

PN 42

**SEEDS AND TOOLS EMERGENCY
REHABILITATION PROGRAMME**

SUD/88/032 ASSISTANCE TO DISPLACED PERSONS

DONORS: UNDP/OPS

FINAL EVALUATION REPORT

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APRIL 1992, KHARTOUM

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ACKNOWLEDGEMENTS

The Evaluation Team would like to extend their sincerest thanks to the field staff of CARE-Sudan, IARA, RRC, LRC, MOA and the displaced farmer groups who greatly assisted the team and made easier to gather the required information.

We are very thankful to the Project staff in CARE-Sudan main office for supplying the necessary secondary data and the Project documents which the team examined for the purposes of this evaluation.

**CARE INTERNATIONAL IN SUDAN
SEEDS AND TOOLS PROJECT
FINAL EVALUATION REPORT - MARCH 1992**

Executive Summary:

Over the past ten years, Sudan has experienced growing rates of population displacement caused by both internal conflict and natural disasters such as drought and floods. Due to intensified conflict in the South in the last eight/nine years, many hundreds of thousands of families have fled the rural areas to the government controlled towns, transitional zones of South Darfur, Kordofan, Central State and Northern Bahr El Gazal as well as into Khartoum.

Accurate numbers of the displaced were difficult to determine due to fluidity of rural populations but reasonable portions of the population estimates were used for planning the Seeds and Tools allocations (see the distribution plan, Annex I).

Tremendous relief efforts were ongoing through 1989 and 1990 but the situation remained precarious for many thousands of families. Commercial food stocks in the area where the displaced had gathered were often either not available due to logistical problems or unaffordable by both the displaced and the poorer residents alike. As many displaced families have little access to income-generating activities or regular work, they thus remained totally or partially dependent on continued relief food aid.

A greater emphasis was placed on provision of seeds and tools to enable displaced families grow at least part of their own food supplies and reduce their dependence on the continued relief food aid.

The government of Sudan (GOS) and the United Nations appealed to the international community to fund a Seeds and Tools Distribution Program. Responses from the International Community were positive and UNDP/OPS and CARE International signed grant # C 90308 for US.\$ 2.9 million on December 10, 1990 so that CARE would implement the programme within the overall framework of operation lifeline Sudan and in line with the GOS/UN appeal.

According to the Terms of Reference (TOR) of the contract, CARE was to recruit the Project Manager, Deputy Project Manager and the support staff needed to timely and efficiently implement the programme. The roles required of CARE to implement the project included procurement of seeds and tools, perform germination tests through the National Seeds Administration (NSA) or Plant Protection Department (PPD), perform packaging and repackaging operations, prepare Planting Instructions, Transportation of Seeds and Tools Fumigation, Distribution and Extension reporting project activities

in a timely manner in addition to furnishing a Final Report including these evaluation comments and recommendations.

Concurrent to the contract signature in New York, a Project Manager was appointed to run the project operations for a twelve months period. Need to recruit a Deputy Manager was not eminent. The project manager recruited the local support staff composed of an Assistant Project Manager (an Agronomist), a logistics officer, 3 field officers (one Agronomist). It was assumed that each project staff member would possess a drivers license to avoid hiring a driver or drivers, which was not the case and a driver's position as well as a secretary's were included on the budget revision of March 1991. This team was given the necessary training to start implementing the project. Project operations started in December 1990. Seeds and tools vendors were identified and tenders floated to allow for competitive bidding. Offers were awarded and contracts signed between 31st December 1990 and February 1991.

The UN Emergency Unit requested CARE-Sudan to subcontract the Islamic African Relief (IARA) to distribute or monitor the seeds and tools distribution at the field level as a means of training & transferring skills to the National NGOs.

The Emergency Unit/UNDP Khartoum initiated the idea of having in place a Project Steering Committee to oversee the Project operations. A committee composed of RRC, UNDP, NSA, CARE, and IARA was formed to co-ordinate activities, approve draft terms of reference and evaluate the project implementation jointly before the final month.

