

MEMORANDUM

DATE: July 31, 1989

TO: Kenneth Rikard, A/DIR

FROM: Lalitha Jayaraman, ARD *lj*

THRU: Michael Fuchs-Carsch, A/SADO

SUBJ: Project Assistance Completion Report (PACR): CDA Forestry
Phase I - Refugee Areas Project (649-0122)

In accordance with Handbook 3, Project Assistance, (Appendix 14A), a Project Assistance Completion Report is due within six months after expiration of the Project Assistance Completion Date (PACD). This PACR is submitted for your approval prior to distribution within the Mission and to A.I.D./W. This report has been cleared by USAID/Somalia offices as noted on the last page of the report.

Approved: *Kenneth Rikard*Date: *August 8, 1989*

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PROJECT ASSISTANCE COMPLETION REPORT

I. SUMMARY DATA

Project Title:	CDA Forestry - Phase I, Refugee Areas Project
Project Number:	649-0122

Administrative

Implementing Agency:	National Range Agency (NRA)
Technical Assistance:	Private Voluntary Organizations
Final Evaluation	April 1988

Financial (\$000)

Date of Authorization:	November 23, 1982
Authorized LOP:	\$6,000
GSDR Contribution	\$1,900 (equivalent in So. Shs)
Date of Initial Obligation:	November 23, 1982
PACD:	January 1, 1989
Cumulative Obligation:	\$6,000
Cumulative Commitments:	\$5,686
Cumulative Accrued Expenditure:	\$5,427

Planned AID Inputs

Institutional Support to NRA	\$689
Reforestation & Fuelwood Production Sub-Projects	\$3,822
Fuelwood Conservation	\$539
Natural Resource & Land Use Survey	\$499
Monitoring & Management	\$451
TOTAL	\$6,000

Planned Project Outputs

- 5 fuelwood lots established
- 2504 ha of fuelwood lots planted
- 1,700,000 tress planted
- 225 to 300 ha shelterbelts established
- 1,500,000 trees planted for shade
- 90 ha of sand dune fixed
- 10,000 woodstoves distributed
- 5 foresters trained
- NRA field staff trained

II. PROJECT DESCRIPTION/PURPOSE

The CDA Forestry Phase I - Refugee Areas Project (649-0122) which was a companion to the Refugee Self-Reliance Project (649-0123), was funded at \$6 million. Both had a major refugee orientation and were funded by moneys made available under the Migration and Refugee Assistance Act which had been transferred from the State Department's Office of Refugee Programs (State/RP) to AID for administration.

The purpose of this Project was "to assist the Government of Somalia to undertake a large volume of forestry and fuelwood planting programs as part of its overall social and economic development efforts." More specifically, the Project was to support reforestation and fuelwood production efforts in and near refugee camps both to provide a potential source of income and employment to refugees and to lessen the environmental impacts of increased population pressure in refugee areas.

III. PROJECT COMPONENT

The major components of the Project are the following:

1. Institutional Support to NRA

This component would finance technical assistance, training and some equipment for the National Range Agency (NRA), a semi-autonomous body (within the Ministry of Livestock, Forestry and Range) that is responsible for range and forestry development in Somalia. The Project proposed to provide the NRA with long-term advisors, training and other assistance to build its capacity to manage and support a national forestry program.

2. Reforestation and Fuelwood Production Sub-Projects

This, the major element of the CDA project, involved the initiation of several reforestation and fuelwood production sub-projects in various parts of the country in and near refugee camps and surrounding areas. The sub-projects would be implemented by US PVOs in close cooperation with NRA foresters and field staff. The sub-projects were expected to include the following elements:

- A. Seedling production through the establishment or extension of nurseries to provide seedlings for reforestation outplantings;
- B. Fuelwood plantations located on land provided by NRA to provide fuelwood for refugee camps and nearby community needs;
- C. Agroforestry intervention including windbreaks in and around fields, shade trees in fields, living fences etc.
- D. Tree planting for other specialized tasks (e.g.) river bank, road and canal sites, sand dune stabilization; and
- E. Amenity plantings (i.e., shade, fruit and ornamental trees in refugee and village compounds and around schools or other public buildings).

3. Fuelwood Conservation

This component was aimed at reducing fuelwood consumption, and thereby alleviating pressure on woody vegetation, through the introduction of improved woodburning stoves.

4. Natural Resource/Land Use Survey

This component would finance a contract to carry out a natural resource/land use survey of southern Somalia, thereby providing basic data for natural resource planning including the intended Phase II of the CDA Forestry Project.

5. Fuelwood Supply/Demand Marketing System

The objective of this component was to gain an understanding of the country's fuelwood and charcoal production and marketing systems as a basis for planning reforestation interventions and priorities for conservation.

6. Project Monitoring and Management

Funds in this component would finance PSCs to monitor and manage both CDA Forestry Phase I and Refugee Self-Reliance projects with costs being shared equally between the two.

