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CARE  
RENEWABLE NATURAL RESOURCES PROGRAM  
FY 1983 ANNUAL REPORT

CARE/USAID MATCHING GRANT  
PDC-0216-G-SS-117-00

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I. Introduction

This report has been prepared in accordance with the requirements of the USAID Matching Grant PDC-0216-G-SS-117-00. The reporting period covers 12 months from July 1, 1982 to June 30, 1983 corresponding to the CARE Fiscal Year 1983.

During the second year of the Matching Grant (MG) CARE's Renewable Natural Resources (RNR) program has grown remarkably. Indeed, CARE has become established as one of the pre-eminent U.S. PVO's engaged in renewable natural resources management, in the developing world. This is in large part due to the support provided by the Matching Grant.

There are now seven MG projects in five countries. Two additional MG projects are expected to begin in fiscal year 1984.<sup>1</sup> Though beyond the scope of this report, it should be mentioned that CARE is undertaking another nine projects in eight countries that fall under the aegis of the RNR program. During 1984 CARE's RNR program will focus less on the development of new projects and concentrate instead on the maturation of the existing portfolio.

Based on actual expenditure to date and projections of future expenditures, we expect that the three year MG period will be insufficient to appropriately utilize all grant funds. Thus, under separate cover we are requesting a nine month extension of the Matching Grant termination date without additional funding. The new grant termination date, if approved, will be June 30, 1985.

<sup>1</sup> This would have completed the Program objective of nine operational projects except that two of CARE-Niger's projects are to be merged this year.

## II. Matching Grant Coordination

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A major benefit of the Matching Grant has been in the area of programming processes: i.e. project conceptualization, design, implementation monitoring and evaluation. This benefit has been realized under the MG through the institution of a comprehensive program coordination structure. Program coordination is really the synergistic result of the existing project support network provided by CWHQ staff for all field activities with the addition of a full-time program coordinator as a catalyst. It consists of five major areas of responsibility:

- Program development, in which rests responsibility of project quality control and approval, programmatic information services, overseas budget allocation and program oversight;
- Personal, which includes responsibility for recruiting and contracting long and short-term staff;
- Procurement, which is directly responsible for all U.S. purchases and reviews and approves plans for local procurement;
- Fundraising, which includes responsibility for public information and donor appeals;
- Finance, which maintains records of and reports on expenditures and controls cash flow.

The benefits of this system of program coordination are numerous. First, it allows a quick response to short-term consultancy needs in many instances at a minimal cost. Second, it ensures a greater degree of consistency in project design. Third, it provides an easily accessible information source for field personnel. Fourth, it provides an in-house resource to assist in technical input required for procurement and personnel contracting. Fifth, it assists in accurately reporting planned and ongoing field activities to official and private donors. These benefits are expanded upon below:

### A. Short-term Consultancy

During the reporting period 141 person-days of short-term technical assistance was provided, over a third of which were met by the program coordinator. Compared with the first program year this represents a 300% greater use of short-term personnel on MG projects. An interesting development in meeting technical assistance needs was the use of CARE's long-term forestry contractors on short-term basis outside of the country of their assignment. Table 1 describes the use of consultancies for the program year.

Table 1: Fiscal Year 1983 RNR-MG Consultancies

<u>Source of Assistance</u>	<u>Country Assisted</u>	<u>Duration (Person-Days)</u>	<u>Assignment</u>
Program	Mali	14	Project Design
Coordinator	Cameroon	9	Monitor Project
"	Ecuador	21	Project Design
"	Bolivia	10	Project Conceptualization
CARE overseas Staff	Mali	14	Nursery/Plantation Design
"	Uganda	21	Project Conceptualization
Short-Term Contractors	Niger	10	Evaluation Design
"	Guatemala	42	Evaluation
Total		<hr/> 141	

This level of consultancy has met the basic requirements of the missions for short-term assistance. During the third program year use of consultancies will shift from project design related tasks to specific problem solving and evaluation tasks. An outline of expected consultancies is provided in Table 2. This plan is tentative as a number of variables may intervene to raise or lower the total number of person days.

Table 2: Fiscal Year 1984 RNR-MG Consultancies

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<u>Source of Assistance</u>	<u>Country Assisted</u>	<u>Duration (Person-Days)</u>	<u>Assignment</u>
Program Coordinator	Bolivia	12	Project Design
	Ecuador	12	Monitoring
	Guatemala	12	Site Planning
	Mali	8	Monitoring
	Niger	12	Evaluation
	Uganda	18	Project Design
Short Term Contractors	Bolivia	10	Project Design
	Guatemala	18	Project Design
	Niger	<u>364</u>	Evaluation
Total		466	

#### B. Project Design

Project design was a major responsibility of the program coordinator during the year. Design efforts were undertaken for five projects, three of which were completed and approved. Two are expected to be completed during the first half of the current fiscal year. Table 3 lists the countries with approximate dates by which key points in the design process were completed.

Table 3: Fiscal Year 1983 Progress of Project Design

<u>Country</u>	<u>Completed Profile</u>	<u>Completed Proposal</u>	<u>Agreement Signed</u>
Niger-Maradi	July 82	Oct. 82	Nov. 83
Ecuador	Dec. 82	March 83	May 83
Mali	July 82	Nov. 82	June 83
Bolivia	March 83	Nov. 83*	Dec. 83*
Uganda	Dec. 82	Dec. 83*	Jan. 84*

\*Expected

It is apparent from Table 3 that the time required to bring project design from the profile or concept stage to initiation of project activities ranges from six to twelve months. This consideration has important implications for MG expenditure rates as described below in Section VI.

Customarily CARE projects have been developed largely by the overseas missions resulting in a variety of approaches to similar problems. This, of course, is warranted given the variability of site conditions, beneficiary needs and capabilities, counterpart capacities, etc. The program coordination structure has allowed CARE to instill a unifying theme to our RNR sectoral program -- community forestry. Community forestry, as defined by the Food and Agriculture Organization of the United Nations, is "any situation which intimately involves local people in a forestry activity". It is understood that "intimate involvement" implies a degree of participation in, control over and direct benefit from forestry activities. It is not limited solely to wage employment. Though physical activities, counterpart agreement, incentive mechanisms and other facets of project design vary widely from project to project, the RNR Matching Grant projects have adopted, without exception, the basic tenets of community forestry.

This theme is repeated throughout the MG projects in a number of ways. First, the final and intermediate goals (goal and purpose in USAID terminology) are expressed with consistent intent. The final goals can be summarized thus: to improve the wellbeing of smallholder farmers through the provision of sustained supplies of fuelwood and the conservation of agricultural productivity. While intermediate goals have a wider range of expression to suit specific project needs they do have similar objectives. These include: institutional strengthening, e.g. staff training, design and evaluation assistance; infrastructure establishment, e.g. nursery establishment, water supply and vehicle procurement; conservation education, e.g. extension visits and audiovisual materials; community development, e.g. organization of reforestation committees and social promotion.

A second important unifying element is the use of a similar approach in MG projects. For example, projects are designed to be self-sustaining. This is fostered by a heavy reliance on the target population's existing resources to produce, plant and maintain tree seedlings. To do this, the projects utilize little or no incentives, simple seedling production techniques, small decentralized nurseries and species whose seed is locally obtainable. We have found that this

approach will work best if the beneficiary communities participate in the planning of project interventions, including species selection, site selection, and design of plantation harvest systems. The communities also must directly receive all or almost all of the benefits of the trees.

C. Information Access

The wealth of scientific literature, fugitive technical documents, newsletters and other RNR-related information that is continually being released is often not available to overseas staff, simply because they are unaware of its existence or cannot readily obtain it. A further difficulty in obtaining adequate information arises, in that of the bulk of information available, only a fraction is really useful to the overseas staff. The program coordination has made a major effort during the year to screen available information and provide document information to MG project staff. It is estimated that, on the average, a document was sent to each overseas mission every two weeks. Sources for this information included the various USAID information services, the USDA Forest Service/USAID Forestry Support Program, FAO and private publishing houses. In addition, a start has been made in exchange of information among the various CARE missions engaged in the RNR projects. This has been facilitated by two ad hoc RNR seminars arranged by the program coordinator.