A. Project Background:

1. Introduction

The long Civil War in the Southern Sudan caused great displacement among the populations resident in the war zones. These displaced populations differ from town to town in the secure areas of northern Sudan. Being displaced, these populations lost all their resource base and became almost entirely dependent on relief food aid. It was thought that if these people were given seeds and tools to plant wherever they are, they could surely produce parts of their own food. It was this idea that the RRC and UN utilized in their appeal to the International community for funding. This very idea was later revised to include the drought affected displaced alongside with war and drought affected Southern displaced, to encourage agricultural production and deter further wide-scale displacement that might result from the seasonal failures in the 1991/1992 planting season.

2. Project Objectives

The main objective of the project was to provide seeds and tools to 60,000 displaced families, displaced due to war and drought.

This was later revised to 57,500 families due to the non accessibility of some areas in Southern Sudan from both Khartoum and Nairobi.

Specifically, the project was to provide between March and May 1991, each displaced family with 2.5 kg Sorghum, 1.25 kg Millet, 2.0 kg Sesame, 15 kg unshelled groundnut, 5 gm Okra, 2 gm Eggplant and 1 piece of tool in Central and Northern Sudan to cultivate 3-4 feddans and 2.5 Kg Sorghum, 1.25 kg Millet, 5 kg Maize, 15 kg Groundnut, 5 kg Okra, 2 Gm Tomato and 2 Gm Eggplant to plant 4-5 feddans in the Southern Sudan.

3. Project Strategies

Initially, seeds and tools distribution, monitoring and extension would be done through the existing UN and NGOs existing networks. Later, at the request of the UN Emergency Unit UNDP/Khartoum, the national NGO Islamic African Relief Agency (IARA) was subcontracted to monitor distribution, do extension and furnish reports to CARE. The sub contract agreement was signed in January 1991.

B. Evaluation Methodology:

1. The evaluation exercise has been undertaken with the following in mind:

a) To evaluate the implementation of the project based on the following major activities:

- i. Seed Procurement
- ii. Logistics (transportation, storage, despatch)
- iii. Seeds and tools distribution to beneficiaries
- iv. Monitoring
- v. Linkages

b) To make recommendations for improving the effectiveness of such disaster responses and suggest how to transform it from a purely relief response to a rehabilitation oriented activity (in support of GOS plans to rehabilitate the displaced) and assess the need for seeds/tools for the next planting season. To realise these objectives, the evaluation team relied on examining project documents, focus group interviewing and key informant interviewing.

2. Data Collection

Secondary data on the project implementation activities of procurement, testing, storage, transport, dispatch, distribution and monitoring activities including the constraints encountered was gathered from a careful review of project documents, field reports and correspondences between CARE and the partner GOS and NGO counterparts. Focus group interviews and key informant interviews were the sources for primary data.

- i. Focus group interviews were semi structured discussion sessions in which the evaluation committee convened small groups of displaced farmers to explore specific topics, issues and concepts. These issues were carried out at the village/camp level to include socio-economic conditions of the beneficiaries (e.g average family size, average number of active farmers per family and land ownership etc. cropping situation this year in terms of rainfall, crop pests etc. cereal food requirements per average family, group opinion on seeds and tools distributed and suggestions for the future programs.
- ii. Key informant interviews:
These interviews were conducted by the evaluation team with the project staff in Khartoum, at some of the rural councils, NSA, ABS, and seeds and tools transport contractors. Although the whole project area was not covered entirely, the information collected using the above mentioned methods in Kordofan, Renk and Juba remains to be the basis upon which the findings, conclusions and recommendations of this report were assessed.

C. The Project Area

The project covered the North Kordofan, North White Nile province and the government controlled towns of Southern Sudan.

1. Physical Conditions:

The geographical location of the project was considerably large composing more than one climatic set up. Rainfall varied from 100 - 550 mm in North Kordofan, and North White Nile 1200 - 3200 mm in the Southern Sudan.

