, Tawawa and Fath el Rahman.

2 Kassala, Gedaref and Khashm el Girba town.

3 See the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees".

4 Medical advice will be required in the choice of participants.

5 Allowing 20 per cent dropout.

6 At the request of UNHCR, the suggested implementing Agency i.e. Afro-Art will provide this expertise as part of the supervision of the project. Therefore the costs are not budgeted for in the present project. However it should be stressed that these experts are essential for the successful implementation of the activity.

7 This is to enable refugees to work at their convenience rather than under strict schedules. Consideration will however be given to family commitments.

8 For instance, in t-shirt printing, it is estimated that by using the paint and printing method employed at present, a gross profit of £S4.50 a day can be realised per individual. It is expected that this figure would increase as a result of the activities to be performed in this project.



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Pilot handicraft production for income-generation by handicapped refugees in settlements in Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
16	Other Costs (local travel fund)		5,000		5,000		-				
17	National Professional Staff										
17.01	Project Supervisor		12,000		12,000		-				
19	COMPONENT TOTAL		17,000		17,000		-				
30	TRAINING										
33	In-Service Training		103,500		80,000		23,500				
39	COMPONENT TOTAL		103,500		80,000		23,500				
40	EQUIPMENT										
41	Equipment		30,000		20,000		10,000				
43	Premises		14,550		14,550		-				
49	COMPONENT TOTAL		44,550		34,550		10,000				
50	MISCELLANEOUS										
53	Sundries		5,000		2,500		2,500				
59	COMPONENT TOTAL		5,000		2,500		2,500				
90	SUB-TOTAL		170,050		134,050		36,000				
60	PROGRAMME SUPPORT COSTS										
68	Programme Support Costs (13%)		22,110		17,430		4,680				
	TOTAL PROJECT		192,160		151,480		40,680				



INTERNATIONAL LABOUR ORGANISATION  
MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Small-scale bee-keeping and fodder  
production scheme in refugee  
settlements in Eastern and Central Sudan

Geographical coverage: Eastern and Central Sudan

Project languages: English and Arabic

Project site: Eastern and Central Sudan

Starting date: 1984

Duration: Two years

Donor contribution: US\$975,850.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)





Bee-keeping and Fodder Production in Refugee  
Settlements in Eastern and Central Sudan

1. Background and context

The ILO/UNHCR mission on Employment, Income Generation and Training of refugees in the Sudan was also concerned with the issue of female-headed households, which constitutes one of the most vulnerable groups of refugees in the Sudan.

The majority of single women with numerous dependents in refugee settlements, are living solely on their meagre food rations distributed to them.

In order to identify alternative employment opportunities for refugee women, feasibility studies were carried out during October-November 1982. They found that bee-keeping and honey production provide a very attractive prospect for income generation among refugee female-headed households. It is a traditional activity in the highlands of Ethiopia and Eritrea, where a large number of refugees came from.

Given the relative aridity of the Eastern Sudan and lack of nectar for the honey production, the project envisages to allocate plots of lands to female-headed households in the vicinity of settlements, to be used as a site for the hives and to be cultivated by Alfalfa (Luzerne) which provides one of the most demanded flavour of honey in the Sudan.

An added advantage of the project is the extra-income that will accrue from the cultivation of Alfalfa, a crop which stays round the year and which is in high demand for fodder.

It is proposed that 870 refugee female-headed households in ten settlements will benefit from this project.

The distribution of target households in ten settlements is as follows:

<u>Refugee Settlements in Eastern and Central Sudan</u>	<u>Number of Female- Headed Households Involved in the Project</u>	<u>% to Total Number of Female- Headed Households</u>
Tawawa	200	50%
Um Gulga	150	50%
Fath-el-Rahman	75	75%
Awad-es Sid	75	75%
Kilo 7	75	75%
Kilo 26	80	50%
Khashm-el-Girba	110	50%
Tenedba	35	25%
Abu Rakhm	40	25%
Wad Awad	<u>30</u>	25%
Total	<u>870</u>	

The settlements and the number of households involved in the project have been selected upon the following criteria:

- High percentage of female-headed households compared to the total population in the wage-earning settlements where the lack of employment opportunities for men has resulted in important outmigration leaving a big number of women and children with no support.
- Water supply potential of settlements, to cater for the irrigation of Alfalfa farms.
- Proximity to the major Sudanese markets and towns.<sup>1</sup>

Each female-headed household will be provided with seven hives and half a feddan of irrigated land.<sup>2</sup>

## 2. Target group

Eight hundred and seventy refugee female-headed households in ten settlements in Eastern and Central Sudan.

3. Development objective

Income generation for refugees in Eastern and Central Sudan.

3.1 Indicator

A minimum of 500 female-headed households earn sufficient income to support their families (at the end of the project).

3.2 Source of indicator data

Records of women's production groups in each settlement.

4. Immediate objective

Small-scale apiculture and honey production in the refugee settlements in Eastern and Central Sudan.

4.1 Indicators

- A minimum of 3,500 hives are set up in ten settlements (at the end of the project)
- A minimum of 500 women are trained in basic principles of bee-keeping and honey production.
- A minimum of 35,000 kg. of honey is produced in ten settlements (10 kg. per hive).

4.2 Source of indicator data

Records of women's production groups in each settlement.

5. Outputs

- (a) A plot of half a feddan irrigated land is allotted to each household.<sup>3</sup> (Month 1)
- (b) 870 female-headed households in ten settlements are identified, and women mobilised to join the project. (Month 1)

- (c) Women are provided with tools, seeds and fertilizer to cultivate the Alfalfa farms. (Months 1 - 3)
- (d) Women are provided with basic knowledge concerning fodder production (water and fertilizer requirements, weeding, yields, etc.). (Months 1 - 3)
- (e) Each household is provided with seven hives, seven "colonies" of bees and required tools for the production of honey.<sup>4</sup> (Months 2 - 4)
- (f) 870 refugee women are trained in efficient methods of bee-keeping and honey extraction. (Months 1 - 18)
- (g) The honey is bottled and taken to the nearby Sudanese villages and towns. (Months 12 - 24)
- (h) Alfalfa is harvested regularly round the year and used on the spot as fodder or sold to Sudanese middlemen. (Months 4 - 24)

6. Activities

- (a) Allocate 1/2 feddan of irrigated land to each female-headed household involved in the project. A total of 435 feddans of land will be allotted in ten settlements, as follows:

Tawawa	100 feddans
Um Gulga	75 "
Fath-el Rahman	37.5 "
Awad-es Sid	37.5 "
Kilo 7	37.5 "
Kilo 26	40 "
Khashm-el Girba	55 "
Tenedba	17.5 "
Abu Rakham	20 "
Wad Awad	15 "

For better irrigation the plots of land will be grouped in one lot in the vicinity of the settlements, and each household's share marked out. (Month 1)

- (b) Identify and mobilise 870 women-household heads in ten settlements. The willingness, ability of women to join the project and their eventual previous experience in bee-keeping will be given due consideration in the final selection of households. (Month 1)
- (c) Provide the tools, seeds and fertilizers and pesticides for the cultivation of Alfalfa. Many refugee women of nomadic background have no experience in farming and should be advised in fodder production. (Months 1 - 3)
- (d) Provide each household with seven complete hives and a set of required tools for bee-keeping and honey extraction. (Months 2 - 4)
- (e) Train women in each settlement in basic principles of bee-keeping and honey production. The Faculty of Agriculture, University of Khartoum<sup>5</sup> which has undertaken a programme for the promotion of bee-keeping in the Sudan, can provide the staff who will train refugee women on the spot, in bee keeping as well as in Alfalfa growing. However, since it would be difficult to mobilise a great number of trainers at the same time, the training should be spread over time. The appropriate schedule should be established at the beginning of the implementation. (Months 1 - 18)
- (f) Bottle the honey produce, and transport it to the market places. During the peak season (April to July), the bottles can be stored in women's production centres and taken gradually to the markets. (Months 12 - 24)

## 7. Inputs

### A. Donor

- (a) Personnel (locally recruited)  
1 project manager (24 m/m)

Essential qualifications: University degree in agriculture or management. Preferably experience of work in agriculture. Fluent in Arabic and preferably English.

Duties: General responsibility for the implementation of the project in 10 settlements and its running over two years. Supervision of the land allocation and irrigation, the identification of households, the training programme, the production and marketing of honey and fodder.

5 trainers in bee-keeping (120 m/m)

Essential qualifications: Diploma in Agriculture or related activities. Experience in bee keeping. Knowledge of Ethiopian and Eritrean languages would be an advantage.

Duties: Train refugee women in 10 settlements in basic principles of Alfalfa production, bee keeping and honey extraction. Two months training period is required for a group of 20 persons. An appropriate schedule should be fixed to cover 10 settlements over the life of the project.

1 driver for the project vehicle

(b)	Funds for the preparation of Alfalfa farms:	<u>US\$</u>
	Seeds, fertilizers and pesticides (£S600 per feddan)	200,770
	Irrigation fees: for 2 years <sup>6</sup> (£S48 per feddan, per year)	32,124
	Hand tools:	
	One hoe and one sickle (£S5.50) for each household	3,681
(c)	Bee-keeping equipment:	431,120
	beehives with frames (7 hives per household, 1 complete hive = £S30)	
	"Colony" of bees (one colony per hive = £S16)	
	Synthetic wax (£S30 per hive)	

US\$

Bee-keeping kit (one set for each household)

7 feeders (£\$1.2 each)

1 transportation box (£\$8)

1 brush (£\$1)

1 queen cage (£\$0.3)

1 smoker (£\$6)

1 frame lifter (£\$1)

1 sieve (£\$1.50)

1 bucket (£\$2)

1 knife to uncap (honeycomb) (£\$4)

1 protective garment and mask (£\$10)

140 honey bottles (£\$0.5 each)

(d)	Transportation cost of materials	385
(e)	Stipend for women during the training period (2 months, £\$40 per month)	53,540
(f)	One vehicle for the project staff's trips between 10 settlements	12,000
(g)	Operation and maintenance of vehicle	4,200

B. Government of Sudan

Allocation of 435 feddans irrigated land in the vicinity of 10 settlements.

C. Implementing Agency

Overall supervision of the project.

8. Institutional framework

The project will be implemented with the assistance of the Office of the Commissioner for Refugees and its sub-offices in Eastern and Central Sudan. The co-operation of the Ministry of Agriculture and the University of Khartoum (Faculty of Agriculture, Shambat, for the training component of the project) is required.

The Federations of Income Generating Associations<sup>7</sup> will be responsible for the transportation of the materials to the settlements and the produce of honey to the markets, while women's production groups in each settlement will oversee the running of the activity, bottling and storage.

A co-ordinating committee composed of the project manager, Members of the ABIGAR (Advisory Board on Income Generating Activities for Refugees) and one official from the Ministry of Agriculture will supervise the different stages of the project.

9. Prior obligations and prerequisites

9.1 Prior obligation

Allocation of 435 feddans irrigated land in 10 settlements.

9.2 Prerequisites

Release of national staff for the participation in the co-ordinating committee; one official from the Ministry of Agriculture and one official from the Office of the Commissioner for Refugees (Ministry of Internal Affairs).

10. Assumptions

10.1 Immediate to development objective

- (a) The Sudanese government continues to encourage income-generating activities for refugees in Eastern and Central Sudan.
- (b) Freedom of movement should be guaranteed for refugees to travel between the settlements and market places to sell the products.
- (c) The revolving fund is available for refugees who would like to expand the activity or for further replication of the project in other settlements.



10.2 Outputs to immediate objective

- (a) There continues to be a high demand for honey and fodder in the Sudan.
- (b) The honey produced by refugee is competitive with the imported ones. There will be no immoderate increase in the prices of raw materials.
- (c) Women do not drop the activity after the training period.
- (d) The water supply in the settlements is sufficient for the irrigation of Alfalfa farms.
- (e) The income is high enough to retain women with numerous dependents.

10.3 Activities to outputs

- (a) Women's production groups are set up in each settlement to oversee the activity and organise women.
- (b) Operational links are established between the federations of income generating associations (in each group of settlement) and women's production groups for the delivery of inputs and the transportation and distribution of honey in the Sudanese towns. A separate project on the institutional framework of income generating activities (women's production groups in each settlement and federation of income generating associations in each group of settlement) will be implemented at mid-1983.<sup>8</sup>

10.4 Inputs to activities

- (a) Physical facilities (transport, fuel) available for installation of equipment.
- (b) Support obtained from UNDP to speed up customs formalities for the imported components.

11. Rationale

Bee-keeping combined with Alfalfa cultivation appears an ideal activity for refugee female-headed households in the settlements.