D. Donor Information

The Matching Grant with its "equal partners" concept has placed a major responsibility on CARE's fundraising effort, described in Section IV. Fortunately, it has had a great deal of appeal to private donors. However, if grant matching is to be fully exploited as a fund raising tool, up-to-date and accurate representation of renewable natural resource problems, program strategy and field activities must be made available on a timely basis. In addition, official assistance donors must also receive information on program status, not to mention a certain amount of consultation on key program issues.

While impossible to accurately quantify the amount of donor oriented information that has been produced during the year, it is fair to state that most, if not all, information needs for donors have been met. Examples of the types of information provided include, of course, the present document. In addition, program coordination has screened fund-raising appeals, drafted fund-raising proposals, assisted in preparation of education pamphlets and audio-visual materials. Samples of this are included as Exhibits. While these activities are

not central to the day-to-day program progress, they are an important long term component of a strong and viable program, and thus, an important secondary benefit of the program coordination.

E. Contracting and Procurement

No project can succeed without timely and appropriate provision of goods and services. The expansion of CARE's activities in Renewable Natural Resources has resulted in a commensurate increase in personnel and procurement requirements. This requires considerable technical expertise in screening potential contractors and developing sources of material and equipment. In these areas the usefulness of the program coordination has been fully developed.

During the past year all MG projects had a full complement of international staff. This has been facilitated by the excellent support CARE has received from the USDA Forest Service /USAID Forestry Support Program which provided names and resumes of candidate foresters. By the end of the year, five forestry project managers were assigned to the seven projects. It should be pointed out that the smallest MG project in Ecuador is being managed in part by a U.S. Peace Corps Volunteer.

Because the MG program emphasizes appropriate technology as the most reliable means to achieving sustainable reforestation models, U.S. procurement requirements are minimal. Nevertheless, a certain amount of technical forestry equipment is needed for project evaluation (mensuration equipment, soil testing kits, etc,) and, to a lesser degree, operational materials and equipment sources are being developed. These procurement requirements were met within the reasonable time limits. Program coordination also reviewed all local procurement plans for justifiable need and correct procurement practices.

During the year there were no major delays in project implementation or shortfalls in activity target accomplishment attributable to delays in procurement. It is estimated that approximately one fourth of the program coordinator's time was devoted to these two activities. Here again the Matching Grant has proven to be valuable in meeting the program goals.

### III. Country Project Reviews

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The Renewable Natural Resources program has seven projects under way in five countries: Cameroon, Ecuador, Guatemala, Mali, Niger (3). In the first annual report we had stated that three new projects would be developed for Mali, Nepal and Niger. These were, in fact initiated in the reporting year although it has been decided that the Nepal project will not be included in the Matching Grant. However, a project in Ecuador was added completing the objective of three new projects during the year. Design activities are nearing completion for projects in Bolivia and Uganda which are expected to be added to the MG portfolio this year.

Given the merging in July 1983 of two of Niger's three projects, only eight projects will be operational during FY 84. A question remains if another project should be added to complete the MG program objective of nine fully operational projects. This will be answered in consultation with USAID early in FY 84. If it is decided to add another project this will be done, probably in the Latin American region, as early as possible.

#### A. Cameroon- Community Forestation

##### Project Synopsis

This project is located in the Mandara Mountain Region of Northern Cameroon. Its purpose is to establish village level agroforestry programs to augment firewood supplies, check erosion, maintain soil fertility and increase fruit production. The project officially began in the first trimester of FY 83 with the signing of an accord with two Government of Cameroon (GURC) agencies, the National Office of Forest Regeneration (ONAREF) and Community Development (CD). The project supports two central ONAREF managed nurseries at Mokolo and Mogode which produce a variety of fuelwood, timber and fruit species. Four small village-managed nurseries have also been established which contribute seedlings to the project.

##### Progress Report

Total nursery production for the project in FY 84 was 86,300 seedlings, some 14% below the planned level of output. This was attributable to several unforeseen events. The preparation of seedling containers was late, which delayed seeding in both the centralized and village nurseries. In addition, the four villages in which nurseries were started did not feel capable of raising the targeted amount of 5,000 seedlings each. Instead nursery size was determined by

what the villages decided that they could effectively maintain. CARE believes the operation of small but successful nurseries the first year, will facilitate future expansion of the project.

The two ONAREF nurseries fell about 3% short of their commitment to produce 80,000 seedlings. Germination rates were low due to some technical problems, however this will be rectified through training and introduction of more reliable techniques.

Furthermore, during FY 83, the project did not receive the technical and extension assistance from ONAREF that had been planned. Fortunately, another GURC agency, the Service of Water and Forests, was able to temporarily assign two foresters to the project to take the place of the two ONAREF agents. They received a two week training course in March emphasizing nursery and extension skills. The project is, however, short two Community Development Agents.

No outplanting was scheduled to take place in FY 83, but 10 villages have been identified as sites for FY 84 plantations, using the nursery stock produced this year. These villages were visited by the two foresters, who used educational material developed by the project to convey to the rural population basic concepts of community forestry. This material consists of a set of flip charts which address the benefits of forestation, the different types of plantation, and the techniques of forestation.

Most of the foresters' extension visits were aimed at setting up and maintaining the four village nurseries. Each village was visited at least twice a week. In addition a seminar for school teachers and agricultural monitors from the project zone was held to familiarize key people in the community with project goals and basic environmental principles. This seminar was coordinated with the visit to the project by the new Director General of ONAREF who presented the opening address. This visit was very useful as it gave high ranking ONAREF officials a chance to see the CARE project at work on the nursery and village level.

#### Problems Encountered

The most serious problem facing project continuity is the failure of the GURC to appoint counterpart personnel. The need for this personnel cannot be overstated, and implementation of the project will suffer if they are not provided in the very near future. Efforts are being made to ensure that personnel are assigned as quickly as possible.

Although it had no effect on seedling production in FY'83, difficulties were experienced at the Mokolo nursery due to insufficient water from the nursery well. Although CARE deepened the well to between eight and nine meters, solid rock and a poor recharge rate were encountered. A community tank truck was borrowed to transport water into the nursery, however, a more permanent solution will be sought during FY'84. Table A shows the level of achievement of project activity targets (PAT) for FY 83.

TABLE 4 Cameroon - Community Forestation FY 83 PAT Achievement

<u>Activity</u>	<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
Reinforce ONAREF Nurseries	2	2	100%
Establish Village Nurseries	4	4	100%
Seedling Production			
ONAREF Nurseries	80,000	77,600	97%
Village Nurseries	20,000	8,700	44%
Total	100,000	86,300	86%
Conduct Community Extension Visits	50	96	192%
Select Participant Village	10	10	100%
Conduct Forester Training course	1	1	100%
Conduct Seminar for Teachers and Agricultural monitors	1	1	100%

### Future Plans

Outplanting of the FY'83 nursery stock will take place during FY'94 in the 10 selected villages. Woodlots will be established in each village, and agroforestry systems will involve planting of windbreaks and Acacia albida trees in farmers fields.

During FY'84 CARE will support two additional ONAREF nurseries in the divisions of Koza and Meri. The project's extension activities will expand into these areas as well. Six new village nurseries will be established. During this year agroforestry extension and village nursery production will become increasingly important. The total nursery output is projected at 210,000 seedlings. As the number of village nurseries increases, the percent of total tree production from the centralized nurseries will decrease in accordance with the community development objectives of the project.

GURC counterparts will participate in training programs, and will make 105 extension visits to villages already involved in project activities and to new communities which will be selected for project expansion. They will also make 20 plantation maintenance visits. Two village nursery training courses will be conducted in order to upgrade their seedling production skills.

