

A.I.D. EVALUATION SUMMARY - PART I

PD - AAX - 760
5-11-88

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS.
2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE.

IDENTIFICATION DATA

A. Reporting A.I.D. Unit: Mission or AID/W Office <u>REDSO/ESA</u> (ES# _____)		B. Was Evaluation Scheduled in Current FY Annual Evaluation Plan? Yes <input checked="" type="checkbox"/> Slipped <input type="checkbox"/> Ad Hoc <input type="checkbox"/> Evaluation Plan Submission Date: FY _____ Q _____	C. Evaluation Timing Interim <input checked="" type="checkbox"/> Final <input type="checkbox"/> Ex Post <input type="checkbox"/> Other <input type="checkbox"/>
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D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
602-0001	Operational Program Grant to CARE-Comoros	FY84	5/89	\$3.5 million	\$2.53 million

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director Action(s) Required	Name of Officer Responsible for Action	Date Action to be Completed
1. Through PACD, consolidate and intensify agricultural extension activities in well defined geographic areas to maximize impact.	CARE/GOC	June 1988
2. Improve the overall quality of CADER extension through training supervisory counterparts, improving curricula, enhanced monitoring of extension agent performance, completing farmer survey analysis, and developing a process for soliciting farmer feedback on extension packages.	CARE/GOC	June 1988
3. Improve the probability of farmer-acceptance of technical packages by improving the choice of plant material with more emphasis on maintaining soil fertility and increasing crop yields.	CARE/GOC	June 1988
4. Obtain GOC decision on whether Comoros garage will continue to train apprentices after PACD, and whether garage will be privatized by lease or sale by December 1989. If apprenticeship program will be continued, provide short-term external training in pedagogical methods for Comorian trainers.	CARE/GOC	June 1988

(Attach extra sheet if necessary)

APPROVALS

F. Date Of Mission Or AID/W Office Review Of Evaluation: (Month) APRIL (Day) 6 (Year) 88

G. Approvals of Evaluation Summary And Action Decisions:

Name (Typed)	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director
	D. ZUBOW PRINDLE	CHRISTY GAVITT	MONICA K. SINDING	SATISH P. SHAH
Signature	<i>[Signature]</i>	Reviewed draft 3/88	<i>[Signature]</i>	<i>[Signature]</i>
Date		4/88 version addresses comments		

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ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

The A.I.D. bilateral program in the Comoros began in May 1984 with a five year grant to CARE for a project to increase GOC capability to implement erosion control and soil fertility enhancement on the Island of Anjouan. As implemented, the project has two components: (1) strengthening of extension capability through training extension agents, establishing nurseries and demonstration fields, providing tree cuttings, and multiplying grasses for dissemination of agroforestry technologies and the stabilization of steep slopes; and (2) institutionalizing capacity for maintenance and repair of extension service vehicles on Grande Comore and Anjouan islands. As the current grant will end in May 1989, the present REDSO evaluation was undertaken in December 1987 (year 4 of project implementation) to assess progress to date towards project objectives, generate recommendations for implementation by PACD, and define overall strategy for A.I.D./CARE collaboration in FY 1989 and beyond.

The overall agricultural project environment in Comoros is complex. In addition to A.I.D., nine bilateral and multilateral donors are providing some form of support to individual CADER units on Anjouan, yet no regular mechanism for high level donor coordination is in place. Despite this level of support, institutional capacity to generate and implement agricultural policy in Comoros is weak. GOC counterparts need more training in agricultural policy analysis, financial appraisal of agricultural projects, and fiscal and commodity management. As WFP is supplying commodities to pay farmers for on-farm erosion control, it is unclear whether farmers value the technical packages in and themselves.

The two regions on Anjouan in which CARE is currently active in soil conservation show relatively modest impact from investments to date, as the extension systems for these areas were only initiated in 1984 with the onset of the CARE project.

GOC counterpart for extension agents' salaries is not being deposited, and the technical quality of CARE's soil/land conservation interventions is not high enough. The number of visits from the Nairobi-based CARE Regional Technical Advisors needs to be increased to a trimestrial frequency.

The evaluation team proposes a number of changes in implementation of the soil conservation component through the current grant's PACD which are designed to: (1) consolidate sites for plant material multiplication, demonstration fields, and extension activities to increase impact on intensification areas within each of these CADER's, (2) improve the training and motivation of extension agents, and (3) raise the technical quality of interventions.