- (a) It requires relatively little capital to run. Bees and other equipment would be imported from Egypt,<sup>9</sup> as is the practice now and therefore there will be no problem in obtaining raw materials.
- (b) Honey is a highly appreciated commodity in the Sudan as well as among refugee communities, for its nutritious and medical values.
- (c) The project presents an additional advantage of providing fodder for animals. Therefore, other income generating project proposals such as "Small-scale Dairy, Poultry and Vegetable Farming", can benefit from this scheme, since they will be implemented in the same settlements.
- (d) Although bee-keeping is a traditional rural activity in Ethiopia and Eritrea, the project envisages a short training period for each group of women, during which basic methods of efficient bee-keeping in the climatic and environmental conditions of the Sudan, as well as the hygienic extraction and bottling of honey will be taught.
- (e) Market Potential and Outlets

Honey

At present honey production in the Sudan is very limited and falls too short of satisfying the local demand. Retailers complain about shortages in the supply, with the result that the price has now reached £9 per kg. for the local production. In 1981 only, Sudan imported 646 tonnes of honey and 3,516 tonnes of molasses which is used as a substitute.<sup>10</sup>

Therefore there is a very important market potential for this product. Although honey is also very

appreciated by refugee communities, it is estimated that a very small quantity will be consumed in the settlements given the generally low purchasing power, and the product will be sold mainly in nearby Sudanese towns.

The estimated annual production of honey would be 121,800 kg., which represents approximately 18 per cent of the imports.<sup>11</sup>

The sale of the product will not cause any problem, and several outlets are envisaged:

- There is a very high mobility of Sudanese middlemen and merchants going around the settlements and buying the product on the spot and taking it very far, even to Khartoum and Port Sudan.
- In case the project on "Small-scale Dairy, Poultry and Vegetable Farming" is implemented, the bottles of honey in Suki and Girba group of settlements can be sold through the co-operative-owned shops in the towns of Sennar and Khashm-el-Girba.
- The surplus production will be stored in women's production groups and arrangements will be made with the Federation of Income Generating Associations in each group of settlements, to distribute it to retailers in neighbouring Sudanese towns:

<u>Group of Settlement</u>	<u>Major Sudanese Markets</u>
(1) Es Suki (Fath-el Rahman, Awad-es Sid, Kilo 7)	- Kawli, Wad Errikane - Suki - Sennar - Wad Madani
(2) Girba group (Khashm-el-Girba Kilo 26)	- Showak - Girba town - New Halfa - Kassala

- (3) Gedaref area - Gedaref  
(Um Gulga, Tawawa)
- (4) El Hawata group - El Hawata  
(Tenedba, Abu Rakham,  
Wad Awad)

Alfalfa

Alfalfa is highly demanded as fodder for cattle, donkeys and even poultry. The marketing of the products will not cause again any problem, since Sudanese middlemen and cattle rearers buy the production on the spot and harvest it themselves.<sup>12</sup>

(f) Expected Profits

Each female-headed household will be provided with seven hives and half a feddan of Alfalfa cultivation. Each hive produces yearly 20 to 25 kgs. of honey, and it is assumed that the sale price will be £6.5 per kg. which is much lower than the actual price of £9 per kg. The profit per household would be as follows:

(1) Expected Annual Income of Each Household  
from Honey Production

(i)	<u>Annual Production Cost</u>	<u>Total</u> £S	<u>Per kg. of Honey</u> £S
-	Bee-keeping equipment: depreciation over 5 years (cost of hives + frames + kit, other than bees, bottles and synthetic wax per household = £\$252.2)	50.44	0.3603
-	Synthetic Wax: depreciation over 2 years (£\$30 per hive, for 7 hives = 210)	105.00	0.75
-	Transportation cost <sup>13</sup>	5.16	0.0368
-	Bottles (140 per household)	<u>70.00</u>	<u>0.5</u>
	Total	<u>230.60</u>	<u>1.6471</u>

(ii) Annual Earnings

Assuming 20 kg. of production per hive, and £S6.5 the price of one kg. of honey, the total annual earnings per household would be:<sup>14</sup>

$$20 \times 7 = 140 \text{ kg.}$$

$$140 \times 6.5 = \text{£S910}$$

(iii) Annual Profit per household:  $910 - 230.6 = \text{£S679.4}$

per kg. of honey:  $6.5 - 1,6471 = \text{£S4.8529}$

(2) Expected Annual Income of Each Household  
from Alfalfa Cultivation

It has been assumed that eight cuttings will be taken round the year, each cutting yields up to 1,500 kg. per feddan<sup>15</sup> and the price per kg. of green weight is £S0.067 (or £S3 per Kantar). Alfalfa seeds stand well for four years.

(i) Annual Production Cost

	<u>Per feddan</u>	<u>Per Household</u> <u>(0.5 feddan)</u>
- Seeds		
£S500 per feddan		
depreciation over 4 years	125	62.5
- Pesticides + fertilizers	50	25
- Irrigation fee	<u>48</u>	<u>24</u>
	<u>223</u>	<u>111.5</u>

(ii) Annual Household Earnings

Total yield for one feddan. 8 cuttings, each of 1,500 kg.

$$8 \times 1,500 = 12,000 \text{ kg.}$$

$$\text{Yield for } 1/2 \text{ feddan} = 6,000 \text{ kg.}$$

$$\text{Price of a kg. of fodder (green weight)} = \text{£S0.067}$$

$$\text{Total earning: } 6,000 \times 0.067 = \text{£S402}$$

(iii) Annual Household Profit

402 - 111.5 = £290.5

Thus, the total annual profit from bee-keeping and fodder production would amount to £969.9 (290.5 + 679.4), which gives a monthly income of £80.

12. Reporting, monitoring and evaluation schedule

12.1 Reporting

The following reports will be required:

- 24 monthly financial reports
- 8, three monthly progress reports
- 1 terminal report

12.2 Evaluation plan

(a) Frequency and timing:

The project is to be evaluated by the UNHCR/ILO joint Mission, at the end of the first year, provided within the project on the "Organisational Structure for the Promotion of Self-Reliance among Refugees". There will be also a self-evaluation review by the project management at the end of the project.

(b) Evaluation participants<sup>16</sup>

(c) Collection of data

The project manager will assume full responsibility for the collection of data necessary for the evaluation review.

Footnotes

<sup>1</sup> See under "Rationale".

<sup>2</sup> 1.5 feddan Alfalfa farm provides the necessary nectar for 20 hives.

<sup>3</sup> See under "Activities".

<sup>4</sup> See the complete list under "Inputs".

<sup>5</sup> The Faculty of Agriculture, (Department of Crop Protection, Shambat), the National Council for Research and the Near East Foundation (US) have launched a programme for the promotion of bee keeping on a commercial basis in the Northern Province.

<sup>6</sup> Included in the operation and maintenance of equipment in the final budget.

<sup>7</sup> See the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

<sup>8</sup> The project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

<sup>9</sup> The "House of bees and agricultural activities" in Cairo is the main supplier of the University project in the Northern province.

<sup>10</sup> Department of Statistics, Foreign Trade Statistics, 1981.

<sup>11</sup> Each hive produces approximately 20 to 25 kg. of honey per year. Part of the production will be consumed within the female-headed households and the rest will supply Sudanese markets.

<sup>12</sup> One feddan of Alfalfa farm yields up to 1,500 kg. per cutting green weight, and 8 to 12 cuttings can be taken yearly.

<sup>13</sup> Transportation cost to the markets for yearly production of 140 kg. of honey.

<sup>14</sup> Does not take into account the consumption within the household.

<sup>15</sup> The normal yield is about 12 cuttings per year.

<sup>16</sup> See the above-mentioned project on the Organisational Structure.





Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Small-scale bee-keeping and fodder production scheme in refugee settlements in Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
11	EXPERTS										
11.01	External Collaborators (local)	120.0	37,000		18,500		18,500				
13	Administrative Support Personnel		3,500		1,750		1,750				
17	National Professional Staff										
17.01	Project Manager	24.0	12,000		6,000		6,000				
19	COMPONENT TOTAL		52,500		26,250		26,250				
30	TRAINING										
33	In-Service Training		55,000		30,000		25,000				
39	COMPONENT TOTAL		55,000		30,000		25,000				
40	EQUIPMENT										
41	Equipment		650,000		650,000		-				
49	COMPONENT TOTAL		650,000		650,000		-				
50	MISCELLANEOUS										
51	Operation and Maintenance of eqt.		37,000		27,000		10,000				
59	COMPONENT TOTAL		37,000		27,000		10,000				
90	SUB-TOTAL		794,500		733,250		61,250				
60	PROGRAMME SUPPORT COSTS										
68	Programme Support Costs (13%)		103,290		95,320		7,970				
	TOTAL PROJECT		897,790		828,570		69,220				



INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Small-scale soap making units in  
refugee settlements in Eastern and  
Central Sudan

Geographical coverage: Eastern and Central Sudan

Project languages: English and Arabic

Project sites: Refugee settlements in Eastern and  
Central Sudan

Starting date: 1984

Duration: 18 months

Donor contribution: US\$141,390.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)



## Small-scale Soap-making Units in Refugee Settlements in Eastern and Central Sudan

### 1. Background and context

The ILO/UNHCR mission on Employment Income Generation and Training of Refugees (November-December 1981) paid special attention to the issue of female-headed households, which constitutes one of the most vulnerable groups of refugees in the Sudan.

The majority of single women with numerous dependents in refugee settlements, are living solely on their meagre food rations distributed to them.

Upon the feasibility study carried out by ILO in October-November 1982, soap making appears to be an ideal activity for income generation among female-headed households in isolated rural settlements. It is easily learnt and potentially profitable.

At present, the refugees rely on the local market for obtaining their needs of soap. The only exception is the small workshop in Um Gulga settlement, set up by Sudan Aid where 1 man and 4 women were producing small quantities of laundry soap. But the final product needs improvement in its physical as well as chemical properties. Thus the settlement economy will provide further source of potential demand for soap.

In this project, it is proposed to strengthen the existing workshop and establish others in 13 settlements: Khashm el Girba, Kilo 26, Um Gargur, Abuda, Um Gulga, Tawawa, Um Rakhoba, 3 of the Qual-el-Nahal villages (Um Sagata, El Zarsur, Salmin), Abu Rakham, Tenedba and Suki (Fath-el-Rahman).<sup>1</sup>

It is envisaged that the project is introduced in two phases. Phase 1, of a duration of 3 months, will aim at setting up pilot workshops in 3 settlements (Um Gulga, Fath-el-Rahman and Kilo 26).

During this phase, an expert in rural soap-making processes in Africa, will deal with two basic problems: identifying potentially locally available raw materials replacing partly the ingredients which are currently imported (caustic soda and tallow), and elaborating the most appropriate formula. The feasibility of a small-scale caustic soda manufacture will also be studied.

In the following phase, it is intended to diffuse the technique to 13 other settlements. Each workshop will be run by 5 refugee women and produce a monthly average of 4,000 bars of soap for the settlement market. Once the project is generalised it will involve 65 female-headed households, and if the experience proves to be successful, the production can expand and the surplus sold in nearby Sudanese villages and towns. It is expected that interested Sudanese in the surrounding areas will participate in the training scheme and therefore benefit from the expert advice on improving traditional processes of soap-making.

2. Target group

- (a) 65 refugee female-headed households in 13 settlements in Eastern and Central Sudan.
- (b) Sudanese artisans in nearby villages

3. Development objective

Income generation for refugee female-headed households in 13 settlements in Eastern and Central Sudan.

3.1 Indicator

At the end of the project a minimum of 50 women, household heads, earn an income by soap-making.

3.2 Source of indicator data

Workshop records of sales and benefits.

4. Immediate objective

Thirteen small soap-making workshops in 13 refugee settlements in Eastern and Central Sudan, each providing an average of 4,000 bars of soap per month for the settlement market.

4.1 Indicators

- (a) An average of 4,000 bars of soap are sold in each settlement, representing approximately 50 per cent of the demand.
- (b) The workshops are financially self-supporting at the end of the project.
- (c) They are operational without external expertise.
- (d) A minimum of 50 women are trained in artisanal soap-making process.

4.2 Source of indicator data

Workshop records of sales and benefits.