### B. Ecuador - Community Forestry Systems

#### Project Synopsis

This project, which was initiated in late FY 83, will fund fuelwood and agroforestry plantations on communal and private lands of the Saraguro tribe in the highland province of Loja. The project will utilize a local agricultural training school to operate a central nursery and provide extension services to participating communities. Three community nurseries also will be established.

#### Progress Report

A tripartate agreement between CARE, the Ministry of Agriculture (MAG), and the Provincial Council of Loja was signed in May 1983. CARE then proceeded with procurement of materials and equipment according to schedule.

The only other major project activity was a two week training course given to eight extension agents. Topics that were addressed included nursery management, fruit tree cultivation, and extension skills. A final test was given on the material that had been covered and the grades showed a high level

of assimilation. An artist was hired to design a set of flip charts to illustrate concepts that were introduced in the seminars. These visual aids will be used again in future training programs.

TABLE 5 Ecuador - Community Forestry Systems FY 83 PAT Achievement

<u>Activity</u>	<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
Training Program for Extension Agents	1	1	100%
Extension Agents Trained	8	8	100%

Problems Encountered

Coordination with the Ministry of Agriculture may prove to be a project constraint, insofar as there exists a deep-seated distrust of MAG on the part of the Saraguro tribes-people. MAG participation, albeit on a limited basis, was deemed essential nevertheless, in order to promote replicability, a primary goal of the project.

Future Plans

Baseline data for evaluation purposes will be collected during the first trimester of FY'84, and a report will be produced based on the findings. This information will be used to measure progress during a formative project evaluation to be held in the third project year.

Implementation of field activities will begin during FY'84. One central nursery will be established in the town of Saraguro, and 2 community nurseries will be started in the outlying region. A total of 344,000 forest tree seedlings will be produced, using the following species: Pinus patula, Eucalyptus globulus, Alnus jorullensis and various native hardwoods. In addition 6,000 fruit trees will be produced for homestead planting.

280,000 forest tree seedlings will be outplanted in 10 community plantations in the Saraguro county (canton) in forest species plantations. The remainder of the forest trees will be planted in species trials and a silvo-pastoral trial plot.

The extension component of the project will train three more extension agents, and produce two forestry manuals to be used by project personnel in the field. The extension agents will conduct 60 group meetings and will make 600 farm visits.

### C. Guatemala - Reforestation and Soil Conservation

#### Project Synopsis

The Guatemala Reforestation and Soil Conservation project is one of the largest community based forestry projects in Central America. It is a truly cooperative effort between five major collaborators: the Guatemala Forest Service (INAFOR), CARE, Peace Corps, USAID and the participating communities. The project supports a nationwide network of nurseries and plantations for timber, fuelwood and soil conservation purposes, and also introduces mechanical soil conservation techniques.

This project has been hindered somewhat by the political instability of the region, however, CARE believes that it is important to continue to support even problematic sites. The project is now operating in 60 communities, nevertheless it would be unrealistic to expect full participation from some of the villages involved.

#### Progress Report

Guatemala has a bimodal rainy season with the short rains occurring during June-July, and the long rains taking place during September-October. Translated into the terminology of CARE's fiscal year, this means that most of the outplanting takes place during the first and third trimesters, with seedling production continuing year round.

In the first trimester of FY 83, the project planted 95% of the planned 2 million seedlings. The remaining 5% were planted during the second trimester. During the third trimester however, only 20% of the projected 2 million seedlings were outplanted. Seedling production did not keep pace with planned output either, with a total shortfall of 50%.

TABLE 6 Guatemala Reforestation and Soil Conservation:  
Nursery Production and Outplanting

<u>Activity</u>	<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
Number of Community Nurseries	75	60	80%
Average Seedling Output per Nursery	53,000	33,333	63%
Total Seedling Production	4,000,000	2,000,000	50%
Total Seedling Outplanting	4,000,000	2,400,000	60%
Pasture Planting (ha.)	20	9.6	48%

There are a number of interrelated factors contributing to the project's failure to achieve its targets. Among these, the primary reason was the programming decision made to decrease the planned number of communities involved from 75 to 60. The rationale for this was based on increasing political instability and INAFOR's inability to provide field coordinators and extensionists in certain regions. In addition, fewer PCV were assigned to the project than had been expected.

The community nurseries were expected to produce an average of 53,000 seedlings/year, however, the nurseries proved unable to meet this goal in FY 83. This low nursery output has two underlying causes: (1) INAFOR budget cutbacks have reduced the number of full time nursery workers; and (2) in the Oriente region, where a large portion of project activities are concentrated, FFW commodities are not perceived as sufficient incentive for community participation in seedling production.

A formative evaluation of the project by an independent consulting firm took place during FY 83. The evaluation team submitted a comprehensive final report including a number of technical and administrative recommendations.

Their suggestions for improved nursery management involve introduction of new techniques which would increase efficiency and output. Copies of this evaluation have been submitted under separate cover.

CARE estimates a survival rate of 55-60% for one year old plantations established under the project's auspices. A more systematic approach to data collection is needed, and extensionists have been provided with training in how to measure and report survival rates. Access to the plantations is constrained, however, by the fact that they are often located on privately held land and are widely dispersed throughout areas where security is at risk.

This project also undertakes a number of soil conservation activities including terracing and construction of contour ditches, live and dead barriers and compost bins. The amount of terraces built surpassed expectations by 59%. During FY'83, it was decided that in order to record progress on construction of contour ditches and live and dead barriers, figures should be reported in terms of area treated (m<sup>2</sup>) rather than in linear terms (m). This created some confusion in spite of the training given to extensionists to aid them in measuring and reporting accomplishments.

The new system has now been instituted, however early estimates of area protected were so widely divergent that an equivalence of 11 m<sup>2</sup> for every linear meter of contour ditches or barriers is used in reporting FY 83 figures. The unusually high level of output cited for live and dead barriers is largely due to work carried out in two "over-achiever" communities. The lack of emphasis on construction of compost bins by extensionists is reflected by the significant shortfall for this activity.

TABLE 7

Guatemala Reforestation and Soil Conservation:  
Mechanical Soil treatment

<u>Activity</u>	<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
Terracing (m <sup>2</sup> )	570	905	159%
Contour Ditches:			
Linear (m)	327,000	260,800	
Area Protected (m <sup>2</sup> )	3,597,000	2,869,000	80%
Live and Dead Barriers:			
Linear (m)	10,000	269,900	
Area Protected (m <sup>2</sup> )	110,000	2,969,000	2699%
Compost Bins (m <sup>2</sup> )	7,000	3,700	53%
Soil Conservation (person/days)	73,000	75,800	104%

During FY 83, construction of fuel efficient lorena stoves was initiated as an additional project component. The principle activity involved training of extensionists who introduced the stove construction technology to 20 pilot sites. Although implementation startup was slow, once the training program was completed the rate of stove construction quickly compensated for earlier delays. It is now obvious that the demand for trained extensionists greatly exceeds preliminary projections. This demand will be met by organizing a formal series of training seminars during FY 84.

In order to strengthen the project extension program, three in-service training programs were conducted in October. Each 3½ day seminar consisted of courses on local administrative controls and reporting, and use of pesticides and pest management. The administrative section of the seminar had as its principal goal the promotion of uniformity in activity reporting methods, FFW material controls and local data collection for intermediate goal measurement (e.g. tree survival rates). Follow-up guidance is being provided by INAFOR field coordinators and PCV's. The one week course in lorena stove construction mentioned above was provided to 20 specially selected extensionists in November. A total of 980 conservation demonstrations were presented by extensionists to local participants. This represents 98% of the planned activity target, most of which took place during the final trimester.