The bulk of financing (US \$4,361,000) for this Project was devoted to Reforestation and Fuelwood production/conservation interventions implemented by the following private and voluntary organizations (PVOs).

1. Save the Children Foundation (SCF);
2. AFRICARE
3. Volunteers in Technical Assistance
4. CARE
5. Overseas Educational Fund

IV. END OF PROJECT STATUS

1. General

The project was implemented according to the design. The major deviation was in eliminating the fuelwood/demand/marketing survey component. This did not affect attainment of project objectives, because at the time PVOs had planned to duplicate much of the survey. The money from this component was transferred to fund Overseas Education Fund (OEF), a PVO. The OEF implemented sub-project was important as it was the only project in the Northwest Region for refugee women beneficiaries.

The goals, purpose, outputs and inputs as conceived in the PP were, in general, well structured. However, serious weakness existed in the assumption (eg. availability of suitable land, species choice, a three year forestry intervention) made in dealing with parts of the

reforestation and fuelwood production component. When this project was initiated the U.S. had the lead role as head of the Cooperation in Development in Africa (CDA) Forestry and Fuelwood Group. CDA was a multidonor group created in October 1979 in an attempt to coordinate and accelerate donor assistance to sub-Saharan Africa in several sectors. Somalia was one of the sub-Saharan countries selected for special efforts in forestry and USAID/Somalia committed itself at that time to lead the long-term CDA effort in forestry. Subsequently, the demands on the Mission to reduce the program portfolio and focus on a few high priority sectors, forced the Mission to drop forestry from the CDSS. Thus USAID was unable to fulfill its commitment to the CDA group.

2. Institutional Support to NRA

The concept of strengthening NRA headquarters with key expatriate personnel was generally well executed. However, the TA staff were called upon to carry out duties well outside their intended technical advisory role. These additional duties limited the time available both for traveling to project sites and responding to requests for technical advice, especially from PVOs. Additionally, the frequent turnovers of NRA counterpart staff affected the NRA's management training programs. Initial training of junior forestry technical officers at Afgoi Forestry and Wildlife Training Center proved useful. On-the-job training and a study tour organized by the PVOs for junior and middle level staff were very successful. There is a greatly increased awareness of forestry activities amongst GSDR, potential donors and recipients. This is the major outcome of the project.

3. Reforestation and Fuelwood Production

In the main, the planning and running of nurseries has been good. On-the-job training of staff at all levels has also been satisfactory. Household/shade tree planting with individuals has been well received and carried out. Agroforestry interventions with settled farmers have been enthusiastically executed and welcomed by the communities. Block and strip plantings on public land have failed; partly because of the harsh climate, partly because of unclear rights of ownership to the produce. Plantations of the correct species in such sites have grown well and offer worthwhile returns, both in preventing further land degradation and in the limited production of fuelwood. The limited forestry experience of most of the expatriate staff on arid zone forestry has been seen in the somewhat rigid approach to tree planting and in a slowness to adopt new approaches and to capitalize on success. Supplies of good quality tree seed of appropriate species in-country proved difficult for timely planting activities.

4. Fuelwood Conservation

The fuelwood conservation efforts, through design and marketing of more fuel efficient charcoal and wood stoves, appear to have been well carried out and efficiently documented. However, the improved stoves now (1989) face selling difficulties due to increased prices over traditional models.

The effort of fencing the areas intended as dryland fuelwood plantations has allowed considerable recovery of natural vegetation particularly grass and herb cover, leading to the sale of controlled quantities of fodder from within fenced areas.

5. Natural Resources/Land Use Survey

The resource/land use survey contributed much valuable data. However, the survey did not contain position papers on key topics, a data index or summaries of the main conclusions or recommendations.

6. Project Monitoring and Management

As the funding organization, USAID met its responsibilities in making its contribution on time. The overall monitoring of the various components took place on a regular basis. USAID also met its requirements of providing management assistance, particularly in assisting with the release of local currency funds from the Ministry of Finance and in acting as a 'buffer' between the PVOs and the NRA.

V. ACCOMPLISHMENTS VS. PLANNED OUTPUTS

At the input level, many refugees and nationals were contacted by the extension agents or given tree seedlings.

<u>ITEM</u>	<u>TARGET</u>	<u>ACCOMPLISHMENTS</u>
Fuelwood lots	5	18
Fuelwood lots	250 ha	2,774 ha planted but survival very poor
Fuelwood Plantations trees planted	1,700,000	3,215,000 trees planted but survival very poor
Shelterbelts	225 to 300 ha	237 km and 180 ha
Amenity Plantings	1,500,000 trees	886,000 trees-90% survived
Sand dune fixation	90 ha	72 ha.
Woodstoves distributed	10,000	6,328
Foresters trained	5	11

Others were trained as nursery or plantations workers. The effect in the refugee camps, the number of shade tree plantings, and the trees planted along irrigation canals and on private land are evidence of a greater understanding and affinity for trees. The project has succeeded in training the GSDR staff in administering forestry activities. It has shown that with the present knowledge and technology fuelwood lots are not economical. This USAID funded CDA Forestry initiative attracted other donor assistance and by June 1984 there were 19 donor funded forestry projects in Somalia. In January there were 9 projects in final planning stages.