5. Outputs

- (a) 65 women - household heads - in 13 settlements able to join the project are identified (5 in each settlement). (Month 1)
- (b) Phase 1: 3 pilot soap-making workshops are set up in the 3 settlements of Um Gulga, Kilo 26, Fath-el-Rahman. (Month 1)
- (c) The feasibility of replacing current imported materials (caustic soda, tallow), by potentially locally available materials is studied. (Months 1-3)
- (d) The feasibility of a small-scale caustic soda manufacture is studied. (Months 1-3)
- (e) The appropriate formula of soap, taking into account the availability and the cost of raw materials, is elaborated. (Months 1-3)

- (f) Reliable sources of raw materials are identified and arrangements are made for their continuous supply. (Month 3)
- (g) 8 other workshops are established in 8 settlements. (Month 3)
- (h) 65 women are trained in soap-making in 13 settlements. (Month 6)
- (i) An average of 4,000 bars of soap are produced and sold monthly in each settlement. (Month 12)

6. Activities

- (a) Identify 65 women - household heads - in 13 settlements to join the project. Although next to the ones in the Um Gulga workshop, no woman with previous experience in soap-making has been identified, nevertheless there would be no problem in mobilising 5 women in each settlement. Many of them, interviewed during the feasibility study in different settlements, expressed their willingness to join the project, if the appropriate training is provided. (Month 1)
- (b) Start the Phase 1 of the project by setting up 3 pilot workshops in Um Gulga (the equipment of the existing workshop should be completed), Kilo 26 and Fath-el-Rahman. (Month 1)
- (c) Review the on-going soap-making method in Um Gulga, as well as the traditional Sudanese process (in Shandi). Investigate the possibility of using potentially locally available raw materials such as mixture of sesame oil, cottonseed oil, animal fats or caustic potash, local spices and scented woods, etc. (Months 1-3)
- (d) Elaborate the most viable and profitable formula and method of making soap in the settlements environment. (Months 1-3)
- (e) If caustic soda proves to be a necessary ingredient, investigate the feasibility of a small-scale caustic



- soda manufacturing using slaked lime and soda ash. The latter is a cheaper imported item. (Months 1-3)
- (f) Identify reliable sources of raw materials and make arrangements for their continuous supply to all settlements through the federations of income-generating associations. (Months 3-6)
  - (g) Train 65 women in soap-making process in different settlements. Given the nature of the target group - women with numerous dependents - they cannot be gathered in one place, therefore the expert with the help of 2 extension workers will visit the settlements and train them on the spot. The appropriate schedule should be established at the end of the first phase of the project. During the training period, women will be given a monthly stipend of £S40 for 3 months, as family support. (Months 1-12)
  - (h) Train 1 literate woman in each workshop in simple accounting and bookkeeping. (Months 1-12)
  - (i) Produce and sell a monthly average of 4,000 bars of soap per settlement. If the experience proves to be successful, the production can expand and arrangements should be made for marketing the surplus in nearby Sudanese villages and towns. (Months 6-18)

## 7. Inputs

### A. Donor

#### A.1 Personnel

Project Supervisor (locally recruited) (18 m/m)

Essential qualifications: Degree in Business Administration or equivalent. Experience in setting up small-scale business in rural areas. Experience with women's groups would be desirable.

Languages: Fluency in English and Arabic.

Duties: Overall responsibility for the implementation of workshops and training women.

Duty station: Gedaref, would be required to travel to project sites in the settlements in Eastern and Central Sudan.

Expert in small-scale soap-making process (international)  
(6m/m)

Essential qualifications: University degree in chemistry or equivalent. Extensive experience in implementing small-scale soap-making plants in Africa and elaborating appropriate techniques using locally available raw materials.<sup>2</sup> Experience with women's groups would be desirable.

Duties: Elaborate the appropriate techniques of small-scale soap-making in rural areas in Sudan. Study the feasibility of a small-scale caustic soda manufacture. Train the extension workers and supervise the training of refugees.

Duty station: Gedaref, but would be required to stay in the vicinity of different settlements during the training period.

2 Extension workers (locally recruited) (36 m/m)

Essential qualifications: Experience in small-scale business, preferably knowledge of soap-making techniques. Work experience with women's groups would be an advantage.

Languages: Fluent in refugee languages.

Duties: Assist the expert during the phase 1 of the project, and acquire necessary skills for the diffusion of the method in other settlements in the second phase. Training women in 13 settlements in soap-making and bookkeeping under the supervision of the expert.

Duty station: In various settlements in Eastern and Central Sudan, in the course of the training period.

1 Driver for the project vehicle (18 m/m).

A.2 Raw materials

US\$

Provision of 6 months supply of raw materials (for the 3 months training period in each settlement, and additional 3 months of production).<sup>3</sup>

(a)	Solid caustic soda (3 tonnes)	1,846
(b)	Tallow (animal fat) or cottonseed oil (21 tonnes)	13,730
(c)	Charcoal	420

A.3 Equipment for 13 workshops

(a)	Barrels, wooden moulds, water containers, buckets, stoves, measuring cups, stirring spoons and paddle, thermometers	4,350
(b)	13 huts used as workshops	5,000
(c)	Vehicle for the project's staff's trips between settlements	12,000

A.4 Other costs

(a)	Stipend to women - household heads - for the training period (£S40 per month, for 3 months)	6,000
(b)	Operation and maintenance of equipment	4,200
(c)	Product Development Fund	5,000

B. Government of Sudan

- (a) Land in the vicinity of chosen settlements for the construction of workshop huts, each of 30m<sup>2</sup>.
- (b) Release of national staff for participation in the Co-ordinating Committee.

C. Implementing agency

Overall supervision of the project.

8. Institutional framework

The Office of the Commissioner for Refugees will assist the implementation of the project. Arrangements should be made with the Ministry of Industry and the Union of Soap Industries for the supply of raw materials.

A Co-ordinating Committee composed of representatives of ABIGAR (Advisory Board on Income Generating Activities for Refugees) and the project manager will be constituted to oversee the implementation and management of the activity.

The workshops in each settlement, will be integrated in the proposed Women's Production Groups<sup>4</sup>, which in turn will be affiliated to the area Federation of Income Generating Associations. The latter will provide transportation facilities for the supply of raw materials to the settlements. At the end of the project, the workshop will be managed by elected committees according to co-operative principles.

9. Prior obligation

Arrangements should be made with the Union of Soap Industries for the regular supply of raw materials.

10. Assumptions

10.1 Immediate objective to development objective

- (a) Continuation of Sudanese Government's policy encouraging income-generating activities for refugees.
- (b) The product of refugee workshops is competitive with similar range of existing soaps, regarding the price/quality relationship. No immoderate increase in the prices of raw materials.

10.2 Outputs to immediate objective

- (a) Trainees drop-out rate does not exceed 20 per cent per annum.
- (b) Trained women do not leave the activity at the end of the training period.
- (c) The income is high enough to attract women with numerous dependents.

10.3 Activities to outputs

- (a) The Union of Soap Industries provides regularly required raw materials.
- (b) Revolving funds are available for further acquisition of raw material and expansion of the production.

10.4 Inputs to activities

- (a) Physical facilities available for the installation of equipment (transportation, fuel, space for buildings, etc.)

11. Rationale

Although refugee skills in traditional soap-making were not identified, the processes are simple and the activity can be easily learnt. Soap is a basic commodity needed by every household and making soap an ideal activity for isolated settlements.

(a) Developing the appropriate formula

The essential element for the success of the project is the development of the appropriate method of soap making in the particular environment of refugee settlements in Eastern and Central Sudan.

Although Sudan grows large quantities of ingredients of many kinds of soap (sesame oil, cottonseed oil, groundnut oil), large and small soap factories use currently imported materials such as caustic soda and tallow (animal fat) which are only obtainable through the Union of Soap Industries. The main reason seems to be, that these items are subsidised by American package aid and therefore cost less than some local ingredients which were used previously, such as cottonseed oil.

Nevertheless, in rural areas, traditional soap makers use locally available raw materials such as potash, slaked lime and blends of sesame and groundnut oil. These potentialities should be investigated by the expert, as well as the possibility of a small-scale caustic soda manufacture. The latter has been realised in Ghana by the Kumasi University, using slaked lime and soda ash, which is a cheaper imported ingredient than caustic soda.<sup>5</sup>

However, even using some imported ingredients, the activity appears fairly profitable for small workshops which do not face some disadvantages of larger factories such as labour costs, electricity cuts, maintenance of sophisticated equipment and competition of imported soaps.<sup>6</sup>

(b) Market potentials

Sudanese market

There are four or five fairly large companies manufacturing soap in the Sudan, plus a number of smaller factories and some artisan or village enterprises in Shendi, in the North.

The annual laundry soap production is estimated at 72,000 tonnes, a figure which fluctuates from year to year depending on the availability of raw materials and other bottlenecks.

Table 1: The capacity and production of soap by the major companies in the Sudan (in tonnes)

	Laundry soap production capacity	Actual production	Toilet soap production capacity	Actual production
Soap and Allied Inds. Ltd. (Bittar and Co. Ltd.)	13,000	12,960	2,000	1,950
African Oil and Soap Corporation	5,103	1,701	-	-
Aba El Mutasim (El Sheikh Mustafa el Amin)	16,128	13,320	6,912	4,500
Others	-	44,019	-	3,550
<b>TOTAL</b>		<b>72,000</b>		<b>10,000</b>

However, the production does not cater for the consumption and in 1981, Sudan imported 2.5 tonnes of laundry soap and 1.5 tonnes of toilet soap.<sup>7</sup> (See table I in Annex). The major suppliers do not feel that the market is fully satisfied, thus there is a potential gap to be filled, though this will not be exploited at the first stages of the project. The proposed refugee workshops will produce mainly laundry soap corresponding to the demand and low purchasing power in the settlements.

### Settlements market

During the field survey, interviews carried out with a number of refugee households in Tawawa and Um Gulga settlements, indicated that an average household of 6-7 persons uses 6 to 10 bars of laundry soap per month. Therefore, for an average settlement of 6,000 people (1,200 households), the monthly consumption would be 7,200 to 12,000 bars of soap, depending on the purchasing power of refugees.

Each workshop will start with a monthly production of 4,000 bars of soap (400 kgs.), which represents 55 per cent of the settlement market, and since the produced soap will be cheaper than similar ones in the market, there is a great potential for future expansion, through the provision of revolving funds.

#### (c) Expected profits

The production cost of soap will vary according to the ingredients which will finally be used. If we consider the current method of using "tallow" (animal fat) and caustic soda,<sup>8</sup> the monthly income of each female headed household, involved in the project will be £58.72 as shown in table 2.

The proposed sale price being £0.15 for a bar of soap,<sup>9</sup> the profit margin per unit would be  $0.15 - 0.0766 = £0.0734$  and the monthly profit  $0.0734 \times 4000 = £293.6$ . Thus allowing a monthly income of £58.72 for each refugee woman ( $293.65:5=58.72$ ).

Given the market potentialities, the production can expand in later stages, generating incomes for more than 65 households initially involved in the project.

(d) The project is in line with the Sudanese Government policy of development of small-scale industries.



Table 2: Expected profits of a small-scale soap-making unit  
in refugee settlements

	Required quantity for monthly product- ion of 4,000 bars of soap (= 400 kgs.)	Price (per kg) (£S)	Monthly production cost (£S)	Production cost per unit (£S)
<b>Raw materials:</b>				
Gaustic soda	37.33 kgs.	0.80	29.87	0.0075
Tallow	266.00 kgs.	0.85	226.00	0.0565
Charcoal	50.00	0.14	7.00	0.0017
<b>Building:</b>				
1 hut per workshop = £S500			8.33	0.0021
Depreciation over 5 years				
<b>Equipment:</b>				
£S435 per workshop			12.08	0.0030
Depreciation over 3 years				
Transportation cost of raw materials (from Khartoum and distribution to the settlements)			23.077	0.0058
			<u>306.357</u>	<u>0.0766</u>

12. Reporting and evaluation schedule

12.1 Reporting

18 monthly financial reports  
3 six-monthly progress reports  
1 terminal financial report

12.2 Evaluation plan

(a) Frequency and timing

The project is to be the subject of one evaluation mission at the end of 1984, provided within the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees"; and one self-evaluation review at the completion of project status.

(b) Evaluation participants

See the above-mentioned project.

(c) Parties responsible for the collection of data

The project manager will have the primary responsibility for the collection of data necessary for the evaluation reviews.

ANNEX

Table I: Total imports of "common" and toilet soap into Sudan in 1981

Origin	Kilos	Value fS	As % Total Volume
<b>"Common Soap"</b>			
AER Egypt	13,075	5,292	0.5
Kenya	45,625	5,060	0.2
France	1,142	3,646	-
United Kingdom	1,014	2,538	-
Korea, Republic of	<u>2,335,250</u>	<u>703,827</u>	<u>97</u>
	<u>2,416,106</u>	<u>720,363</u>	<u>100</u>
<b>"Toilet Soap" including liquid medicated and shaving</b>			
AER Egypt	33,490	66,564	2
Kenya	62,185	5,975	4
Netherlands	2,000	4,805	-
Germany, Federal Republic	1,000	2,112	-
Italy	15,366	7,716	1
United Kingdom	358,120	269,983	24
Greece	52,926	23,068	3
USA	2,000	2,825	-
Korea, Republic of	905,942	247,450	60
China, People's Republic	<u>72,505</u>	<u>22,541</u>	<u>5</u>
	<u>1,505,534</u>	<u>653,039</u>	<u>100</u>

Unit value of "Common Soap" = 30 piastres/kilo

Unit value of "Toilet Soap" = 43 piastres/kilo

Source: Department of Statistics, Foreign Trade Statistics, 1981.