TABLE 8 Guatemala Reforestation and Soil Conservation:  
Training & Conservation Education

<u>Activity</u>	<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
In-Service Seminars	3	3	100%
Number of Extensionists Participating in Seminars	72	60	83%
Conservation Demonstrations Conducted	1000	980	98%
Lorena Stove Training Program	1	1	100%
Number of Extensionists Participating in Lorena Stove Training	20	20	100%
Number of Lorena Stove constructed	300	498	166%

### Problems Encountered

A major setback has been nationwide INAFOR budget cuts. This has limited availability of field coordinators and extensions staff, because vacant positions are not being filled. As a stopgap solution, it has been proposed that existing personnel in neighboring areas to take over responsibility for coordinating the neglected sites.

A serious logistical problem is faced by the lack of INAFOR funding for fuel and maintenance of vehicles. This has limited the mobility of the field coordinators and has caused problematic lapses in FFW commodity and nursery material deliveries to project sites. In June a new agreement was signed with INAFOR in which a phrase was added to the effect that "necessary maintenance and sufficient fuel" will be provided to all vehicles involved in project logistics. It is hoped that this will provide CARE with more leverage in the resolution of such matters during FY '84.

Another problem has been identified in regard to the priority assigned by extensionists to the various project components. In looking at the tables it is obvious that there have been imbalances in the amount of effort expended on different activities. Certain interventions have been over emphasized to the detriment of others. CARE will address this issue by strengthening its training programs, and by providing thorough and frequent follow up visits.

Another problem recognized is in the reporting of project activity targets. Discrepancies are particularly noticeable in the recording of person/day inputs. This seems to be due to some misapprehensions on the part of a number of extensionists who differentiate between labor inputs for which no incentives were provided, and labor which was reimbursed through FFW commodities.

Additional training has been provided in order to ensure that all person/day inputs are accounted for and to increase accuracy in other areas of record keeping. It is evident that assumptions regarding the correlation of person/day inputs vis a vis land area treated need to be re-evaluated as well. By utilizing a random sample of test plots where these variables can be carefully monitored, new correlations can be derived which will enable CARE to set realistic activity targets.

The efficacy of using FFW incentives in the Oriente region has come under question. It has been determined that it would be prudent to re-evaluate the necessity of providing the commodities in order to motivate participation in the project. For this reason, no FFW commodities were requisitioned for the Oriente during the third trimester.

### Future Plans

Plans for FY 84 show reduced seedling production and outplanting targets. This reflects program goals aimed at reaching 68 communities through the extension of reforestation practices. Average nursery production is expected to be 40,000 seedlings for a total output of 2,800,000 seedlings. By the end of FY 84, 2.8 million seedlings will have been outplanted as well.

Mechanical soil conservation interventions directed at terracing, and live and dead barriers will be expanded during FY 84. Construction of compost bins and contour ditches will be somewhat reduced. Other project activities will be continued at approximately the same level of intensity as in FY 83.

Three in-service training programs will take place during the year, scheduled for October, February and May. In November a special short course in lorena stove construction and maintenance for selected project extensions will be given.

### D. Mali - Village Agroforestry

#### Project Synopsis

The project will establish three village-managed nurseries and one central, project-managed nursery in the county (cercle) of Koro in Mali's Fifth Region, Mopti. The nurseries will produce indigenous hardwood tree species for live fencing, public weal, windbreaks and woodlots as well as indigenous and exotic fruit tree seedlings. Most of the seedlings produced will be planted by smallholder families and villagers on their own fields or homesteads.

#### Progress Report

The project proposal was completed and approved by November 1983. However, there was considerable resistance to accepting the concept of community management of nurseries by some officials of the Government of Mali (GOM) Service of Water and Forests. Finally in the spring of 1984, agreement was reached and the project officially began on June 10, 1984.

Activities during the year were limited to planning and procurement. Completed planning activities include: a detailed implementation plan, personnel contracting and training plans, an extension plan, detailed evaluation

plans, and nursery site selection. Procurement was initiated immediately upon signing of the agreement but no items were actually delivered, thus no expenditures during the reporting year are shown for this project.

#### Problems Encountered

The major problem encountered was the delay in signing of the project agreement. The GOM Service of Water and Forests has maintained with rare exception, the traditional Sahelian forestry service approach of policing natural forests and foresting government owned nurseries and plantations. The USAID/Mali Village Reforestation project (No. 625-0937) was a major shift in this policy. However, this project's nurseries are managed exclusively by the GOM. CARE's project design took this new policy direction a step further by proposing village management of the nurseries. Eventually a compromise was reached in which seedlings will be produced under both village and government auspices. All outplanting, however, will be privately managed with the exception of seedlings destined for public weal.

Because of the delay, the 1983 planting season was missed entirely. However, it is CARE's opinion that it was better this than to forgo the opportunity to attempt the introduction in Mali of an innovative approach to reforestation.

#### Future Plans

During the first half of FY 84 the project infrastructure will be established. This includes fencing the four nurseries and digging their wells, construction of a small project field office, and rental of staff housing and a warehouse. Hiring and training of project-paid staff and detailing of GOM counterparts will be a second major activity during this period. As the staff is trained, community promotion and extension activities will begin in earnest.

The second half of FY 84 will be devoted to nursery production, and extensive promotion and extension will continue. The relatively small number of seedlings (22,500) that will be produced reflects the need for starting small with community managed nurseries. Outplanting will not take place until FY 85.

E. Niger

Unfortunately, the late arrival of the 1982 rainy season and flooding that occurred when it did arrive had significant negative impact on the success of the FY 83 outplanting of tree seedlings. As a result of the poor survival of seedlings in Keita we have decided to shift some activities to more productive sites. To facilitate this change, beginning in FY 84 the Keita and Bousa will be merged into a single project to be known as the Tahoua Reforestation Project. This project will include all CARE reforestation activities in the Department of Tahoua which includes the arrondissements of Keita and Bousa.

During the year the Government of Niger's (GON) Service of Water and Forest has assumed a larger role in project administration. Approximately one-third of local operational costs are managed by the GON counterparts. However, because of a GON austerity policy all operational costs continue to be met by CARE. The GON contribution to project input is limited to the salaries of counterpart personnel, and field office costs.

Given the strength of our reforestation activities in Niger, CARE has initiated a third project in the Department of Maradi. Though not without some start-up problems, we believe this project has made an impressive beginning. We feel this project demonstrates CARE's and the GON's commitment to community forestry and establishes the feasibility of replicating the approach on different sites.

The difference between CARE's fiscal year schedule and the seasonal schedule which governs any reforestation campaign makes reporting of the Niger project's somewhat confusing. The bulk of nursery production takes place during the final trimester of the fiscal year (March 1-June 30), however out-planting of the seedlings does not occur until the first trimester of the subsequent fiscal year (July 1-Oct. 30).

1. Bousa Reforestation

Project Synopsis

CARE and the GON Service of Water and Forests entered into an agreement in 1974 to undertake a forestry project to counter the effects of erosion and declining soil productivity. Known as the Bousa Reforestation project, it now encompasses a variety of activities in several communities. The first windbreaks were planted in the Majjia Valley in 1975. Since then, other

efforts aimed at dune stabilization, riverbank protection and free distribution of seedlings to the local population have expanded the project's scope and impact.

CARE has five nurseries operating in the Bousa arrondissement. The main nursery is located in the town of Bousa, and it supplies seedlings for riverbank protection. The Karaye nursery, one of Bousa's oldest, is situated in the northern zone of the Majjia Valley. Tama and Taboye nurseries are also in the valley but are located further south. The primary function of these three nurseries is to produce seedlings for windbreaks, although Tama also contributes towards riverbank protection. The Yegalalane nursery is located about 14 km north of the town of Bousa. It serves the dune fixation project and riverbank protection measures. All of the nurseries also provide seedlings for free distribution to the local population.

#### Progress Report

During the year the GON Service of Water and Forests assumed responsibility for managing 56% of the funds budgeted in the CARE - GON project agreement. The principal categories for which they control expenditures include worker salaries, expendable materials, and vehicle maintenance. The construction of the Bousa Water and forests office building was completed in May, and has been turned over to the forestry officer in charge.