2. Landholding and Access to land

In Sudan access to agricultural land is governed by certain laws. Land is owned by a family either by inheritance or by mere allocation from the Village Sheikh. New families normally acquire lands from the Sheikhs.

Land allocation by the Sheikh to families or individuals from outside his village are not easy to make and based on this factor, most Southern displaced in North Kordofan could not plant as they did not have free access to land. Seeds and tools, therefore, distributed in North Kordofan were mainly given to the drought displaced farmers. In the South, the displaced were allocated lands to temporarily plant as a rehabilitation strategy but the initial focus was on producing part of their own food.

D. Findings and Discussions

This section is intended to give the results of the evaluation, the quantitative and qualitative information gathered

in the evaluation exercise along with the team's interpretation of these informations.

i. Planting Dates:

Planting dates varied between March-May in the Southern Sudan and May to August in Kordofan and North White Nile Province. Unlike the Southern Sudan where planting is done immediately with the coming of rains for any seed species, planting dates in Kordofan vary not only with respect to variation in the rain pattern among the provinces but also with the dates associated with the seed species in particular areas or rural councils which is in turn associated with the beginning of the first good rains. While Millet planting in En Nahud province, for example, started in May; it was planted in most parts of Bara Province in July.

ii. Yield Estimates

Crop yields display a high degree of variability due to a number of reasons including the diversity in the level of rainfall and the damage caused by pests such as Nafasha, Samta, tree locusts and birds in North Kordofan; and birds and tree locusts in Renk. Although yields were not uniform among rural councils or provinces in North Kordofan, average yields were assessed at:

1-3 bags of Millet per feddan, 0-3 bags of sorghum per feddan, 10-20 bags of Groundnut per feddan and 2-3 bags of Sesame per feddan in North Kordofan. The Renk and Juba, average yields were estimated at 3-6 bags of sorghum per feddan, 8 bags of Maize per feddan, and 3-10 bags of Ashford Groundnut per feddan.

iii. Cereal Food Requirements

The annual cereal food requirement for an average family (5-7 persons) for most parts is 12 sacks (i.e 3 Kg per family per day). The production of cereals has been good for very few families. Only very few families have harvested just enough to keep them for 3-6 months but the majority of the displaced farmers have harvested enough to keep them for only two months, but with the war and displacement still continuing and given the kinship systems of sharing among the Sudanese communities these yields could hardly suffice the displaced families for the said period.

iv. Project Implementation Activities

By December 1990, CARE New York had already signed the contract with UNDP/OPs, first funds installment of US \$

900,000 released to CARE-Budan to start implementing the project.

a. Seed/Tool Procurement

With the first installment funds, local support staff were hired and trained, and a competitive bids process initiated with the bids analysed in December 1990. To produce the climatically- required seeds for the Southern Budan, not available in Khartoum, the project through CARE-kenya placed orders for Sorghum, Maize and tools in Nairobi. The seeds and tools procured at this stage were as stated below:

Purchase Point	Cereal Seeds MT	Vegetable Seeds kg	Tools PCS
Sudan	456.66	421.66	60,000
Kenya	85.30	152.00	19,500
TOTAL	<u>541.96</u>	<u>573.66</u>	<u>79,500</u>

With the quoted prices per MT of US \$ 1,262 (Sorghum), US \$ 1,443 (Millet), US \$ 1,034 (Groundnut) and US \$ 1,365 (Maize), let alone the vegetable seeds, the purchase contracts for the above mentioned quantities could exhaustively spend the seeds budget line item. But CARE had to meet a target of 1500 mts of various seeds, a target that was unrealistic to meet whatsoever.