The establishment of community and large scale woodlots was unsuccessful due to the following factors: 1) the harsh nature of the local climate and rainfall that is at best marginal for tree planting; 2) the degraded nature of the soil; 3) the extremely dessicating effect of winds which blow strongly for 10 months a year; 4) the inappropriate selection of fast growing species; 5) lack of GSDR management capability; and 6) the question who owned the woodlot. The shade tree plantings, though they did not meet the target were very successful. The shade tree plantings demonstrated to the refugees some of the advantages of trees in their compounds. The agroforestry intervention has shown some of the possibilities and advantages of growing trees in close relation to crops. The introduction of live fencing in Somalia by the project is an important contribution. The work on sand dune fixation is important not only for a start at controlling the dunes but also as an experiment in methods to do so.

The training of some of the refugees in planting activities was very successful as measured by the high survival rate of the amenity plantings. The sizable number of refugees employed also caused money to be either accumulated or pumped into the refugee economy which benefited the refugee community.

The institutional strengthening of the NRA was a partial success. The upgrading of the field staff was successful because NRA field staff were trained by being seconded to the PVO sub-project at various project sites. However, improvement of the NRA did not occur due to low civil service pay, lack of initiative and poor job performance. Eleven foresters were sent to a six-month training course in Pakistan. A three week in-country training course offered by the International Council for Research in Agroforestry (ICRAF) was very useful. Though the fuelwood component did not achieve 100% of the quantifiable targets, the component was successful. A stove that was efficient (it required 20% less fuel) was designed, manufactured and sold.

VI. LESSONS LEARNED

1. The project design must carefully think through the implications of local circumstances (in this case, climate and land tenure conditions) on proposed activities, timing, ecc. in order to maximize benefits.
2. With appropriate attention given to local conditions, successful forestry/fuelwood interventions can be made even in a relatively arid environment (eg. Gedo Community forestry sub-project agroforestry component).

3. Sufficient time must be programmed to achieve desired results. In arid regions with only one short acceptable planting season per year, thirty six months is insufficient time for a forestry project to incorporate even initial findings into improved procedures.
4. While technological improvements were realized during the life-of-the-project, inadequate attention was given to issues of sustainability. Consequently, improved seeds were not available after project termination.
5. Expatriate staff must have relevant experience. In the case of this project, dryland/arid zone forestry management was critical but advisors did not always have the appropriate background.

VII. RECOMMENDATIONS FOR FUTURE FORESTRY ACTIVITIES

1. Reforestation and Fuelwood Production

- A. Block plantings for fuelwood production on public land should not be continued in future projects. Care must also be exercised before contemplating more limited blocks for shelterbelts/windbreaks. Appropriate site assessment must be carried out and clear understandings reached with local people.
- B. Shade tree (amenity planting) should be encouraged, and by increased emphasis on extension services and agroforestry practices, tree planting should be introduced on farmland. The availability of irrigation is an obvious advantage, but with careful design, limited dryland interventions are also worthwhile.
- C. More attention should be paid to the management of existing bushlands for fuelwood production.
- D. The Project planners and implementors must ensure a guaranteed supply of good quality seeds before a project commences and arrangements should be made to continue this throughout and after the life-of-the-project.
- E. The success of the hardy species Prosopis juliflora (and to a lesser extent Prosopis cineraria) on dryland is striking; its potential for uncontrolled spread on irrigated land is well documented and great care should be taken to prohibit its use in such area.

2. Fuelwood Conservation

Consideration should be given to subsidizing the selling price of improved stoves to make them directly competitive with well established models. Subsidies should be gradually reduced as the stoves become popular and local craftsmen more skilled in their construction.

3. Natural Regeneration Plots

The fuelwood lots failed in the purpose of growing bush or trees to provide firewood. However, they are now natural regeneration plots, by virtue of the period of time they have been fenced in and protected from people and animals. The plots are a low cost way of providing for the regrowth of vegetation. The usefulness of regeneration plots requires further study.

VIII. Pending Actions for Project Close-Out

1. Obtain a statement from the GSDR that the project has been completed.

<u>Action Agent</u>	<u>Time Frame</u>
ARD/GSDR	August, 1989

2. Send letters requesting the PVOs to submit final vouchers to GSDR/USAID.

<u>Action Agent</u>	<u>Time Frame</u>
ARD/CONT	September 1989

3. Close the project files and prepare for forwarding to appropriate storage.

<u>Action Agent</u>	<u>Time Frame</u>
ARD/MGT	October 1989

4. Prepare a contract/project completion statement.

<u>Action Agent</u>	<u>Time Frame</u>
CO	September 1989