ANNEX

Table II: Caustic soda imports 1981

Sodium Hydroxide

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Origin	Quantity kilos	Value £S
Kenya	400	776
Netherlands	256,066	59,942
Belgium	1,600,213	443,016
Germany, Federal Republic	5,470,094	1,138,380
Italy	100,000	29,900
United Kingdom	1,087,465	337,335
Greece	49,500	12,514
Trieste	550,000	140,450
China, People's Republic	506,650	119,458
	<hr/>	<hr/>
	9,620,388	2,281,771

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Unit value = 24 piastres/kilo

Source: Department of Statistics, Foreign Trade Statistics, 1981.

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ANNEX

Table III: The price of soap in the Sudan

	<u>Ex-factory prices</u>			<u>Recommended retail prices</u>		
	<u>Per carton</u>	<u>Per bar</u>	<u>Per 100 gms.</u>	<u>Per carton</u>	<u>Per bar</u>	<u>Per 100 gms</u>
		<u>£S</u>			<u>£S</u>	
<hr/>						
Laundry Soap						
"Abu Gaba" African Oil and Soap Corp.	6,835	0.15	0.08	8.10	0.18	0.10
Toilet Soap						
"Prince" Bittar and Co. Limited	16.83	0.23	0.33	20.32	0.27	0.42
Perfumed Soap "Lux" Bittar and Co. Ltd.	27.05	0.37	0.37	32.66	0.45	0.45
	<u>Actual retail prices</u>			<u>Actual retail prices</u>		
	<u>per bar</u>		<u>per 100 gms.</u>	<u>per bar</u>		<u>per 100 gms.</u>
	<u>£S</u>		<u>£S</u>	<u>£S</u>		<u>£S</u>
<hr/>						
Laundry Soap	0.20		0.20			
"Prince" (145 gm. bar)	0.50		0.34			
"Lux"	0.55		0.55			
"Camay" (imported)	1.34		0.89			
<hr/>						



Footnotes

1 The settlements were selected on the criteria that they were large enough to sustain a minimum demand of 4,000 bars of soap per month. See under "Rationale".

2 The Technology Consultancy Centre of the Kumasi University (Ghana) could be a useful contact for this purpose. The experts have extensive experience in implementing small-scale soap and caustic soda plants in Africa and they have particularly advised women's co-operative in Mali, to improve the traditional soap-making process.

3 The cost has been calculated on the basis of caustic soda and tallow prices. Nevertheless other ingredients could be used.

4 See the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

5 The price of caustic soda is £S800 per tonne and soda ash £S270 per tonne.

6 Imported luxury soaps do not compete with refugee products, which belong to a different quality/price ratio, and cater for different clientele.

7 Department of Statistics, Foreign Trade Statistics, 1981.

8 This method requires 0.14 tonnes of caustic soda and one tonne of tallow, for the production of 1.5 tonnes of soap.

9 At present, the price of similar soap at the settlements markets is £S0.20 to 0.30. For a more detailed list of prices in the Sudanese market, see table II in Annex.





Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Small-scale soap making units in refugee settlements in  
Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
11	EXPERTS										
11.01	Consultant in Soap Making	6.0	37,000	6.0	37,000		-				
13	Admin. Support Personnel		2,500		2,000		500				
15	Travel on Official Business		5,000		2,500		2,500				
16	Other Costs (Prod. dev. fund)		5,000		5,000		-				
17	National Professional Staff										
17.01	Project Supervisor	18.0	6,000	12.0	4,000	6.0	2,000				
17.02	Extension Workers (2)	36.0	10,400	24.0	5,000	12.0	5,400				
19	COMPONENT TOTAL		65,900		55,500		10,400				
30	TRAINING										
33	In-Service Training		6,000		6,000		-				
39	COMPONENT TOTAL		6,000		6,000		-				
40	EQUIPMENT										
41	Equipment		33,000		33,000		-				
43	Premises		5,000		5,000		-				
49	COMPONENT TOTAL		38,000		38,000		-				
50	MISCELLANEOUS										
51	Operation and Maintenance of Eqt.		5,000		4,000		1,000				
59	COMPONENT TOTAL		5,000		4,000		1,000				
90	SUB-TOTAL		114,900		103,500		11,400				



INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Support and expansion of refugee spinning and weaving activities in Eastern and Central Sudan

Geographical coverage: Eastern and Central Sudan

Project sites: Eastern and Central Sudan

Project languages: English and Arabic

Starting date: 1984

Duration: Two years

Donor contribution: US\$1,159,330.00

Cooperating Government Agency in the Sudan: Office of the Commissioner for Refugees (Ministry of Internal Affairs)



Support and Expansion of Spinning and Weaving Activities  
in Eastern and Central Sudan

1. Background and context

At the request of the Government of Sudan, the ILO/UNHCR Interdisciplinary Mission on Employment, Income Generation and Training of Refugees visited the Sudan during 17 November-6 December 1981, and concluded that self-reliance for refugees can only be attained through the introduction of income-generating activities.

Spinning and weaving are among the activities identified during the feasibility studies in October-December 1982 which hold greater promise for income generation.

The skills are one of the most widespread among refugees and traditionally Ethiopian women spin raw cotton and men weave it at their handlooms.

At present, a few refugee cooperatives and groups, employing about 200 refugees are involved in these activities, such as:

- The Sudanese Council of Churches (SCC): In Um Gulga settlement there are already 135 spinners (women) and 22 weavers (1 woman and 22 men) registered with the SCC project.

Fixed quantities of cotton and yarns are allotted to each spinner and weaver who are paid on piece-work. Some of the woven articles (cloth, curtains, blankets, ...) are sold in Um Gulga but they are mainly taken to Khartoum where they are exposed for sale in SCC Women's Centre.

- The REST (Relief Society of Tigray) Weaving Cooperative in Khartoum employs 28 weavers who use traditional Ethiopian and Egyptian looms for the production of cloth out of machine-spun cotton.

The main difficulty faced by these groups as well as individual workers is the marketing of the products. The woven articles (using hand spun or machine spun cotton) do not meet Sudanese tastes, and thus the narrow market available for these products impedes further expansion of the activity, and the above enterprises are viable only on a subsidised basis.

However, if these constraints were overcome by providing expertise, the activities would be fairly profitable and could constitute a reliable source of income for a great number of refugees.

As it is shown in Table 1, a great deal of weaving and spinning skills of refugees are not used and therefore potential employment opportunities are wasted.

The project envisages several stages; in the first three months of implementation, a textile marketing expert will conduct a survey identifying the appropriate designs of woven articles which would suit Sudanese tastes. The following step would be to upgrade the technology used in spinning and weaving. The introduction of spinning wheels<sup>1</sup> will improve the productivity of spinners as well as the quality of produced yarns, and the looms will be modified according to the identified designs. Dyeing methods of yarns and cloths will be tested.

After the identification of new designs and articles, and modification of looms, 15 master weavers and 15 master spinners (one or two from each town or settlement involved in the project) will be trained by the expert for six months in the production of new items; at the completion of which they will train the above-mentioned numbers of spinners and weavers in each town or settlement.

The products will be displayed for sale in the cooperatives in towns or taken to Khartoum.

It should be taken into account, that this project will not provide employment opportunities for all skilled spinners and weavers,

Table 1

Towns/ Settlements	% of refugees trained in spinning and weaving	% of refugees who have worked previously in spinning and weaving	% of refugees working at present in weaving and spinning	% of unused skills	
				to total number of refugees	to trained refugees
1) Gedaref	3	1.75	1.57	1.43	47.6
2) Khashm el Girba (Town)	0.95	0	0	0.95	100
3) Kassala	0.67	0.08	0.04	0.63	94
4) Tawawa	0.98	0.74	0.12	0.86	87.7
5) Khashm el Girba (settlement)	0.36	0	0.18	0.18	50
6) Kilo 26	0.24	0.23	0.23	0.01	4.2
7) Um Gayar	0.86	0	0	0.86	100
8) Abuda	0.48	0.24	0.48	0	0
9) Um Ali	0	0.27	0	0.27	100
10) Wad Awad	0.58	0.58	0	0.58	100

Source: ILO Skill Survey/ October 1982.

In this project it is proposed to support existing groups and establish new spinning and weaving cooperatives in 10 towns and settlements in Eastern and Central Sudan, as follows:

	Number of Weavers and Spinners	Weavers	Spinners
1) Kassala	75	25	50
2) Gedaref	75	25	50
3) Kashm el Girba (Town and Settle- ment)	60	20	40
4) Tawawa	60	20	40
5) Um Gulga	60	20	40
6) Kilo 26	45	15	30
7) Um Gargur	45	15	30
8) Abuda	45	15	30
9) Um Rakhoba	45	15	30
10) Wad Awad	45	15	30
	<u>555</u>	<u>185</u>	<u>370</u>

but if the experience proves successful, the Revolving Fund would finance further expansion or replication of the scheme.

The expertise provided within this project could also benefit Sudanese individual spinners and weavers, in improving the methods of production and the designs.

2. Target group

- (a) 555 skilled spinners and weavers in 10 towns and settlements in Eastern Sudan of which 370 women - household heads - for the spinning component.
- (b) Existing refugee spinning and weaving cooperatives.
- (c) 10 refugee carpenters producing spinning wheels and weaving looms.
- (d) Sudanese spinners and weavers in areas covered by the project.

3. Development objective

Income generation for refugees in Eastern and Central Sudan.

3.1 Indicators

- (a) At least 300 refugees with skills in spinning and weaving are earning an income from these activities.
- (b) Increased incomes for spinners and weavers.

3.2 Source of indicator data

Records of refugee workshops.

4. Immediate objective

Refugee spinning and weaving workshops using improved spindles and looms and producing designs and products to suit Sudanese market.



4.1 Indicators

- (a) At least 8 refugee spinning and weaving workshops are established.
- (b) At least 10 carpenters are producing spindles and looms to improved designs.
- (c) At least 200 spinners and 100 weavers are using improved spindles and looms.
- (d) The workshops are financially self-supporting at the end of the project.

4.2 Source of indicator data

- (a) Records of project management.
- (b) Records of sales of trained carpenters.
- (c) Records of spinning and weaving workshops.

5. Outputs

- (a) Skilled spinners and weavers willing to join the project are identified. (Month 1)
- (b) Marketable woven items are identified. (Months 1-6)
- (c) Improved designs of woven cloth produced. (Months 1-6)
- (d) Modified spinning wheels and looms are recommended. (Months 1-3)
- (e) Dyes and technology for dyeing yarns and fabrics are identified and tested. (Months 1-6)
- (f) 370 six spindle or 12 spindle spinning wheels and other accessories are imported. (Month 3)
- (g) 10 carpenters (1 in each town/settlement) are trained in production of modified looms and spinning wheels. (Months 3-6)
- (h) 15 master weavers are trained in the use of modified looms for the production of marketable items. (Months 3-9)
- (i) 15 skilled women - household heads - are trained in spinning with spinning wheels. (Months 3-9)

- (j) 10 spinning and weaving workshops are set up in 10 towns and settlements. (Month 9)
- (k) Workshops are provided with a total of 370 spinning wheels and 185 looms of improved designs. (Month 9)
- (l) Skilled spinners and weavers in 10 towns and settlements are trained by the master spinners and weavers in the use of new methods. (Months 9-15)
- (m) Marketing outlets for woven products are established. (Month 15)
- (n) Mechanism for the supply of cotton, machine spun yarns and dyes to the workshops is established. (Month 15)
- (o) Woven products are sold in workshops in the towns or taken to Khartoum. (Months 15-24)
- (p) The workshops are affiliated to the corresponding area Federation of Income Generating Associations,<sup>2</sup> which will provide the transportation facilities for the supply of raw materials and collection of finished product. (Month 6)

6. Activities

- (a) Recruit the experts. (Month 1)
- (b) Conduct a marketing survey. (Months 1-3)
- (c) From the result of the survey identify new designs of woven cloth with greater appeal in the Sudanese market. (Month 3)
- (d) Develop dyeing techniques of yarns and fabrics. (Months 3-15)
- (e) Introduce six or twelve spindle spinning wheels for production of yarns comparable to machine spun products.<sup>3</sup> (Months 1-3)
- (f) Identify 15 master spinners among female-headed households in 10 towns and settlements:
  - 10 from Kassala, Gedaref, Khashm-el Girba, Tawawa, Um Gulga (2 women from each town or settlement)

- 5 from Kilo 26, Um Gargur, Abuda, Um Rakhoba, Wad Awad (1 from each settlement). (Month 3)
- (g) Train the master spinners in the utilisation of spinning wheels. (Months 3-9)
- (h) Identify 15 master-weavers in 10 towns and settlements (the same distribution as master spinners). (Month 3)
- (i) Modify the looms for the production of new designs and types of products. (Month 3)
- (j) Train the master-weavers in the utilisation of modified looms. The training of master spinners and weavers will take lace eventually in the Tawawa Community Centre. (Months 3-9)
- (k) Train carpenters in the production of spinning wheels and modified looms. (Months 3-9)
- (l) Identify skilled spinners and weavers in 10 towns and settlements: 370 women - household heads - and 185 men weavers willing to join workshops. (Month 9)
- (m) Set up 10 spinning and weaving workshops in the towns and settlements. Provide the workshops with spindles and looms and raw materials for 6 months training period and 3 months initial production. (Month 9)
- (n) Train skilled spinners and weavers in the towns and settlements in the utilisation of new techniques of spinning, weaving and dyeing. (Months 9-15)
- (o) Establish marketing outlets for sale of woven articles: showrooms in the workshops in the towns of Kassala, Khashm-el Girba, and one shop in Khartoum. (Months 9-12)
- (p) Arrange the mechanism for the continuous supply of raw cotton (with ginning factories), machine-spun yarns, and dyes to the workshops. (Months 3-15)
- (q) Make arrangements with the corresponding Federation of Income Generating Associations in each area for the provision of transportation facilities for the supply of raw materials and collection and distribution of finished products. (Months 6-24)

7. Inputs

A. Donor

A.1 Personnel

1 Project Supervisor (locally recruited) )(24 m/m)

Essential qualifications: Degree in Small-Scale Business Administration or equivalent. Experience in setting up small-scale business, and marketing the products.