These among other factors necessiated a budget revision and contract amendment to access funds from the transport line item to seeds line item to purchase another 550 mts of seeds and attain a reasonable target of 1,000 mts of various seeds as requested. This amendment was only received end May 1991 after which prices had escalated by a minimum of 42% over the December/January prices. Only by the time the contractual amendment was received was CARE able to purchase more seeds/tools in the second phase as follows:

Purchase Point	Seeds (mts)	Tools (pcs)
Sudan	440.28	-
Kenya	160.00	6,500
TOTAL	<u>600.28</u>	<u>6,500</u>

At that point seeds/tools procurement stood at:

Seeds	1,135.64	mts	which is less than the original target but more than the revision target
Tools	59,000	pcs	which is more than the requested revision target but this was done at the request of UNDP/Khartoum.

One constraint associated with the second phase seeds purchased locally was the GOS restriction on cash withdrawals at the end of May. This caused remarkable delays in the

105.38 mts delivered to the North White Nile Province early August as the supplier could not sign contracts until this restriction was reversed let alone the quantities short of the contracted 140 mts. Secondly, millet seeds were scarce by the time funds were available for purchase.

c. Germination, Purity and True to Variety Tests:

CARE was required to enter into an agreement with the NSA/FPD to ascertain the viability of the seeds before their despatch to the target locations. This agreement was signed on January 5, 1991. Based on this agreement the NSA/FPD was to clean, grade, rebag and perform the purity and germination testing using their available facilities. These operations supervised by project staff were completed in a timely manner in March 1991 except for the Ashford Groundnut intended for distribution in the South. Large quantities of this Groundnut were rejected in March due to poor quality and the suppliers asked to replace it with a better quality. The replacement was received in April 1991. Unlike in the other seeds, 40.5 mts of the Groundnut was despatched to Juba and 9 mts to Renk. Test results which were still poor were only received in May after the despatches. Losses due to poor quality standard were calculated and recovered from the supplier at Ls 247,099.66 and the Groundnut balance of 75 mts was unpaid for, rejected and returned to the vendor. Most Groundnuts available was poor due to the drought in the previous season.

c. Packing and Repackaging Operations

Initially, seeds and tools were to be repacked in the Agi-packs before transporting them to the target locations. Due to some considerations including time and the damage a piece of hoe would make to the seeds in the Agi-packs, it was decided to repack only the vegetable seeds into small per beneficiary allocations and send the cereal seeds in bulk with some measuring devices/scoops. Scoops were made in varying capacities ranging from one Kg to 5 Kg but beneficiaries and distribution agencies did not use them and instead used the malwa (3 Kg measure) or local traditional measure or other familiar measuring units.

d. Planting Instructions:

The project prepared planting instruction leaflets in both Arabic and English and were distributed to those who could read and the field NGOs explained whatever was necessary for the displaced farmers to understand.

e. Transport, Storage and Despatch:

CARE had temporarily hired a warehouse in Sennar near the NSA

cleaning, grading, rebagging and testing facility. This was to guarantee seeds some security before and after the processing operations by the NSA. Tools were stored in IARA warehouse free of charge, IARA being a sub contractor to the project. Transport bids were floated and analysed in March and the contract signed end of March. All seeds and tools from Khartoum were moved long before rains and delivered to IARA suboffices except in Abyei (South Kordofan) where IRC was the only operational NGO, in Juba seeds and tools were delivered to CART and Renk where the Dawa Islamiya assisted IARA in storage and distribution since they had better than IARA in the area. The secondary transport to the distribution points was contractually entrusted to IARA.

Two constraints were noted in the process of the primary and secondary transport:

- i. Short deliveries of 37 bags of Sorghum in Um Ruaba and CARE recovered the cost of the lost Sorghum from the contractor and 22 bags of Sorghum in Renk for which CARE also recovered the cost from the transporter.
- ii. Due to some fuel crises in Kordofan the transporter delivered the tools and vegetable seeds for Bara 3 weeks after the distribution of cereal seeds but these were also distributed.