Outplanting of the FY 82 nursery stock took place during the first trimester. However, the young plants suffered considerably from poor weather conditions. The total number of seedlings outplanted or distributed to community members reached 99.6% of the targeted amount. A prolonged lapse in rainfall in July was followed by flooding on some sites in August. Outplanting was delayed until September in some areas, and seedling survival was low throughout the plantations. Of the 30 km of windbreaks planted in the Northern part of the valley (Karayé), 50% of the trees survived. The seedlings lost will be replanted during the FY 84 campaign. The southern valley windbreak sites (Taboyé) have a good survival rate which will require only minimal replacement plantings.

Dune stabilization efforts at Yegalalane accomplished more than was planned. A total of 11.5 were treated with millet stalk windbreaks and planted using 13,500 seedlings. Another 4,350 seedlings were used for replacement plantings on 1981 dunes.

Table 9 Bousa Reforestation: Outplanting of FY 82 Nursery Stock

<u>Site</u>	<u>Activity</u>	<u>Number of Seedlings Outplanted</u>		<u>Area Planted or Protected</u>		<u>% of Target Realized</u>
		<u>Target</u>	<u>Realized</u>	<u>Target</u>	<u>Realized</u>	
Bousa	Riverbank Protection	10,000	8,700	4.5 km	4 km	87%
	Free Distribution	10,000	14,300		-	143%
Karayé	Windbreaks: New Lines 1982	15,000	15,000	30 km	30 km	145%
	Replacement of Old Lines 1981		6,800	-	13 km	
	Free Distribution	15,000	9,660	-	-	64%
Tabcyé	Windbreaks: New Lines 1982	15,000	15,000	30 km	30 km	140%
	Replacement of Old Lines 1981	-	6,000	-	12 km	
	Free Distribution	15,000	3,820	-	-	25%
Yegalalane	Dune Stabilization	15,000	17,850	10.5 ha	11.5 ha	119%
	Free Distribution	20,000	17,500	-	-	88%
Total seedlings outplanted or distributed		115,000	114,630			99.6%

The nursery at Tama was established in FY 83, and the first seedlings were produced there during the final trimester. An inadequate water supply at Karaye led CARE to contribute 50% of the cost of an additional well there. The rest of the cost was borne by the local sub-prefecture with the understanding that the community will have access to the water. Wells at Tama and Taboye nurseries were deepened and cleaned.

Overall production of seedlings reached 75% of the planned output for FY 83. Shortfalls in seedling production are attributable to poor seed quality which resulted in low germination rates; inadequate water supply at some nurseries, in spite of efforts undertaken to deepen wells; and insufficient supervision of nursery workers by Service of Water and Forests personnel.

In FY 83 the Yegalalane nursery was the only project nursery to surpass its planned production of seedlings for free distribution. The negative deviations seen for this activity at the other nurseries reflects the lower priority accorded to free distribution. Seedling requirements for other activities must be met before plants may be allocated for distribution to community members.

TABLE 10 Bousa Reforestation: Seedling Production FY 83

<u>Site</u>	<u>Activity</u>	<u>Number of Seedlings Produced</u>		
		<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
Bousa	Riverbank protection	15,000	15,000	100%
	Free distribution	10,000	7,000	70%
Karaye	Windbreaks	20,000	13,000	65%
	Free Distribution	10,000	-0-	0%
Taboye	Windbreaks	20,000	14,600	73%
	Free distribution	10,000	3,700	37%
Tama	Riverbank protection	10,000	10,000	100%
	Free distribution	5,000	2,000	75%

TABLE 10  
(continuation)

<u>Site</u>	<u>Activity</u>	<u>Number of Seedlings Produced</u>		
		<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
Yegalalane	Dune stabilization	16,000	16,000	100%
	Riverbank	4,000	4,000	100%
	Free distribution	5,000	8,900	178%
Total seedling production		125,000	94,200	75%

A 100% inventory of the Majjia Valley windbreaks has been completed for the planting years 1975-1981. The results have been analyzed and show an overall seedling survival rate of 63%. A full analysis of the distribution of losses over the entire valley is not yet available. Continuous inventory sample plots have been established in the windbreaks to measure height and diameter of individual sample trees. This information will be used to derive growth and yield tables.

An exploratory investigation of the feasibility of the sale of tree seedlings has been undertaken. Although the results are not complete, some initial interest has been generated among GON foresters. It has been proposed to market seedlings through interested Village Development Councils, which would be responsible for setting prices and for using the sales income to further other forestry activities in the community. There is still some opposition to this plan, however, and it will probably not be operational during FY 84.

Collaboration has begun with Dr. Ray Beal, a researcher at the Pacific Southwest USFS Research Station at Berkeley, California to identify termite species residing on windbreak trees and advise on methods of treatment. Although no superficial damage to the trees by the insects has been observed, it is possible that some internal infestation has occurred. It has been decided, in any case, that chemicals such as Dieldrin and Lindane will not be used by the project to eradicate termites. They are prohibited in the

U.S. and their use should not be encouraged elsewhere.

The windbreak harvesting trials that were scheduled to take place this year were postponed when it was realized that there were a number of complex issues involved which required more careful consideration. A proposal for a multi-disciplinary evaluation study has been prepared which addresses these issues. This study will integrate the wood harvesting experiment with research into the impact of the windbreaks on crop yields and soil erosion, and with socio-economic analysis of the project's effect on the area. This study will form the basis for a project evaluation scheduled to take place in FY 84.

#### Problems Encountered

Poor survival rates are due to the inconsistent rainfall experienced this year and a related problem, the choice of species and locations by the GON forester. Sites in the Northern Valley are on heavy clay soils which are periodically inundated and are used to grow sorghum. The Neem (Azadirachta indica) seedlings which were planted there will not withstand flooding, and cannot compete effectively for light with cereal crops which were already six feet tall when the seedlings were set out. CARE is concentrating its efforts on encouraging the GON forester to select more appropriate species, or to avoid these sites altogether.

#### Future Plans

As mentioned earlier, during FY 84 the Bousa and Keita projects will be combined into one project, Tahoua Reforestation. This will allow a gradual phasing out of activities in the Keita arrondissement, the reasons for which are elaborated further in its progress report. Activities at the Bousa sites will continue to be supported.

A total of 205,000 seedlings will be outplanted during the first trimester of FY 84. In the latter part of the year, 175,000 seedlings will be produced for use in FY 85 outplantings. In addition to the centralized nurseries, small private and village nurseries will be established which will produce another 25,000 seedlings.

CARE also proposes to undertake an intensive field evaluation of the Majjia Valley windbreaks. The proposal for this study which is described above, will be submitted to USAID separately. In addition, an inventory of living saplings will continue with the survey of the 1982 windbreaks. It will be expanded to encompass the Yegalalane zone during the next reporting period. The area of stabilized dunes will be measured and mapped on 1/50,000 topographic maps. This information will be used to determine the area of agricultural land protected by the dunes.

## 2. Keita Reforestation

### Project Synopsis

Located less than 50 km from Bousa, the Keita project has undertaken similar types of activities: windbreaks, woodlots and live fencing. The project operates in two arrondissements, Keita and Gadamata, each of which has a centralized nursery. Reforestation efforts began at both sites in FY 80. This project has not achieved a high level of success for reasons outlined below.

### Progress Report

A new GON forest officer was assigned to the project in FY 83. It was hoped that he could demonstrate the leadership that this project lacked. Disappointingly, he has not lived up to these expectations. The GON was, however, able to manage a full one-third of project funds stipulated in the GON-CARE project agreement.

In the early part of FY 83, 6 km of new windbreaks were established in Keita arrondissement. Replacement plantings of the 1982 windbreak lines and the three existing woodlots took place as well. Survival of the outplanted seedlings, however, was nil due to delayed outplanting, poor site selection, erratic rainfall as well as a lack of GON and community rapport. In Gadamata, 14.4 km of windbreaks and 3,500 replacement seedlings were planted. Of these 11% survived. The 2 ha woodlot that was established there was the only significant success with an 85% survival rate.