Languages: Fluency in Arabic and English.

Duties: General responsibility for the implementation of the project. Supervision of the experts activities and the training scheme.

Duty station: Gedaref, will be required to travel frequently to various project sites in the towns/settlements in Eastern and Central Sudan.

1 Textile design and marketing expert (international) (6 m/m)

Essential qualifications: Diploma/certificate in woven fabric design and marketing; knowledge of cultural traditions and methods of spinning and weaving in Africa. Relevant experience in the procurement of raw materials, marketing and basic accounting. Knowledge of English and Arabic.

Duties: Conducting a marketing survey, identifying new designs and products. Training the master craftsmen in the new techniques of spinning and weaving, and supervising the training of cooperative members in the towns and settlements, establishing the machinery for the supply of raw materials and distribution of woven products. Will also advise two other income generating projects, i.e. "handicraft production" and "garments production", in developing new marketable designs.

Duty station: Gedaref, but will be required to travel frequently to other towns and settlements.

1 Spindle and loom design and training expert (international)  
(6 m/m)

Essential qualifications: Degree/diploma in design engineering. Experience in the design, development and manufacture of looms and spindles; knowledge of appropriate technology developments in spinning and weaving if possible with some practical experience in India.

Languages: Knowledge of English and Arabic.

Duties: Modification of looms for the production of new designs, close cooperation with the project manager; training of carpenters in the production of spinning wheels and improved looms.

Duty station: Gedaref.

1 Printing Design and Dyestuff Expert (locally recruited)  
(6 m/m)

Essential qualifications: Diploma/certificate in textile design and printing. Experience in non-mechanised textile printing processes.

Duties: Production of designs for cloth printing. Advice on printing methods and types of dyestuffs for yarns and cloths. Will also advise two other projects i.e. "The Handicraft Production" and "The Garments' Production Workshops".

Duty station: Gedaref, will be required to travel frequently to other project sites.

A.2 Stipends for the training period

US\$

30 refugee master spinners and weavers:  
(15 master-weavers and 15 women - household  
heads - spinners)

(a) Stipend for the six months period during which they will be trained in the 8,310

US\$

	utilisation of new techniques and production of new designs. They would further train other artisans. (£S60 a month)	
(b)	Salary for the six month period during which they will train other members of the workshops (Average of £S120 per person and per month)	16,615
(c)	Stipend for other 525 trainees during the training period of six months (average of £S60 per head and per month)	145,384
-	1 driver of project vehicle (24 m/m)	2,028
-	Other prsonnel costs (Secretary, messenger, etc.)	2,000

A.3 Buildings and rent:

(a)	Construction of workshops in 7 settlements (1.5m <sup>2</sup> per worker) (assuming 50 per cent of women work at home)	80,770
(b)	Rent for workshops in 3 towns (Kassala, Khashm-el Girba, Gedaref) (2 years)	33,230
(c)	Rent of a shop in Khartoum (2 years)	5,540

A.4 Equipment and materials

(a)	370 six to 12 spindle spinning wheels (including prototypes for development)	111,000
(b)	185 looms	14,230
(c)	1 vehicle for use by experts	12,000
(d)	Cotton for spinning (to cover 6 months training in the workshops and 3 months initial supply) (£S380 per bale of 90 kg.)	256,000
(e)	Additional machine spun yarns for weavers	40,000
(f)	Dyes for yarns (training period and 6 month initial supply)	10,000

US\$

A.5 Other costs:

- (a) Funds for preparation of publicity materials 5,000  
(posters, samples) for the exploration of  
foreign outlets
- (b) Operation and maintenance cost of equipment 10,000  
(including fuel) (for 24 months)

B. Government of Sudan

- (a) Land in the vicinity of the settlements for the  
construction of workshops.
- (b) Release of national staff to participate in the  
Coordinating Committee.
- (c) Venue for the training of master craftsmen such as the  
Tawawa Community Centre.

C. Implementing Agency

Overall supervision of the project.

8. Institutional framework

The project will be undertaken jointly with the Office of the Commissioner for Refugees which will act as the counterpart Sudanese Government Agency. This office will be required to provide office accommodation for the project staff as well as a venue for the training of refugees. A possible venue will be the Community Centre at the Tawawa settlement.

A project coordinating committee will consist of representatives of ABIGAR (Advisory Board on Income Generating Activities for Refugees), the Project Manager, experts and refugee representatives.

This committee will assume complete responsibility for initiating and implementing this project. The choice of master weavers for the training courses will be made by the camp managers in consultation with the refugee elders committees in the settlements. In the towns, the choice would have to be based on merit, due consideration being given to the willingness of the master weavers to train other members working in workshops.

Spinners and weavers workshops will be set up in settlements in which these do not already exist. Each master spinner and master weaver will train 20 to 30 female household heads and 10 to 15 weavers respectively. The spinning wheels and looms will be handed over to the workshops at the end of the project. These workshops will be managed according to cooperative principles at the end of the project.

They will be affiliated to the area Federation Of Income Generating Associations<sup>4</sup> which will provide the transportation facilities for the supply of raw materials and collection of finished goods.

9. Prior obligations and prerequisites

9.1 Prior obligations

- (a) Refugees will be granted travel permits to attend the courses and to purchase raw materials.

9.2 Prerequisites

- (a) The community centre in Tawawa will be made available for the purpose of training.
- (b) Release of officials of the Office of the Commissioner for refugees to serve in the project coordinating committee.
- (c) Arrangements with ginning - factories to maintain a steady supply of cotton.



10. Assumptions

10.1 Immediate to development objective

- (a) The Sudanese Government will continue to support income-generating activities for refugees and their integration in the development of the country.
- (b) There continues to be a market for the products and designs identified by this project.
- (c) A revolving fund is available to enable the workshops to expand their activities, the individual weavers to purchase improved equipment and for the extension of these activities into other settlements not covered by the project.

10.2 Outputs to immediate objective

- (a) That incomes from these activities are attractive to the refugees.
- (b) There exists the capability and the materials for the manufacture of the spindles and modified looms in the Sudan.
- (c) The productivity and income of spinners increases with the introduction of spinning wheels.
- (d) The yarns produced by spinning wheels can compete in regularity and fineness with the majority of mill spun cotton.<sup>5</sup>
- (e) The master spinners and weavers trained during the initial period do not leave the project.

10.3 Activities to outputs

- (a) Trainees drop out in the towns and settlements do not exceed 20 per cent per annum.
- (b) Refugees would use improved spinning techniques and looms.

- (c) Operational links are established with the ginning factories and the Organisational Structure for the supply of raw materials and transportation of goods.

#### 10.4 Inputs to activities

- (a) UNDP will speed up the custom facilities for the imported components.
- (b) Physical facilities (transport, fuel, etc.) is available for the installation of equipment.

### 11. Rationale

Spinning and weaving are two of the most spread skills among refugees. Traditionally women spin raw cotton in their own homes and then invite the weaver to come home and make up the cloth with his mobile loom. The traditional division of labour has been envisaged in this project: women spinning and men weaving, however, a few women who have been trained in weaving should be further encouraged.

The spinners will be selected among female-headed households. The advantage of spinning is that it can be undertaken in the refugee huts; thus women with numerous dependents will have the choice of either working at home or in workshops. The spinning wheels are easily transportable, however these will remain the cooperatives property.

One of the difficulties encountered by individual spinners and weavers is the availability and transportation of raw materials. The implementation of the project on the Organisational Structure for the steady supply of raw materials and transportation of finished goods, will solve this problem.

However, as it has been stated above, the main constraint is the narrow market for actual woven articles.

The responsables of SCC project in Um Gulga indicated that the woven articles displayed in Khartoum shop (dresses with cross designs, bags, curtains, table cloths, wall hangings and plain cotton) are mainly demanded by expatriates living in Sudan or foreign visitors, thus they do not really cater for Sudanese markets. Only white stripped "tobes" woven with machine spun yarn have some Sudanese clients. This is mainly due to 2 factors: the thickness of hand spun yarns, which should be improved with the introduction of spinning wheels, and Ethiopian designs of woven items which do not suit the Sudanese market; the identification of new designs, colours and sizes of products is expected to overcome this constraint too.

The actual profitability of spinning and weaving can be taken as a basis for the expected incomes:

### Spinning

Traditionally the hand-spun cotton rarely entered the cash economy and was simply spun and woven within the home. The imputed value now attached to spinning by the SCC is £S4 for 0.9 kg. of hand-spun cotton. Each spinner is given 1 kg. of cotton of which she produces in 5 days time 900 grammes of yarns. Thus the average earning of a spinner per month is £S24. This wage even compared to the minimum wage in Sudan £S28 is very low, however the introduction of spinning wheels will increase the productivity by 3 to 6 times, thus it is expected that minimum earnings after the training period would be about £S72.

### Weaving

Although productivity may vary considerably from one weaver to another depending on his physical dexterity, and other supplementary activities such as farming, on average one skilled weaver produces one "tobe" of cloth i.e. 9 metres in 3 days. The profits will be thus as follows:

(a)	Production cost	<u>per unit</u> 1 tobe = 9 metres <u>£S</u>	<u>per day</u> <u>£S</u>
-	1.5 balls of yarns (machine spun yarns including coloured ones) Price of one ball = £S3	4.5	1.5
-	Transportation cost of raw materials <sup>6</sup>	0.25	0.08
-	Depreciation of equipment over 10 years (loom and shuttle and bobiner cost £S86)	0.07	0.02
		<hr style="width: 50px; margin: 0 auto;"/> 4.82	<hr style="width: 50px; margin: 0 auto;"/> 1.60
(b)	Profit	<u>per unit</u> <u>£S</u>	<u>per day</u> <u>£S</u>
	The price of one tobe	7.18	2.39

The income per month would be £S62. However, it is expected that, with the improvements in the fineness of hand spun yarns, weavers will use more of this type, produced within the workshop, and this will represent a cost reduction of 15 to 20 per cent compared to the mechanised millyarns. Furthermore, the diversification of products and designs will provide a larger market and higher prices per unit, and so higher benefits.

The project is also in line with the Sudanese government policy of "development of small scale industries based on local materials."<sup>7</sup>

12. Reporting, monitoring and evaluation schedule

(a) Reporting

24 financial reports

8 three-monthly progress reports

1 terminal report

(b) Evaluation plan

Frequency and timing

The project is to be the subject of one evaluation mission at the end of 1984, provided within the project on "The Organisational Structure" and one self-evaluation by the project management at the completion of project status.

(c) Evaluation participants

See the above-mentioned project.

(d) Collection of data

The project manager will have absolute responsibility for the collection of data.



Footnotes

1 At present, women use a very simple wooden stick as a spindle.

2 See the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

3 This technology has been developed in India for the purpose of decentralised cottage spinning units. It increases the productivity (compared to one spindle actually used by refugee women) and improves the regularity and fineness of the produced yarns. These wheels can be obtained from Sudarshan Charka, Gram Seva - Niandal, Saranjan Karyalarya, Gopur, District Warda, Bombay State, India, or Khadi Gran Odyob Brayab Samiti, Ghandi Ashran, Ashram Road, Ahmedabat, 380027 Gujarat, India.

4 See the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

5 Weavers will still use some machine spun cotton, however it is expected that the main part of yarns will be produced by spinners in the workshops.

6 The travel and transportation costs vary very much with the location of the weaver and his proximity to major market places, however, average costs have been taken into account.