A constraint associated with the Sennar storage facility was the loss of 69 bags of Millet allocated for Wau. The cost of the 69 bags was covered from the warehouse contractor at the market price since storage security and any loss was the liability of the contractor as per contract with CARE. Storage at the main towns after dispatch from Sennar was contractually a responsibility of IARA except in Juba where CART did all the storage at no cost to the project. No problems have been reported in connection with storage. We would think that this went very well since most stores available at whatever point were empty following the 1989/1990 crop failure due to drought and commodity scarcity in the war zone.

Seeds and tools were transported to the distribution sites with the cost covered by IARA directly and later reimbursed by CARE. There were delayed dispatches noted to the North White Nile and Gabrat El Sheikh areas. About 30% of these delayed quantities were stored for next planting 20% eaten as seeds could not be planted. One transport constraint encountered was associated with transporting 175 mts of Sorghum to the villages from Renk in July/ August 1991 due to roads being semi flooded. This raised the estimated transport but was acceptable, considering the fact that the seeds were still distributed and planted successfully.

Although transport costs in North Kordofan were slightly

higher than CARE had projected. IARA's justifications were accepted since in several cases they delivered seeds to displaced in remote rural locations following the DDR repatriation/rehabilitation procedures and dispersal of displaced from urban areas. In addition, IARA had to pay truckers for full loads to transport to a few villages, allocations which otherwise could have been transported in pickups if these were received by the project earlier. All in all the project transport costs was 65.29 % less than the original budget, and was at 37.68 % of the requested March 191 revision. A storage problem in El Obeld was noted in the case of some of the groundnut seeds due to pests, a consequence of not fumigating the seeds in time. The loss was estimated at 18-25 % of the weight, which was within the normal range if ground nut is not fumigated.

7. Seeds Distribution, Extension and Monitoring:

Irrespective of IARA's subcontract, seeds and tools distribution was done by local NGOs under the supervision of IARA, who monitored and targeted distribution populations in consultation with RRC and local relief committees. Only in Juba all the distribution was done by CART through other NGOs (SUDRA, SUDANAID, IARA, OXFAM etc.) with the beneficiary allocations done by CART. The distribution reports were compiled and sent by CART.

In Renk seeds and tools distribution was done by IARA who took Dawa Islamiya into partnership and jointly disbursed the seeds and tools and IARA prepared the distribution reports. In North Kordofan IARA took the lead role in seeds distribution and was assisted by the Local Relief Committees. IARA as usual monitored distribution and prepared reports. All seeds and tools were distributed as per distribution plan except in Um Ruwaba in Kordofan where the Local Relief Committee demonstrated excellent programming capabilities and redistributed the seeds according to the soil requirements and the farmers preference, and according to this criteria. Um Ruwaba was divided into three zones of Northern, Central and Southern.

The originally planned allocations were such that each beneficiary got all the seeds types to plant. A change in programming in terms of per beneficiary allocation was also reported in Juba. Some farmers had only Sorghum, others got Maize or Millet and a third group farmers got vegetable seeds only. Each family was given equal quantities of all cereal crops irrespective of the number of able farmers in the family. Reportedly 13.5 mts of Millet seeds in the Gabrat El Sheikh area reached very late and were not distributed and was stored for the next planting. We would like to give the credit to CART/Juba, and Dawa Islamiya for assisting IARA in the seeds and tools distribution activities. No biases were reported in connection with the entire distribution process

operation. Distribution timing was appropriate except in Gabret El Sheikh and the North White Nile area due to millet scarcity, delay in the testing process and a brief fuel crisis that delayed transportation. The planned unit of distribution was kilograms for Sorghum, Millet, Maize, Sesame and Groundnuts; and grams for the vegetable seeds. Tools were planned as pieces per family. Extension services were offered by IARA and MOA field staff but no crop performance and yield estimation reports were found except for Juba area. The delayed arrival of project vehicles also hampered movement of IARA field staff implementing the project and monitoring crop health, growth and pest situation etc.