Live fences were planted around the woodlots to discourage grazing livestock. The remainder of the seedlings were distributed locally for compound shade trees. In both arrondissements the project did not meet its targeted levels of outplanting for various activities. This shortfall was principally attributed to institutional deficiencies of the GON. This was exemplified by poor nursery management during FY 82, and a lack of coordination with landowners in the area in which the trees were to be planted.

Because inclement weather conditions delayed outplanting the seedlings had a reduced probability of survival. Under the circumstances, a decision was made to give many of the plants away through the free distribution program. The recipients of these seedlings usually plant them in their compounds, where they benefit from occasional waterings. Survival rates of these seedlings are not measured.

Table 11 Keita Reforestation: Outplanting of FY 82 Nursery Stock

<u>Site</u>	<u>Activity</u>	<u>Number of Seedlings Outplanted</u>		<u>Area Planted or Protected</u>		<u>% of Target Realized</u>
		<u>Target</u>	<u>Realized</u>	<u>Target</u>	<u>Realized</u>	
Keita	Windbreaks: New Lines 1982	22,800	3,350	40 km	6 km	
	Replacement of Old Lines 1981	-	2,500	-	5 km	26%
	Vested Woodlots	6,200	4,100	10 ha	6.5 ha	66%
	Live Fencing and Free Distribution	15,000	33,000	-	-	220%
Gadamata	Windbreaks: New Lines 1982	20,000	10,900	26 km	14.4 km	
	Replacement of Old Lines 1981	-	3,500	-	4.6 km	72%
	Vested Woodlots	5,000	1,680	8 ha	2 ha	34%
	Live Fencing and Free Distribution	15,000	16,000	-	-	106%
Total Seedlings Outplanted or Distributed		84,000	75,030			89%

During FY 83 nursery output was high for both Keita and Gadamata. Seedling production was 88% of the targeted figure for the department. The shortfalls noted for windbreaks reflect a mid-course programming change i.e., a reduction of the planting target to 10 km instead of 15 km per zone. What additional shortfall did occur is attributed to poor seed quality. Much of the credit for the significant improvement in nursery management belongs to the two PCV's who were assigned to the project.

Table 12 Keita Reforestation: Seedling Production FY 83

<u>Site</u>	<u>Activity</u>	<u>Number of Seedlings Produced</u>		<u>% of Target Realized</u>
		<u>Target</u>	<u>Realized</u>	
Keita	Windbreaks	15,000	11,000	73%
	Vested Woodlots	2,250	-0-	0%
	Live Fencing	2,400	2,500	104%
	Sale or Free Distribution	15,000	15,400	103%
Gadamata	Windbreaks	14,000	10,000	71%
	Vested Woodlots	1,500	1,500	100%
	Live Fencing	1,600	1,600	100%
	Sale or Free Distribution	10,000	12,400	124%
Total Seedling Production		61,750	54,400	88%

Problems Encountered

As was the case in the northern part of the Majjia Valley, the Keita project experienced severe seedling mortality. This problem is due to a combination of poor site and species selection and erratic rainfall patterns. Neem seedlings were planted on clay-sorghum soils which are subject to periodic inundation. Lack of rainfall prevented outplanting in July, and flooding made it impossible during much of August. The seedlings were therefore late getting in the ground, and suffered severe competition from crops which overtopped them.

Future Plans

The Keita project will be combined with the Bousa project under Tahoua Reforestation, as has been previously mentioned. Activities in Keita in FY 84 will

consist of outplanting the seedlings which were produced in the nursery this year. However, a new cycle of nursery production will not take place in Keita arrondissement, as it has been decided to phase out future activities there.

The poor results over the past year do not show sufficient promise of improvement, therefore continued input into the area is not justified. The sharply reduced programming in Keita arrondissement is a move to reallocate resources in an effort to improve return on investment. CARE will continue to support activities in Gadamata arrondissement, as well as some individual mini-nursery operators in Keita and will provide guards for those plantations which merit protection until they are mature.

### 3. Maradi Agroforestry

#### Project Synopsis

FY 83 was CARE's introductory year in the department of Maradi. Efforts are concentrated in the Aguié arrondissement at two sites, Gazaoua and Assaya, each of which has a centralized nursery. Planned activities include windbreak establishment, sale of seedlings for private woodlots, distribution of seedlings to the public weal (school yard, dispensary and market shade-trees) and private production.

#### Progress Report

Once the GON-CARE protocol was signed, the Service of Water and Forests took over management of almost 10% of the FY 83 budget. They will be responsible for more in the future. Baseline data, regarding current agricultural and forestry practices, and other land and energy use issues, was collected in the field over a period of three months. This information will be used for future evaluation of project impact. Two wells have been completed, one within each nursery. Delays in construction hindered nursery production to some extent, however other factors proved to be more serious constraints to seedling output.

The total Aguié arrondissement seedling production was 57% of planned output. Part of this shortfall is due to the fact that no private nurseries were established in Gazaoua as had been planned. Twelve small, farmer-managed nurseries were started in Assaya, but their total production was also lower than planned.

No outplanting was scheduled to take place during FY 83. The seedlings that have been produced will be planted during the first trimester of FY 84.

Table 13 Maradi Agroforestry: Seedling Production FY 83

<u>Number of Seedlings Produced</u>				
<u>Site</u>	<u>Activity</u>	<u>Target</u>	<u>Realized</u>	<u>% of Target Realized</u>
Gazaoua	Windbreaks	13,300	10,000	75%
	Public Weal	6,700	2,000	30%
	Sale to Individuals	5,000	1,900	38%
	Private Nurseries	5,000	-0-	0%
Assaya	Windbreaks	13,300	10,000	75%
	Public Weal	6,700	2,000	30%
	Sale to Individuals	5,000	7,000	140%
	Private Nurseries	5,000	1,600	32%
Total Seedling Production		60,000	34,500	58%

Problems Encountered

The major problems encountered involve nursery production shortfalls. A number of reasons can account for this discrepancy. Well construction turned out to be more time consuming than had been foreseen. Without water, seedling germination had to be delayed. The Maradi nurseries also suffered from poor seed viability, which lowered germination rates. In addition, the nursery crews in this department are somewhat inexperienced, and supervision and technical guidance are lacking. More advanced nursery techniques such as seed scarification and stratification are not employed. A PCV assigned to the project will be able to introduce these and other methods of nursery management in order to upgrade standards of seedling production in the future.

### Future Plans

During the first trimester of FY 84, outplanting operations will be completed using the FY 83 nursery stock. At each of the Gazaoua and Assaya sites 20 km of windbreaks will be established. Seedlings will be sold to 100 families in each of the project zones. In addition, 13,400 seedlings will be distributed for the public weal.

A total of 110,000 seedlings will be produced in FY 84. 85,000 of these will be provided by the two centralized nurseries, with another 25,000 raised in village and private nurseries. An additional project activity, the planting of Gao trees (Acacia albida) in the fields which are protected by windbreaks, will begin in 1985. This will require that the Gao seedlings be started in the nursery during FY 84.

Thirty-one local forestry promoters will be recruited and trained to carry out an extension program at the community level. They will select, train and assist farmers and villagers who will participate in the establishment of 10 private nurseries and 10 community nurseries.

F. New Projects Planned for FY 84

It is expected that two new MG projects in Bolivia and Uganda will begin in FY 84. Project profiles have been received from these missions and they have been authorized to develop complete project proposals. These are discussed below:

1. Bolivia -- Integrated Natural Resources Management

This project will address the serious problems of renewable natural resource degradation in the mid-altitude hilllands of three Bolivian states; Tarija, Chuquisaca and Oruru. As the title implies, it will focus on a broad range of resources including soil, water, forests and range lands.

CARE counterparts will be the Regional Development Corporations of the three departments. Activities will begin in the departments of Tarija and Chuquisaca in FY 84. It is expected that Oruru will be added in FY 85. These corporations are semi-autonomous, state government entities responsible for the bulk of GOB rural development projects. CARE has been working with them for some eight years in separate activities.