7 Ministry of National Planning, The Six Year Plan of Economic and Social Development 1977/78 - 1982/83, Vol.2, p.54.





Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Support and expansion of refugee spinning and weaving activities  
in Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
11	EXPERTS										
11.01	Textile Design and Mkting Expert	18.0	109,900	12.0	72,900	6.0	37,000				
11.02	Spindle and Loom Design and Trng. Expert	6.0	36,450	6.0	36,450		-				
11.99	SUB-TOTAL	24.0	146,350	18.0	109,350	6.0	37,000				
13	Administrative Support Personnel		4,100		2,050		2,050				
15	Travel on Official Business		10,000		7,500		2,500				
16	Other Costs (publicity)		5,000		2,500		2,500				
17	National Professional Staff										
17.01	Project Supervisor		16,000		8,000		8,000				
17.02	Printing Design and Dyestuffs		9,500		9,500		-				
19	COMPONENT TOTAL		190,950		138,900		52,050				
30	TRAINING										
33	In-Service Training		170,500		170,500		-				
39	COMPONENT TOTAL		170,500		170,500		-				
40	EQUIPMENT		445,000		400,000		45,000				
43	Premises		120,000		60,000		60,000				
49	COMPONENT TOTAL		565,000		460,000		105,000				
50	MISCELLANEOUS										
51	Operation and Maintenance of Eqt.		10,000		5,000		5,000				
	COMPONENT TOTAL		10,000		5,000		5,000				



INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

Project title: Pilot Garments' Production Workshops in  
refugee affected areas of Eastern and  
Central Sudan

Geographical coverage: Eastern and Central Sudan

Project languages: English and Arabic

Project Sites: Khartoum, Port Sudan, Kassala and  
Tawawa settlement

Starting date: 1984

Duration: 18 months

Donor contribution: US\$915,730.00

Cooperating Government  
Agency in the Sudan: Office of the Commissioner for Refugees  
(Ministry of Internal Affairs)



Pilot Garments' Production Workshops in  
Refugee Affected Areas of Eastern  
and Central Sudan

1. Background and context

Upon the request of the Sudanese government, an ILO/UNHCR Interdisciplinary Mission on Employment, Income Generation and Training of Refugees visited the Sudan during the period of 17 November to 6 December 1981. The main conclusion of the mission was that self-reliance for refugees can only be attained through the introduction of income generating activities.

Further, the Arusha Conference (1979), the Khartoum Conference (1980), as well as the Khartoum Seminar on refugees (1982) recommended that special attention should be paid to the needs of refugee women who suddenly assume the double role of mothers and breadwinners. The ILO/UNHCR mission was also concerned with the issue of female-headed households, which constitutes one of the most vulnerable groups of refugees in the Sudan. The percentage of female-headed households represents up to 27 per cent of households in urban areas (Source: ILO Socio Economic and Skill Survey, 1982/83).

The general lack of employment opportunities in urban and sub-urban areas has forced many single women with children to resort to prostitution or other petty jobs in order to earn a living.

Following the feasibility studies which were carried out during October-November 1982, the present project aims at creating new and alternative income generating activities for refugee female-headed households in Eastern and Central Sudan.

It proposes the establishment of 4 pilot workshops producing a range of textile goods such as:

- (a) Babies' and children's ready-made garments;
- (b) Hand-printed cloths and "tobs";

- (c) Machine-knitted sweaters, socks, etc.
- (d) Machine-embroidered bed sheets, pillow cases, tablecloths;
- (e) Traditional handicrafts<sup>1</sup> - "crochet", knitting, hand embroidery, ornamental items.

The 4 pilot centres will be established in the urban and sub-urban areas of Eastern and Central Sudan where the estimated population of female-headed households is higher, i.e. Khartoum, Port Sudan, Kassala and Tawawa settlement. They will provide employment opportunities for 300 women heads of households:

- (a) 1 workshop in Khartoum employing 100 women and producing for the Khartoum area market
- (b) 1 workshop in Port Sudan employing 100 women and producing for Port Sudan's market
- (c) 1 workshop in Kassala employing 50 women and producing for Kassala market
- (d) 1 workshop in Tawawa, sub-urban settlement employing 50 women and producing for the Gedaref area market.

The project will start with an initial period of training,<sup>2</sup> concentrating mainly on upgrading the existing tailoring, knitting and sewing skills of refugees and developing hand-printing skills.

At the same time, marketable designs for the final products will be developed followed by the direct sales of the goods through the cooperative owned shops in market places in each area.

At the end of the project, the production units will be run by refugee women on a cooperative basis ensuring the acquisition of raw materials, the production and direct marketing of the products.

It is expected that these pilot activities will be expanded or replicated in other areas through the provision of revolving funds for refugee affected areas.

2. The target group

380 refugee female-headed households in urban and sub-urban areas of Eastern and Central Sudan.

3. Development objective

Income-generation for refugee female-headed households in Eastern and Central Sudan.

3.1 Indicator

At least 60 per cent of the women involved in the project earn sufficient income to support their families 2 years after the implementation of the project.

3.2 Source of indicator data

- (a) Workshop, records of sales and benefits.
- (b) Management records.

4. Immediate objective

Four pilot production units run by refugee women and capable of producing a range of textile goods for the local Sudanese market, such as children's ready-made garments, bedsheets, tablecloths, sweaters, printed cloths and "tobs". These items are currently being imported to the area.

4.1 Indicators

- (a) The workshops are financially self-supporting (at the end of the project).
- (b) The workshops are run by refugee women without international expertise.
- (c) A minimum of 100 women are trained in different fields.
- (d) Products' market share compared with the one of imported goods (optional).

4.2 Sources of indicator data

- (a) Workshop records (production, sales, benefits).
- (b) Marketing surveys of the main suppliers of the above-mentioned products conducted in each area (optional).

5. Outputs

- (a) Necessary equipment is purchased and installed in 4 centres in Khartoum, Port Sudan, Kassala and Tawawa. (Month 1)
- (b) Personnel is recruited. (Month 1)
- (c) 300 refugee women, household heads, willing to join the project are identified. (Month 1)
  - 100 in Khartoum
  - 100 in Port Sudan
  - 50 in Kassala
  - 50 in Tawawa settlement and Gedaref town.
- (d) Suitable sources of raw materials are identified. (Month 2)
- (e) 4 shops are set up in market places: 1 in Khartoum, 1 in Port Sudan, 1 in Gedaref, and 1 in Kassala. (Month 6)
- (f) A total of 280 women are trained in 4 crafts: children's garment making, cloth printing, machine knitting and machine embroidering in the 4 workshops:
  - 95 in Khartoum
  - 95 in Port Sudan
  - 45 in Kassala
  - 45 in Tawawaof which 60 per cent are trained especially in garment making (tailoring and sewing), 30 per cent in printing cloth and "tobs", 5 per cent in knitting and 5 per cent in embroidering. (Month 12)
- (g) 4 women are trained in basic management and bookkeeping, 1 in each centre. (Month 12)



- (h) 16 women are trained in the quality control of the products. (Month 12)
- (i) Products are sold through the shops set up in market places. (Months 6-18)
- (j) Designs for each set of products are developed and quality standards are fixed. (Month 18)
- (k) Final production plan is fixed determining the precise quantity of each item to be produced. (Month 18)
- (l) A management committee is elected in each centre. (Month 18)

## 6. Activities

- (a) Purchase equipment and install this in the 4 centres of Khartoum, Port Sudan, Kassala and Tawawa. (Month 1)
- (b) Recruit the required personnel. (Month 1)
- (c) Identify 300 women, household heads in the 4 areas of the project implementation: Khartoum, Port Sudan, Kassala and Tawawa. Priority should be given to women with some skills in tailoring, sewing and knitting. (Month 1)
- (d) Investigate supply sources for raw materials and purchase the necessary quantity for the training purpose. Arrangements should be made to ensure continuous supply after the completion of the training period, as well as at the end of the project. (Month 12)
- (e) Acquire or rent shops in market places for sale of final products: 1 in Khartoum, 1 in Port Sudan, 1 in Kassala and 1 in Gedaref. (Month 6)
- (f) Train 280 women in the 4 crafts of garment making, cloth printing, machine embroidering and knitting; respectively 60 per cent of the total number, 30 per cent, 5 per cent and 5 per cent. The distribution of the trainees in the 4 centres would be:
  - 95 in Khartoum
  - 95 in Port Sudan
  - 45 in Kassala
  - 45 in Tawawa (Months 1-12).

- (g) Train 4 women, 1 in each centre, in basic management and bookkeeping. (Months 1-12)
- (h) Train 16 women in quality control of final products: 4 women in each centre and 1 in each craft. At the end of the project they should control the quality of different products according to precise criteria and ensure their successful competition with the imported items. (Months 1-12)
- (i) Market the products through shops in Khartoum, Port Sudan, Kassala and Gedaref. (Months 6-18)
- (j) Developing designs for each set of products, according to local tastes. A small percentage of products would be destined to satisfy the demand of the refugee communities in the towns of Khartoum, Kassala, Port Sudan and Gedaref, thus taking into account Ethiopian and Eritrean patterns, but the main emphasis would be to produce suitable designs for Sudanese consumers. (Months 6-18)
- (k) Setting precise quality standards and criteria for each type of product. (Months 6-18)
- (l) Establishing final production plans which will determine the precise production level of each item in each area. These plans will be elaborated taking into account recorded sales and demand for specific goods, after an initial marketing period of six months, i.e. Months 6-12 of the project. (Months 12-18)
- (m) Prepare the election and organisation of a management committee in each centre, which will be responsible for the overall management and running of the workshops at the end of the project. (Months 12-18)

## 7. Inputs

### A. Donor

#### A.1 Personnel

1 Project Manager (locally recruited) (18 m/m)

Essential qualifications: Degree/diploma in textile design with extensive experience in setting up and

managing small-scale business. Preferably experience in marketing textile goods.

Languages: Fluency in English and Arabic.

Duties: General responsibility for the overall management of the project in the 4 sites. More particularly to be entrusted with the conception of the training scheme's content in different crafts, the elaboration of designs, quality standards and production plans in each area.

Duty station: Khartoum, undertaking frequent visits to Port Sudan, Kassala and Tawawa (Gedaref).

4 workshop supervisors (18 m/m)

Essential qualifications: Diploma in Business Administration, with experience in the management of small-scale industries.

Languages: Fluent in Arabic. Knowledge of English, Tigrinya or Amharic would be desirable.

Duties: Responsibility for the project implementation and management in each area, applying project manager's guidelines. Training women in basic management and bookkeeping.

Duty station: Khartoum, Port Sudan, Kassala and Gedaref.

Expert in textile design (international)<sup>3</sup> (3m/m)

Essential qualifications: Degree in textile design, extensive experience in designing textile goods, marketing the products in developing countries.

Duties: Advise the Project Manager in the identification of new designs, setting up the criteria for quality control and designing the training scheme for refugees. The main task would be to identify products which could compete with imported items.

Duty station: Khartoum, will travel to other project sites.

6 teachers of tailoring, sewing, knitting, printing (locally recruited) (72 m/m)

- 2 in Khartoum
- 2 in Port Sudan
- 1 in Tawawa
- 1 in Kassala

Duties: Upgrading the skills of the trainees according to the guidelines set up by the Project Manager and the Expert.

2 Drivers (1 for the project vehicle and 1 for the truck in Port Sudan)

A.2	<u>Equipment and materials</u>	<u>US\$</u>
(a)	190 sewing machines (imported)	51,155
(b)	15 knitting machines (imported)	23,070
(c)	Tables and chairs and other furniture (locally made)	5,000
(d)	Miscellaneous (scissors, irons, printing materials, dyes, etc.)	10,000
(e)	2 vehicles (pick-up trucks for Port Sudan and Khartoum workshops, where the project on "Organisational Structure" does not provide transportation facilities for the supply of raw materials and collection of goods)	56,000
(f)	Raw materials for the training period and initial production (including cloth, dyes and other accessories) <sup>4</sup>	260,000
A.3	<u>Construction funds and rental premises</u>	
(a)	Construction fund for the workshop in Tawawa	8,000
(b)	Rent of workshops in Khartoum, Kassala and Port Sudan (for 18 months)	29,800
(c)	Rent of shops in market places (Khartoum, Port Sudan, Kassala and Gedaref) (for 12 months)	102,000

A.4	<u>Other costs</u>	<u>US\$</u>
(a)	Family support for project trainees (during the training period: 12 months at £S75/month for 360 trainees) <sup>5</sup>	254,770
(b)	Operation and maintenance of equipment	8,400
(c)	Local travel fund for the project staff	1,500

B. Government of Sudan

Release of national staff for participation in the coordinating committee: 1 official from the Office of the Commissioner for Refugees.

C. Implementing Agency

Overall supervision of the project.