According to the reports coming from the field, all seeds and tools delivered have been distributed except the following quantities:

- 80 mts Berena Sorghum in Wau, 50 mts distributed as food as children were facing starvation.
- 100 mts Berena Sorghum in Juba, now being distributed through CART/UNDP.
- 8500 pcs of tools in Juba, now being distributed through CART/UNDP.
- 100 mts Maize in Reak, now being distributed through the LRC/IARA.
- 40 mts Maize in Juba for distribution this season.
- 500 pcs Tools in storage with IARA.
- 150 bgs of millet in Gebrat El Sheikh area.

Below is the summarized report of seeds and tools distribution exclusive of the on going distribution. This table shows the target locations, the number of Rural Council (RCs) covered in each province, the number of villages (VCs) or camps reached, the number of beneficiaries reached and the quantities of seeds/tools distributed per location.

LOCATION	NO. OF RCS	NO. OF VCS	NO. OF BENF.	TOOLS	SORGHUM PCS	MILLET MTS	SESAME MTS	MAIZE MTS	G/WUT MTS	V. SEEDS MTS
1. Reak	7	45	20,058	2,000	177.00	0.80	-	26.73	9.00	17.70
2. Juba	1	7	45,000	25,500	29.25	5.70	-	32.25	40.50	220.90
3. Um Ruaba	5	243	13,787	6,500	11.97	7.80	3.15	-	58.50	58.10
4. El Obeid/Sheikan	5	46	4,975	4,500	11.93	6.87	3.28	-	21.97	38.00
5. Bara	2	39	6,330	6,000	10.80	7.20	3.83	-	80.99	54.00
6. En Nahud	4	46	7,020	7,000	16.74	8.40	4.50	-	65.65	65.40
7. Abyei	1	1	3,000	3,000	5.22	0.66	1.02	-	25.68	31.80
8. El Mayram	2	16	3,000	3,000	5.22	0.66	1.02	-	25.68	38.50
9. North White Nile	7	161	24,445	21,000	-	79.65	-	-	-	-
10. Gabrat El Sheikh	3	21	7,934	3,500	-	24.30	-	-	-	-
	<u>37</u>	<u>625</u>	<u>135,549</u>	<u>82,000</u>	<u>268.13</u>	<u>141.84</u>	<u>16.80</u>	<u>58.98</u>	<u>327.97</u>	<u>514.40</u>

v. Project Impacts

One of the major impacts of this project is the institutional linkages and close coordination ties that have flourished with the government institutions at all levels, NGOs and UN agencies during its implementation. The program has achieved an infrastructure that other programs can continue to utilize in the future. This infrastructure was utilized by CARE to successfully implement its North Kordofan Emergency Seeds Distribution using the institutional linkages so established with the NGOs, the GOS and the Village Relief Committees. The second major impact was the effect the produce from the seeds and tools distributed made on the market prices of the cereal crops. This was clearly seen in all areas but more distinctly in Juba where prices declined remarkably from the harvest of Maise although they have escalated again due to the smaller quantities of the produce owing to the seed quantities distributed. Thirdly the provision of the seeds and tools to the displaced wherever possible was a mechanism to stop further movement of these displaced into other areas.

vi. Conclusions Recommendations

1. The seeds and tools program was well planned and fairly implemented considering the wide area it covered and the logistical difficulties involved in the staff movements to monitor and report effectively.
2. The delay in the first contract amendment requested in March and the unexpected GOS cash restrictions were factors beyond the project control but were responsible for delayed seed deliveries and poor planting in the Gabrat El Sheikh area and the eating of some significant quantities of Millet seeds in the North White Nile area.
3. The quantities of seeds distributed to the displaced families was inadequate and the farmers experienced serious difficulties in finding back-up seeds when re-planting was required, due to unavailability and unaffordable seed prices.
4. The seeds and tools project was a positive step towards halting further displacement and a major, though for a limited time, market intervention. This type of intervention is recommended for the future as a continued activity where there are large concentrations of displaced (Renk / Juba / Abiye).
5. IARA as a national NGO performed well and in the face of various constraints were still able to

reach target groups in remote locations. Such
twining of national and international NGOs should
be encouraged.