The Corporations are organized ideally to be counterparts for the proposed MG project as they already have multi-disciplinary departments responsible for the management of natural resources. However, in the past their various resource management activities have been independently undertaken. With the support of CARE's MG project this will be changed so that the Corporations' activities are integrated in order to obtain an optimal multiple-use mix. To do this CARE will utilize a watershed management systems approach in the project's execution. The project will operate on small watersheds (less than 10,000 ha) with a mix of project activities to be determined on the basis of site characteristics, community priorities, as well as economic and environmental soundness. The activities will include reforestation, soil conservation, small irrigation systems and simple range management techniques.

The Corporations currently receive PL 480, Title III funds from the AID/Bolivia mission which, to a limited extent, are being used in activities that are complementary to the proposed MG project. CARE hopes that the MG project will incorporate these and, perhaps, additional Title III local currency as a significant component of the project budget. Discussions concerning this joint application of MG and Title III funds have been initiated with the AID/Bolivia mission and the Corporations, however, it is too early to determine if we will be successful in developing this funding mechanism.

## 2. Uganda -- Integrated Forest Conservation

This project will address the problems causing deforestation in Uganda with special emphasis on Forest Reserves. Project conceptualization began in the second trimester of FY 83 as a result of a suggestion by the head biologist from the New York Zoological Society's (NYZS) Kibale, Uganda field research station. The Kibale forest reserve is typical of all of Uganda's parks and reserves in its endangerment from encroaching farmers, herders and wood cutters. The problem is particularly critical on the Kibale reserve as it contains a number of endangered species. One, a primate, is only found in the Kibale.

While CARE does not have an organizational mandate of wildlife preservation we recognize that some of the problems associated with wildlife result from the human misuse of natural resources, clearly within CARE's (and the Matching Grant's) mandate. The Uganda MG project will attempt to maintain forest reserves by working with the encroaching populations to: (1) conserve their agricultural lands through agroforestry systems and (2) help them grow their own supplies of fuelwood. This will reduce two principle driving forces behind encroachment on the reserve.

Discussions are underway with the NYZS and the National Wildlife Federation (NWF) to explore the possibility of a tripartite donor effort in Uganda. The concept CARE has proposed to these organizations is to manage the Ugandan forest reserves much like a Biosphere Reserve developed by UNESCO's Man and the Biosphere program. Thus a core of pristine forest would be maintained for research and esthetic purposes in which the NYZS would be the lead donor agency. Surrounding this would be a buffer zone of wildland for sustained yield of natural resources. The NWF would be the lead donor agency in this area. Finally, and for the most part outside of the reserve boundaries, CARE would work with farmers to help them become self-sufficient in wood and staple foods using their existing on-farm resources.

The GON counterparts for this project would be the Forest Department, the Makerere University and the Parks and Wildlife Department. Regardless of the outcome of negotiation on the tripartite arrangement CARE intends to carry out its component. Obviously, we believe the project would have greater impact if implemented as part of a Biosphere Reserve type approach, however, our proposed activities can be implemented independently.

#### IV. Fundraising

The Renewable Natural Resources grant has become a primary focus of CARE's fundraising and public relations program. A national campaign is in progress with components in direct mail, radio and TV, corporate and foundation solicitations, special events and other grass roots fundraising efforts. The results of these activities have been overwhelmingly positive. To date, CARE has raised \$1,481,703 over half of our \$2.7 million goal (See Exhibit I). The campaign has not only helped to energize and unify our internal fund-raising operations, but has generated an enthusiastic response among CARE donors and the media.

The campaign has been built around the theme of "CARE for the Earth". The logo is an image of a boy carrying wood, which is adapted from the cover photo of the CARE for the Earth brochure in Exhibit II. This image, as well as all supporting copy, stresses the impact of environmental deterioration on the human condition. It was our intention that this approach would enable us to attract new donors with an interest in the environment and wildlife as well as upgrade the support of our current donors.

Following is a brief summary of fundraising and public relations activities undertaken as part of the CARE for the Earth campaign.

##### A. General Promotion

The first step in initiating the CARE for the Earth campaign was to produce promotional materials which would support our fundraising efforts. Materials produced include:

1) CARE for the Earth brochure -- This is our basic selling piece which is being distributed through our regional offices. We anticipate distributing 130,000 pieces throughout the three year grant period. (Exhibit I.)

2) Annual Report -- CARE's 1982 Annual Report featured CARE for the Earth, in the cover photo and in a feature article. (Exhibit III) The reader response form in the back provides an opportunity for the donor to contribute to CARE for the Earth and receive a poster of the annual report cover for a \$50 contribution.

It is interesting to note that the area of Niger shown in the cover photo has been reforested. CARE/Niger is taking an "after shot" which we hope to use in future publications.

3) CARE Brief -- Natural Resources for Human Needs -- CARE's Office of Education produces a quarterly paper on development issues known as the "CARE Brief". The first in the series, which was co-sponsored by the National Wildlife Federation and written by Erik Eckholm, focuses on environmental deterioration and poverty in the developing world. (Exhibit IV)

The piece was mailed to teachers' groups for use in school curricula and it is also being used by fundraising staff in cultivating donors who show a particular interest in the program. In addition, a shorter version was created for use as an op-ed article which is attached herein as a reprint from the Bergen Record. (Exhibit V)

4) Broadcast and Audio Visual -- To further support the CARE for the Earth campaign, the Broadcast division produced a series of Public Service Announcements for use in radio and TV. They have only recently been distributed to stations, so the response is unknown at this time. Many stations did, however, express enthusiasm for this new approach and indicated a willingness to play the spots frequently. The theme of the Broadcast campaign is "A Part of our Earth is Dying -- Please help CARE for the Earth". A 15 minute slide and audio presentation has also been produced for use in group presentations.

B. Appeals

Originally we had viewed CARE for the Earth as having only limited appeal to more sophisticated segments of our donor market. CARE's customary approach has been to emphasize basic human needs. We were uncertain whether a more complex, long term appeal would work, particularly in Direct Mail.

Results to date indicate that CARE for the Earth has a much broader appeal than we had anticipated. Field Offices have been very successful in marketing the program, and as we will see, an initial test in Direct Mail yielded outstanding results.

1) Regional Fundraising

Since the inception of the matching grant, CARE's 16 regional offices have raised approximately \$670,000. The majority of this amount came from special grants from large individual donors, corporations, foundations and national service organizations. Two particularly important grants were received from IBM/Europe/Middle East/Africa for \$15,000 and the Le Brun Foundation for \$60,000.

An additional \$130,000 was raised through special events, including a meal skip organized at the University of California at Berkeley and an Art Auction in Washington, D.C.

CARE's original plan to enlist a Corporate Advisory Board to assist in corporate fundraising was not successful. We found that executives who were already overburdened with non-profit commitments were unwilling to take on additional projects. CARE will, however, continue to seek corporate grants utilizing our current contacts.

2) Direct Mail

In order to test the success of CARE for the Earth with our donors we mailed the package shown in Exhibit VI to a portion of our house list (300,000 names). The response was one of the strongest which CARE has ever had with a Direct Mail solicitation. The statistics are as follows:

<u>Pieces Mailed</u>	<u>Pieces Returned</u>	<u>% Responses</u>	<u>\$ Return</u>	<u>\$ Average</u>
300,000	26,726	8.9%	\$937,000	\$35.06

Typically, a mailing to CARE donors yields a 2% response with an average of \$15-20. These results are thus significantly better than previous mailings.

It should be noted, however, that there are other than theme factors which could have contributed to these results such as package format, copy style and timing of mailing. A similar appeal with the CARE for the Earth theme will be mailed to our entire house list in August, which will provide a better sense of this approach.

C. Conclusion

CARE intends to continue many of the activities described above throughout the final year of the grant. Pending the success of the August Direct Mail campaign, we may mail one more CARE for the Earth solicitation in the spring of 1984. This will largely depend on how much money is needed to meet our \$2.7 million goal.