8. Institutional framework

The project will be implemented with the assistance of the Office of the Commissioner for Refugees (Ministry of Internal Affairs) and the UNHCR: their respective headquarters in Khartoum and sub-offices in Port Sudan, Gedaref and Kassala.

Other eventual collaborating bodies would be the Ministry of Industry and the Ministry of Cooperation.

A Coordinating Committee composed of representatives of ABIGAR (Advisory Board on Income Generating Activities), the Project Manager and supervisors will ensure the smooth running of the project. This Committee will meet every 3 months at the headquarters of the project in Khartoum, or if necessary in Gedaref, Port Sudan and Kassala.

The workshops in Gedaref and Kassala will be affiliated to the area Federation of Income Generating Associations which will provide

transportation facilities and other services.<sup>6</sup> In Khartoum and Port Sudan, vehicles are provided within the present project.

At the end of the training period of the project, management committees, consisting of 5 women in Khartoum, Kassala, Port Sudan, and 3 in Tawawa settlement, should be elected. These committees will assume the overall running of the workshops (purchase of raw materials, production and sales) upon the termination of the project, according to cooperative principles.

## 9. Prior obligations and prerequisites

### 9.1 Prior obligations

The Sudanese Government will issue necessary regulations and instructions concerning:

- (a) The issuing of business licences and permission for the acquisition of the shops in market places in Khartoum, Port Sudan and Gedaref.
- (b) Freedom of movement should be guaranteed for refugees in Tawawa settlement in order to travel to Gedaref town for the acquisition of raw materials and marketing purposes.

### 9.2 Prerequisites

- (a) The Government will ease the supply of equipment and raw materials.

## 10. Assumptions

### 10.1 Immediate objective to development objective

- (a) The Sudanese Government policy supporting the creation of income generating activities for refugees and their integration in the development of the country will continue.

- (b) The goods offered by the workshops will be competitive with similar imported items. The feasibility study showed that under present circumstances, these goods can be produced and sold at cheaper prices for the same quality. This trend should be maintained provided that:
- the prices of the raw materials and transportation costs will not increase immoderately;
  - the similar imported items will be sold in the present range of prices and not cheaper.
- (c) There will not be an important shift in the Sudanese consumers' tastes concerning ready-made babies' and children's garments, and other items.
- (d) Revolving funds would be provided for the future expansion of the production units or the establishment of new ones.

#### 10.2 Outputs to immediate objective

- (a) Trainees drop-out rate does not exceed 20 per cent per annum.
- (b) At the end of the training period, at least 80 per cent of women stay and produce for the workshops.
- (c) Workshop benefits are high enough to attract and retain members.

#### 10.3 Activities to outputs

- (a) Funds paid to trainees as family support are sufficient to attract women with numerous dependents.
- (b) Child-care facilities are available nearby the workplace in each site.

#### 10.4 Inputs to activities

- (a) Support obtained from UNDP to speed up custom facilities.
- (b) Physical facilities available for the installation of equipment.

11. Rationale

As it has been stated above, the conditions of refugee women, household heads in urban areas call for urgent measures generating new and alternative employment opportunities. Yet the existing skills consist mainly of traditional Ethiopian and Eritrean handicrafts (knitting and embroidering and ornamental items). These activities are very time consuming and the final products have a very limited market in the Sudan. The few ongoing activities in this field indicate that they can not be undertaken on a commercially viable basis.

For this reason the present project proposes the use of existing skills with a new orientation, i.e. the production of a range of various textile goods for which there is a large demand in Sudanese urban markets.

The feasibility study proved that the expected profits will be high enough to provide women with a reliable source of income of £\$100 per month (see Table 1).

The project will start with an initial training period consisting of upgrading existing skills such as sewing, tailoring or knitting, and introducing new ones, cloth printing or machine embroidering.

Given the very nature of the target group - women with numerous dependents - a realistic approach would be to guarantee them a salary or family support during this period.

At the same time, new designs and production plans for each range of products will be elaborated, taking into account the Sudanese consumers' tastes.

The simultaneous production of various types of textile goods, allows gradual and flexible adaptation to market conditions in each area.



Table 1: Expected profits for a sample of textile goods produced by women's workshops in the 4 urban areas of Khartoum, Port Sudan, Gedaref and Kassala (in £S)

Items	Production cost per unit'	Price of similar imported goods (per unit) <sup>8</sup>	Proposed sale price (per unit)	Benefit (per unit)	Number of workers in 4 areas	Total production per year (units) <sup>9</sup>	Annual benefit
Childrens's garments (6 yr.-old girls dress)	5	14	10	5	168	17,472	87,360
Printed or embroidered "tob"	30	65	50	20	84	13,104	262,080
Ladies' sweater (cotton)	10	18	15	5	14	17,472	87,360
Embroidered bed sheet (single)	4.5	10	7.5	3	<u>14</u>	4,368	<u>13,104</u>
					235		449,904
Total gross annual benefit: £S449,904		Annual running cost <sup>10</sup> : 53,360		Total annual net benefit: 369,544		Total number of workshops' members: £S 300	
				Salary per month and per capita: 100.15			

Furthermore, the production process will imply extensive use of local raw materials (mainly cotton cloth). It will also avoid competition with Sudanese producers, given that these items are mainly being imported to the Sudan from China, Taiwan, Japan or Egypt.

The project fits also into Sudanese national policy consisting of development of "small-scale industries based on local materials".<sup>7</sup>

13. Reporting, monitoring and evaluation schedule

(a) Reporting

18 monthly financial reports  
6, three-monthly progress reports  
1 terminal report

(b) Evaluation plan

Frequency and timing

The project is to be the subject of 1 evaluation mission at the end of year 1 provided within the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees", and 1 self-evaluation review by the project management at the completion of project status.

(c) Evaluation participants

See the above-mentioned project.

(d) Parties responsible for the collection of data

The Project Manager, with the assistance of workshop supervisors, will have primary responsibility for the collection of data necessary for the evaluation review.

Footnotes

1 The emphasis would be on the production of the first 4 types of items, rather than traditional handicrafts, given the limited market for the latter.

2 There will be no training in the field of traditional handicrafts, given the on-going activities. The project will provide only marketing facilities for this type of product.

3 This expert will also advise two other projects (i.e handicrafts production and the project on spinning and weaving). The cost is included in the budget of the latter project. But it should be stressed that given tight competition with imported materials, the advise of an international expert is fundamental for the success of the present project.

4 Calculated on the basis of the requirements indicated on Table 1.

5 Allowing 20 per cent drop-out rate.

6 See the Project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

7 Ministry of National Planning, the Six-Year Plan of Economic and Social Development, 1977/78-1982/83, Vol. 2, April 1977, p. 54.

8 These are average prices collected during the feasibility study, Oct.-Nov. 1982 in the 3 towns of Khartoum, Port Sudan and Gedaref.

9 It has been assumed that one skilled worker will produce:

- 2 children's garments per week (104 per year) or
- 3 "printed" or embroidered "tob" per week (156 per year) or
- 24 machine-knitted sweaters per week (1,248 per year) or
- 6 bed sheets per week (312 per year).

10 Annual running cost of the workshops	<u>US\$</u>
Rents for the workshops	20,886
Rents for shops in market places	10,200
Maintenance and repair of equipment	5,710
Fuel and transportation costs	4,250
Total	<u>41,046</u>

or fs53,359.80



Project Budget Covering Contribution from Donor  
(In US Dollars)

Country: Sudan

Project No:

Title: Pilot Garments' Production workshops in refugee affected areas  
of Eastern and Central Sudan

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
10	PROJECT PERSONNEL										
16	Other Costs (local travel fund)		1,500		1,000		500				
17	National Professional Staff										
17.01	Project Manager	18.0	12,000	12.0	8,000	6.0	4,000				
17.02	Workshop Supervisors (4)	72.0	24,000	48.0	16,000	24.0	8,000				
17.03	Teachers (6)	72.0	17,000	72.0	17,000		-				
19	COMPONENT TOTAL		54,500		42,000		12,500				
30	TRAINING										
33	In-Service Training		225,000		225,000		-				
39	COMPONENT TOTAL		225,000		225,000		-				
40	EQUIPMENT										
41	Equipment		406,000		406,000		-				
43	Premises		48,000		24,000		24,000				
49	COMPONENT TOTAL		454,000		430,000		24,000				
50	MISCELLANEOUS										
51	Operation and Maintenance of eqt.		8,400		6,000		2,400				
53	Sundries		5,000		2,500		2,500				
59	COMPONENT TOTAL		13,400		8,500		4,900				
90	SUB-TOTAL		746,900		705,500		41,400				



INTERNATIONAL LABOUR ORGANISATION

MULTIBILATERAL PROGRAMME OF TECHNICAL COOPERATION

Project Document

<u>Project title:</u>	Secretarial Pools in Khartoum, Port Sudan and Kassala
<u>Geographical coverage:</u>	Eastern and Central Sudan
<u>Project languages:</u>	English and Arabic
<u>Project Sites:</u>	Khartoum, Port Sudan
<u>Starting date:</u>	1984
<u>Duration:</u>	2 years
<u>Donor contribution:</u>	US\$397,750.00
<u>Cooperating Government Agency in the Sudan:</u>	Office of the Commissioner for Refugees (Ministry of Internal Affairs)





Secretarial Pools in Khartoum,  
Port Sudan and Kassala

1. Background and context

The ILO/UNHCR Interdisciplinary Mission on Employment, Income Generation and Training, visited the Sudan during November-December 1981 in order to identify means to lessen the burden of refugees on the host country.

The main conclusion of the mission was that the self-reliance of refugees can only be achieved through the introduction of income-generating activities. Furthermore, the mission recommended that special attention should be paid to the needs of a particularly vulnerable group of refugees, that of female-headed households. Single, widowed and separated women with numerous dependents constitute up to 27 per cent of households in the urban areas of Eastern Sudan.<sup>1</sup>

The lack of productive employment opportunities has forced many of them to resort to prostitution or other petty jobs in order to earn a living.

Following the main conclusions of the above-mentioned mission, feasibility studies were carried out during October-January 1982/83 with the objective of identifying alternative income generating-activities for refugee female-headed households.

One of the most potentially profitable activities is the provision of secretarial services in urban areas by skilled refugees. Although a number of refugee women have been trained in typing in English and other secretarial activities, the lack of appropriate structure and information has prevented many of them from practising their skills.

The ILO Skill Survey indicates that 0.3 per cent of refugee women possess secretarial skills. The review of "Intake forms" in the UNHCR Counselling Service in Khartoum showed as well that 4 per cent of refugee women in search of employment are typists.

On the other hand, in Khartoum, Port Sudan and Kassala where a large number of universities and smaller educational institutes, foreign companies and international agencies are located, there is still an acute shortage for qualified typists especially for those who master the English language well.<sup>2</sup>

Given the above considerations, in this project it is proposed to establish three typing pools in Khartoum, Port Sudan and Kassala. It is envisaged to provide 70 refugee women with appropriate venue, equipment, advertisement funds and other materials to practise their skills and earn an income.

The activities will consist mainly of providing secretarial services in English, and there is a sufficient number of skilled refugees to start the activity without previous training. However, to widen the scope of activities at a later stage, interested refugees could participate in language and typing courses in Arabic as well. It is also envisaged that interested Sudanese typists would join the pools, or the training schemes, benefiting from the language and typing courses in English. The Sudanese Academy for Administrative Studies will provide the training courses.

2. Target group

70 refugee women household heads in Khartoum, Port Sudan and Kassala (30, 20 and 20 respectively).

3. Development objective

Income generation for refugees in Eastern and Central Sudan.

### 3.1 Indicator

A minimum of 50 skilled refugee women are earning a living at the end of the project.

### 3.2 Source of indicator data

Management records and reports.

## 4. Immediate objective

Three secretarial pools managed by refugee women and providing typing, duplicating and photocopying services in Khartoum, Port Sudan and Kassala.

### 4.1 Indicators

- (a) The pools are financially self-supporting at the end of the project.
- (b) A minimum of 12,600 pages are typed and 18,200 photocopied annually (or other secretarial services are provided amounting to the equivalent income).

## 5. Output

- (a) 70 refugee women with typing and secretarial skills willing to join the project in Khartoum and Port Sudan are identified. (Month 1)
- (b) Training needs are evaluated and eventually arrangements are made for upgrading the skills of refugees. (Months 1-3)
- (c) Office accommodation, located near the business centres in Khartoum, Port Sudan and Kassala are identified and rented. (Month 1)
- (d) Equipment is installed. (Months 1-2)

- (e) Advertisements are made to attract all potential clients in academic institutions, foreign companies, etc. (Months 1-12)
- (f) English typing, editing, photocopying and other related services are provided in the 3 cities. (Month 12)
- (g) Arrangements are made for the continuous supply of material and repair and maintenance of equipment. (Month 12)
- (h) At the end of the project, elected committees will be responsible for the running of the activity. (Month 12)

6. Activities

- (a) Identify 70 refugee women: 30 in Khartoum, 20 in Port Sudan and 20 in Kassala (preferably household heads), who have had training in English typing and related activities and who would like to join the project. (Month 1)
- (b) Evaluate the training needs of selected refugees and eventually make arrangements for upgrading their skills.<sup>3</sup>
- (c) Rent appropriate office accommodation for typing pools near the business centres in Khartoum, Port Sudan and Kassala. (Month 1)
- (d) Install the equipment. (Months 1-2)
- (e) Advertise the services provided by the pools in order to attract potential clients in academic institutions, foreign and national companies, international agencies, etc. (Months 1-12)
- (f) Provide high quality typing, editing, duplicating, photocopying and other related activities in Khartoum, Port Sudan and Kassala. (Months 2-12)
- (g) Train women working in the pools in the management of the business and prepare the election of committees who will be responsible for the running of the activities at the end of the project. (Months 6-12)

- (h) Make arrangements for the continuous supply of working materials and repair and maintenance of equipment.  
(Months 2-12)

7. Inputs

A. Donor

A.1 Personnel

3 Project Managers (locally recruited)

Essential qualifications: Diploma or certificate in secretarial management or business administration. Experience in running small-scale business and preferably experience of work with women's groups.

Languages: Fluency in English and Arabic.

Duties: General responsibility for the implementation and supervision of the project in the three cities. Setting up the pools, recruiting skilled refugee women, upgrading their skills, particularly contacting and attracting potential clients for the pools.

Duty station: Khartoum, Port Sudan and Kassala.

A.2 Equipment

US\$

(a)	110 typewriters (70 with English keyboards and 40 Arabic)	88,000
(b)	64 photocopiers	36,000
(c)	office furniture	15,000
(d)	materials (paper, ink, etc.)	10,000

A.3 Other costs

(a)	Stipend for 3 months for women participating in the pools	28,000
(b)	Office rent in Khartoum, Port Sudan and Kassala (for 12 months)	112,000
(c)	Funds for advertisements	6,000

8. Institutional framework

The project will be implemented with the assistance of the Office of the Commssioner for Refugees.

A coordinating committee composed of representatives of ABIGAR (Advisory Board on Income Generating Activities for Refugees) and the three project managers will oversee the running of the activity.

At the end of the project, a refuegee management committee will be elected in each city, taking charge of the management of typing pools.

9. Prior obligations and prerequisites

9.1 Prior obligation

Grant of business permits to refugees to set up typing pools.

9.2 Prerequisites

- (a) Assistance to the project managers in finding appropriate sites for the activity (close to the centre of the cities and possibly nearby child care facilities).
- (b) Release of national staff (Office of the Commissioner for Refugees) to participate in the Coordinating Committee.

10. Assumptions

10.1 Immediate to development objective

- (a) The Sudanese Government will continue to encourage income generating activities for refugees.
- (b) The Revolving Fund is available for the expansion or further replication of the activity.
- (c) There continues to be a high demand for English typing and editing in Khartoum, Port Sudan and Kassala.

10.2 Outputs to immediate objective

- (a) Incomes from these activities are attractive to refugees. (See under paragraph 11 "Rationale")
- (c) Women's drop-out rate does not exceed 20 per cent per annum.

10.3 Inputs to outputs

- (a) Support obtained from UNDP to speed up customs facilities.
- (b) Physical facilities available for the installation of equipment.

11. Rationale

As it has been stated earlier, a number of refugee women possess typing and other secretarial skills which are not used at present. On the other hand, the labour market studies show a growing shortage of typists in urban areas. Thus this project aims at providing the required working capital and support for setting up three typing pools by refugees. In the first stage, the main emphasis will be to provide typing and editing in English (associated with photocopying and eventually duplicating services). However in the longer term, there is a prospect of providing refugees with language and typing courses in Arabic and thus widening their employment opportunities. Sudanese typists could also benefit from the facilities of the pool and provide secretarial services in Arabic.

A survey of potential clients of a typing pool in Khartoum gives a good example of the profitability of the activity:

- Potential demand for typing in English and photocopying services

(a) Universities and academic institutions

In a number of universities and academic institutions awarding Masters degrees and Ph.D.s, students have to present their dissertations and thesis in English. The average length of each paper varies from 100 to 300 pages. The number of students who are required to submit their dissertations in English in different institutions is as follows:

1. The University of Khartoum (post graduate studies)

<u>College/institute</u>	<u>No of candidates</u>	
	<u>1981/82</u>	<u>1982/83</u>
Institute of Asian and African Studies (IAAS)	25	21
Institute of Environmental Studies (IES)	13	14
Social Development and Research Centre (SDRC)	16	32
School of Mathematics (SM)	17	12
Medical Schools (MS)	183	183
Extra Mural Studies (EMS)	<u>23</u>	<u>29</u>
Total	277	290

2. Islamic University of Omdurman 220

The total number of students in the graduate and undergraduate fields who may require typing dissertations in English is 1741 for 1982-83 (510 in post graduate fields and 1231 in undergraduate fields).

(b) Prospects outside the universities

(i) Friendship Hall:

On an average, six big conferences are held annually. The Hall has an Arabic typing pool service of its own. There



is no equivalent English service. Yet the conferences are for most part conducted in English. The Hall administration either requests those holding the meetings to provide their own typing services or depends largely on typists from the Ministries. However, these arrangements have proved unsatisfactory and the Director of Conferences and Public Relations has welcomed the establishment of a typing pool in English.

(ii) UNDP

The UNDP assists UN agencies in organising conferences or seminars. Usually, prepared documents are sent with the organisers, however the administration is prepared to let them know in advance of the availability of typing services.

(iii) Private firms and embassies

Many expressed their need for a reliable and good typing pool service.

Expected income from secretarial activities in Khartoum

The secretarial pools will provide a range of various services such as typing, editing, duplicating and photocopying, thus it is difficult to anticipate the exact income.

However, if we take into consideration only one of the potential outlets for the typing pool i.e. the academic institutions in Khartoum and assume that 20 per cent of the required post-graduate dissertations are typed and photocopied by the refugee pools, the expected monthly income will amount to £5108, as is shown below:

Total number of post-graduate dissertations in English	510
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Average length of each dissertation            150  
Number of dissertations typed in                102  
the pool (20 per cent of the  
total) = 15,300 pages

Number of pages photocopied = 45,900\*

Total annual earnings

Profit per typed page = £S2  
Profit per photocopy = £S0.5\*\*  
Earnings from typing: 15,300 x 2 = 30,600  
Earnings from photocopying: 45,900 x 0.5 = 22,950  
Total annual earning: 22,950 + 30,600 = £S53,550

Total annual income

53,500 - 14,300 = £S39,200  
Expected monthly income = £S109 per capita

12 Reporting, monitoring and evaluation schedule

(a) Reporting

12 monthly financial reports  
4 three-monthly progress reports  
1 terminal report

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\* Assuming 3 copies of each dissertation.

\*\* The current price of photocopying is £S1 to £S1.50 per page. The cost is estimated at £S0.5 per page.

(b) Evaluation plan

Frequency and timing

The project is to be the subject of one evaluation mission at the end of the first year, provided within the project on "The Organisational Structure for the Promotion of Self-Reliance among Refugees".

(c) Evaluation participants

See the above-mentioned project.

(d) Parties responsible for the collection of data

The project managers will have primary responsibility for the collection of data necessary for the evaluation review.



Footnotes

<sup>1</sup> ILO Socio-Economic and Skills Survey 1982/83.

<sup>2</sup> See under 11 "Rationale".

<sup>3</sup> The Sudanese Academy for Administrative Studies (Director Abdulahi Beshir el Ahmadi) can provide facilities for the training of refugees in typing, office management and record-keeping as well as language courses in English and Arabic.



Project Budget Covering Contribution from Donor  
(in US Dollars)

Country: Sudan

Project No:

Title: Secretarial pools in Khartoum, Port Sudan and Kassala

Code	Details	Total		1984		1985		198		198	
		M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
17	NATIONAL PROFESSIONAL STAFF										
17.01	Project Managers	72.0	24,000	36.0	12,000	36.0	12,000				
16	Other costs (funds for advert.)		6,000		3,000		3,000				
19	COMPONENT TOTAL		30,000		15,000		15,000				
30	TRAINING										
33	In-Service Training		28,000		28,000		-				
39	COMPONENT TOTAL		28,000		28,000		-				
41	EQUIPMENT		150,000		150,000		-				
43	Rental Costs		112,000		56,000		56,000				
49	COMPONENT TOTAL		262,000		206,000		56,000				
90	SUB-TOTAL		320,000		249,000		71,000				
68	Programme Support Costs (13%)		41,600		32,370		9,230				
	TOTAL PROJECT		361,600		281,370		80,230				
71	Provision for cost increase (8% - 84, 17% - 85)		36,150		22,510		13,640				
	GRAND TOTAL		397,750		303,880		93,870				
	*The provision for cost increases will only be used if prices increase above the calculated level. It will not be used to increase project inputs.										





**ANNEXES**



Project Personnel

I. Coordinating Committee

- Ambassador Abdel Magid Beshir El-Ahmadi, Commissioner for Refugees
- Mr. Mohammed El-Murtada Mustafa, Commissioner of Labour
- Mr. Samir Radwan, Senior Economist, ILO
- Mr. Abdul Mejid Hussein, Project Coordinator

II. Field Officers

- Mr. Hassan Mohammed Osman, Projects General Manager, Commissioner of Refugees, Eastern Region
- Mr. Ahmed El-Amin, Director of Labour, Eastern Region, Kassala
- Mr. El Tureifi Younis, Projects Deputy General Manager, Commission of Refugees, Showak
- Mr. Ismaeel Ibrahim, Assistant Commissioner for Refugees, Gedaref
- Mr. Abdel Qadir Ibrahim, Assistant Commissioner for Refugees, Port Sudan
- Mr. Mohammed Habib Mirghani, Assistant Commissioner for Refugees, Kassala

III. Consultants

1. Recent Developments of the Sudanese Economy

Mr. Alemayehu Bezabih (ILO)

2. Labour Markets and Labour Processes in Sudan

The list of contributors is included in a separate volume devoted to "Labour Markets in Sudan".

3. Socio-Economic and Skill survey of Refugees

<u>ILO</u>	<u>Counterpart</u>
Mr. Ibrahim El-Bagir	Mr. Ahmed Osman
Mr. Jonathan Lucas	
Mr. Albert Wagner	
Mr. Pedro Antolinez	

Interviewers

Mr. Hassaballa Omar Hassaballa  
Mr. Eltigani El-Tahir  
Mr. Abbas Younis  
Mr. Abdel Rahman Ali Kheir  
Mr. Hussein Muhammed Abdallah

Assistant Interviewers

Mr. Estifanos Tsegaye	Mr. Hadre Mikael Essayas
Mr. Teklemariam Fesseha	Mr. Mulugeta Gebre Meskel
Mr. Elias Kidane	Mr. Tewedros Kidane
Mr. Tsegaye Negash	

There were also 60 other enumerators from the refugee settlements.

4. Review of existing self-help activities

Mrs. Yvette Stevens (ILO)

5. Female-Headed Households: A Profile

Mrs. Azita Berar-Awad (ILO)

6. Income-Generating Project Proposals

(ILO)

(Counterparts)

Mrs. Azita Berar-Awad

Ms. Ararat Iyob

Mrs. Yvette Stevens

Ms. Alawia Osman Ahmed

Mrs. Janice Hughes

7. Revolving Fund

Mr. Omar E. Hassan

Mr. Anthony Wheeler

IV: Administrative and Secretarial Back-Up

(i) ILO, Geneva

Mrs. Anne-Marie Causanillas

Ms. Sandra Deacon

Ms. Lesley Brooks

Mrs. Geraldine Ople

Ms. Kareen Hayes

(ii) Department of Labour, Khartoum

Ms. Rughaiya Mustafa Khojali

Mr. Khalid Hassan Mutwali

Mr. Abdel Aziz Sayed El-Tayeb

Mr. Muaawiya Hassan Muddathir

Mr. Ahmed Nimr

(iii) Office of the Commissier for Refugees, Khartoum

Mr. Mustafa Fakih



List of Abbreviations

COR	Commissioner of Refugees
CTA	Chief Technical Adviser
ICARA II	Second International Conference on Assistance to Refugees in Africa
ILO	International Labour Office
£S	Sudanese Pound (1US\$ = 1.3 Sudanese Pounds)
NGO	Non-Governmental Organisations
REST	Relief Society of Tigray
SCC	Sudanese Council of Churches
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees

N.B. "The Sudan" is referred to in this volume as Sudan, and "Libyan Arab Jamahiriya" as Libya. One billion stands for thousands of millions.