It is difficult to determine what portion of money raised for CARE for the Earth represents new or upgraded dollars. Our computer system does not enable

us to track income in this manner. A conservative estimate is that approximately \$700,000 represents new money. The benefits of the grant, however, go beyond the immediate dollars raised. The new ideas and approaches to fundraising which were part of the CARE for the Earth campaign will be integrated into CARE's long range marketing strategy, thus generating income after the grant has ended.

V. Financial Statement

During FY 83 the Matching Grant expenditures including CARE and AID contributions totaled U.S. \$800,912. (Table 14) This was 54% of the expenditures expected for the year as reported in the first annual report. Difficulties encountered in the initiation of new projects account for 65% of the total shortfall. In addition minor shortfalls occurred in all previously operational projects with the exception of Guatemala.

Expenditures shown in Table 14, differ slightly from expenditures reported in the Attachment A, the Matching Grant's Financial Status Report (form no. 269), because June expenditures in this report are based on accruals. The accrual is due to the fact that CWHQ does not receive monthly financial statements in time for submission of the 269. As Ecuador's expenditures began in June they could not be accrued and were not included in the 269 report. The expenditures for Ecuador reported in Table 14 are based on the missions own financial report and are subject to adjustment by CWHQ's Finance Department. Reported expenditures will be corrected in the FY 84 first quarter Financial Status Report.

Projected MG expenditures for FY 84 total \$2,310,000. (Table 15) These projections are relatively more firm than last year's as most of the projects are well underway. Slippage in the initiation dates of the two new projects would be the only major unknown variable capable of reducing planned expenditures.

TABLE 14

CARE					
RENEWABLE NATURAL RESOURCES					
MATCHING GRANT					
FY 1983 CARE MANAGED EXPENDITURES					
(U.S. \$)					
<u>Country</u>	<u>CARE</u>	<u>USAID/MG</u>	<u>Other AID</u>	<u>Other Government</u>	<u>Total</u>
Cameroon	106,070	113,941	-	1,400	221,411
Ecuador	23,047	4,730	-	-	27,777
Guatemala	75,344	88,211	138,491 <sup>1</sup>	75,000	377,046
Niger					
Bousa	79,816	90,439	-	-	170,255
Keita	37,463	43,661	-	-	81,124
Maradi	37,379	40,152	-	-	77,531
Support Services	34,659	-	-	-	34,659
Administrative Recovery	-	26,000	-	-	26,000
Total	393,778	407,134	138,491	76,400	1,015,803

<sup>1</sup> Value of PL 480 commodities and estimated value of ocean freight.

TABLE 15

CARE  
RENEWABLE NATURAL RESOURCES  
MATCHING GRANT  
FY 1984 Projected CARE Managed Expenditures  
(U.S. \$ 000's)

<u>Country</u>	<u>CARE</u>	<u>USAID/MG</u>	<u>Other AID</u>	<u>Other Government</u>	<u>Total</u>
Bolivia	116	125	-	54	295
Cameroon	125	148	-	52	325
Ecuador	22	22	-	14	58
Guatemala	87	87	123 <sup>1</sup>	75	372
Mali	118	118	-	-	236
Niger					
Tahoua	174	149	-	-	323
Maradi	125	105	-	-	230
Uganda	125	125	-	-	250
Ninth Project	50	50	-	-	100
Support Services	25	25	-	-	50
Administrative Recovery	-	71	-	-	71
<b>Total</b>	<b>967</b>	<b>1025</b>	<b>123</b>	<b>195</b>	<b>2,310</b>

<sup>1</sup> PL 480 value of commodities and ocean freight

# FINANCIAL STATUS REPORT

(Follow instructions on the back)

1. FEDERAL AGENCY AND ORGANIZATIONAL ELEMENT TO WHICH REPORT IS SUBMITTED AGENCY FOR INTERNATIONAL DEVELOPMENT		2. FEDERAL GRANT OR OTHER IDENTIFYING NUMBER AID/PDC G. 117		OMB Approved (In. BI-ROIR)	PAGE 1 OF 1 PAGES
4. EMPLOYER IDENTIFICATION NUMBER 13-1685039		5. RECIPIENT ACCOUNT NUMBER OR IDENTIFYING NUMBER		6. FINAL REPORT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
7. BASIS <input type="checkbox"/> CASH <input checked="" type="checkbox"/> ACCRUAL		8. PROJECT/GRANT PERIOD (See instructions) FROM (Month, day, year) 9-21-81 TO (Month, day, year) 9-30-84		9. PERIOD COVERED BY THIS REPORT FROM (Month, day, year) APR. 1 1983 TO (Month, day, year) JUNE 30, 1983	

RECIPIENT ORGANIZATION (Name and complete address, including ZIP code)  
**CARE, INC.**  
 660 FIRST AVENUE  
 NEW YORK, N. Y. 10016

PROGRAMS/FUNCTIONS/ACTIVITIES ▶	STATUS OF FUNDS						
	(a) NIGER BOUSA	(b) NIGER IKRITA	(c) NIGER MARRADI	(d) GUATEMALA	(e) CAMBODIA	(f) SUPPORT SERVICES	TOTAL (g)
Net outlays previously reported	\$ 236,310.91	\$ 136,772.84	\$ 60,668.65	\$ 253,990.89	\$ 154,246.47	\$ 44,268.52	\$ 882,258.33
Total outlays this report period	39,871.37	21,398.85	20,862.28	73,530.79	84,789.66	10,413.61	250,866.56
Less: Program income credits							
Net outlays this report period (Line b minus line c)	39,871.37	21,398.85	20,862.28	73,530.79	84,789.66	10,413.61	250,866.56
Net outlays to date (Line a plus line d)	276,182.28	158,171.74	77,530.93	327,521.68	239,036.13	54,682.13	1,133,164.89
Less: Non-Federal share of outlays	143,160.79	83,537.36	37,378.73	173,506.57	125,135.40	34,654.85	597,299.70
Total Federal share of outlays (Line e minus line f)	133,021.49	74,634.38	40,152.20	154,015.11	113,900.73	19,993.28	535,867.19
Total unliquidated obligations							
Less: Non-Federal share of unliquidated obligations shown on line h	NON-FEDERAL	SHARING THIS REPORT PERIOD PROJECT EXPENSE		SUPPORT SERVICES	ON 7.4.81	TOTAL	
Federal share of unliquidated obligations	AID	115,925.64	10,413.61	8,601.68		126,339.25	
Total Federal share of outlays and unliquidated obligations	TOTAL	231,851.27	10,413.61	8,601.68		250,866.56	
Total cumulative amount of Federal funds authorized							535,867.19
Unobligated balance of Federal funds							1,007,132.81

12. INDIRECT EXPENSE

a. TYPE OF RATE (Place "X" in appropriate box)	<input checked="" type="checkbox"/> PROVISIONAL	<input type="checkbox"/> PREDETERMINED	<input type="checkbox"/> FINAL	<input type="checkbox"/> FIXED			
b. RATE	7.42%	c. BASE	115,925.64	d. TOTAL AMOUNT	8,601.68	e. FEDERAL SHARE	8,601.68

13. CERTIFICATION  
 I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and unliquidated obligations are for the purposes set forth in the award documents.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL  
 JOSEPH O' LEARY  
 TYPED OR PRINTED NAME AND TITLE  
 CASH MANAGER

DATE REPORT SUBMITTED  
 TELEPHONE (Area code, number and extension)  
 212-606-3110

14. REMARKS: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation.

Best Available Document

ATTACHMENT A

EXHIBIT I

CARE FOR THE EARTH

INCOME SURVEY

Direct Mail <sup>1)</sup>	\$ 937,000
Corporate/Foundation	\$ 247,765
National Organizations	\$ 36,330
Special Events	\$ 131,430
Other Field Office	\$ 229,178
<u>Total</u>	<u>\$1,481,703</u>