COSTS

I. Evaluation Costs

1. Evaluation Team		Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. \$)	Source of Funds
Name	Affiliation			
Vern Cowan	Kenya Ministry of Transport	CARE/Comoros Contract 10 person days	\$2,000 plus expenses	A.I.D. Grant to CARE
Deborah Prindle	REDSO/ESA/PRJ	10 person days	\$1,664.25	A.I.D. OE
David Gibson	REDSO/ESA/ANR	10 person days	\$1,410.41	A.I.D. PD&S

2. Mission/Office Professional Staff Person-Days (Estimate) 33

3. Borrower/Grantee Professional Staff Person-Days (Estimate) 10

b

ACTIONS REQUIRED (Continued)

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|---|---|
| <p>5. Continue to push for financial self-sufficiency under the garage component by recruiting 50 tax-free client vehicles from outside the CEFADER fleet, keeping CEFADER service payments up-to-date, and having a CARE RTA review pricing policies quarterly.</p> | <p>CARE/GOC July 1988</p> |
| <p>6. Use PDS funds to support a study of privatization alternatives for the garages, as part of design of the new multi-year grant to CARE proposed to start in FY 1989.</p> | <p>CARE/
REDSO/IQC
Contractors September 1988</p> |
| <p>7. In design of any follow-on activity, CARE should focus on one sector, preferably agriculture, and improve coordination with other donors, and consider the need for more external short-term technical assistance.</p> | <p>CARE November 1988</p> |
| <p>8. Strengthen REDSO monitoring by providing formal annual project assessment by REDSO under any future follow-on grant. All REDSO project monitors should be scheduled to visit Comoros at the same time as a team. As a first step, in FY 89, send REDSO team to Comoros to assess progress implementing evaluation recommendations and to assist CARE with design of a new multi-year grant.</p> | <p>REDSO/CARE November 1988</p> |
| <p>9. CARE should continue to seek payment for garage services.</p> | <p>CARE/GOC On-going</p> |

A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)

Address the following items:

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| <ul style="list-style-type: none"> • Purpose of evaluation and methodology used • Purpose of activity (ies) evaluated • Findings and conclusions (relate to questions) | <ul style="list-style-type: none"> • Principal recommendations • Lessons learned |
|---|--|

Mission or Office:

REDSO/ESA

Date This Summary Prepared:

APRIL 1988

Title And Date Of Full Evaluation Report:

April 1988 - Evaluation of Operational Program Grant to CARE-Comoros (602-0001)

The vehicle repair/garage component requires development of a strategy for its hand-over to the GOC, or alternatively, for its privatization. A.I.D., CARE, and the GOC will need to agree on the role of the Grande Comore and Anjouan garages in future (e.g. whether they will continue to provide training, or just services), so that hand-over can be phased in by December 1989. The Grande Comore garage is in the process of becoming financially self-sufficient under Comorian administration, but success in this endeavor will require continued efforts to attract paying clients, to supplement receipts from CEFADER, quarterly review of price policies, and reduction in delays in CEFADER's own payments for services received.

Recommended strategy for A.I.D.'s future investments in FY 1989 and beyond focuses on design of a new five year grant to CARE to overlap with the May 1989 completion of current grant activities. It is proposed that the new grant focus primarily on intensifying CARE's activities in the agricultural sector, e.g. by expanded soil conservation/fertility enhancement on Anjouan; expanding into involvement in extension training in other CADER's on Anjouan if consonant with other donors' programs; and possible support to the long term extension training school on Moheli. Under the new grant, short-term consultancies for CARE should be funded to support the technical quality of CARE activities. Funds should also be provided for completion of the hand-over of garage component activities to the Comorian government or private sector by December 1989. Design of the new grant may need to include training in establishment of cooperatives and agricultural joint ventures in accord with the HRDA Country Training Plan approved by AID/W (87 Nairobi 40961). Structured annual monitoring by a REDSO team is also recommended under a follow-on grant. Given the relatively modest impacts of soil conservation investments to date, despite the critical importance of this activity in the Comoros, the team believes that A.I.D./CARE resources should not be diffused by start-up of new activities in other sectors during the new grant.

A PDS-funded IQC consultancy (three person-weeks) is needed as input for design of the new grant to produce a study of privatization alternatives for the CEFADER garages. Additional PD&S funds (about 4 person weeks) may be needed to support a CARE-managed agricultural sector review of secondary data sources, as input for design of the new grant.

ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier; attach studies, surveys, etc., from "on-going" evaluation, if relevant to the evaluation report.)

COPY OF FULL EVALUATION REPORT ATTACHED.

COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

CARE has repeatedly expressed concern about the use of WFP commodities to pay farmers for on-farm erosion control, believing that this practice may inhibit acceptance of technical packages for their inherent value. Though only about 10% of Comorian rice needs are currently supplied by domestic production, the currently proposed shift from maize to rice in WFP rations may reduce local rice production below current levels. The use of WFP commodities should be carefully considered during design of a new FY 89 multi-year grant for CARE.

A.I.D. and CARE began agricultural extension support in the Comoros without first preparing an overview of secondary data available on the overall status of the Comorian agricultural sector. CARE and A.I.D. have thus been hampered during project implementation by lack of understanding of the wider context for project activities in agriculture. REDSO and CARE will discuss the need for an agricultural sector review as input for design of the new grant, and REDSO will consider making PD&S funds available to CARE for up to four person weeks of consultant time for this review. REDSO and CARE will also discuss whether the new grant should include funds for follow-up agricultural sector studies and short-term consultancies.

CARE/Comoros Country Director Christy Gavitt reviewed the original draft of the evaluation report during March 1988, and the final attached version addresses comments raised by her review.

XD-PAX-760-A
5.1.1.2

**Evaluation of A.I.D.'s Operational Program Grant to
CARE - Comoros
(602-0001)**

April, 1988

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I. List of Acronyms

ADB	African Development Bank
A.I.D.	Agency for International Development
AID/W	A.I.D./Washington
CADER	Center for Agriculture and Rural Economic Development
CARE	Cooperative for American Relief Everywhere
CEFADER	Federal Center for Agriculture and Rural Economic Development
FAO	Food and Agriculture Organization
FAC	Funds for Aid and Cooperation
FED	European Development Fund
FY	Fiscal Year
GOC	Government of Comoros
LSC	Land and Soil Conservation
NTF	Nitrogen-Fixing Trees
OPG	Operational Program Grant
PACD	Project Activity Completion Date
REDSO/ESA	A.I.D. Regional Economic Development Services Organization for Eastern and Southern Africa
RTA	Regional Technical Advisor
U.N.	United Nations
WFP	World Food Program

II. Executive Summary

The A.I.D. bilateral program in the Comoros began in May 1984 with a five year grant to CARE for a project to increase GOC capability to implement erosion control and soil fertility enhancement on the island of Anjouan. As implemented, the project has two components: (1) strengthening of extension capability through training extension agents, establishing nurseries and demonstration fields, providing tree cuttings, and multiplying grasses for dissemination of agroforestry technologies and the stabilization of steep slopes; and (2) institutionalizing capacity for maintenance and repair of extension service vehicles on Grande Comore and Anjouan islands. As the current grant will end in May 1989, the present REDSO evaluation was undertaken in December 1987 (year 4 of project implementation) to assess progress to date towards project objectives, generate recommendations for implementation by PACD, and define overall strategy for A.I.D./CARE collaboration in FY 1989 and beyond.

The overall agricultural project environment in Comoros is complex. Major areas of the Comoros (e.g. the CARE focus area on western Anjouan Island) will need to make the transition from traditional export crop production to non-traditional export crops and/or subsistence food crop cultivation to adapt to the recent decline of the international spice export market. As an example of declines in spice export opportunities, Indonesia is now self-sufficient in the production of clove cigarettes for its domestic market. Under the Ministry of Production, CEFADER (the Federal Center for Agriculture and Rural Development) on Grande Comore supervises regional agricultural extension service units known as CADER's; there are 4 CADER's on Anjouan Island alone, plus a recently established fifth unit (a "pre-CADER"). In addition to A.I.D., nine bilateral and multilateral donors are providing some form of support to individual CADER units on Anjouan. Though monthly meetings of expatriate advisors, CADER Directors, and the CEFADER branch chief are held on Anjouan, a higher lever mechanism for donor coordination is also needed.

Despite this level of donor support, institutional capacity to generate and implement agricultural policy in Comoros is weak. For example, CEFADER and its decentralized CADER leadership need to develop skills in agricultural policy analysis, financial appraisal of agricultural projects, and fiscal and commodity management. Though extension in southeast Anjouan (M'remani CADER) has been successful, this is largely due to the presence of successive waves of donor support for technology dissemination in this area since 1963, initially under French colonial administration, and most recently with ADB financial support (recently ended). Gains in this area need to be protected, and a strategy for use of this demonstration area to motivate less progressive regions on the island needs to be supported.

The two CADER's in which CARE is currently active in soil conservation show relatively modest impact from investments to date, as the extension systems for these areas were only initiated in 1984 with the onset of the CARE project. The evaluation team proposes a number of changes in implementation of the soil conservation component through the current grant's PACD which are designed to: (1) consolidate sites for plant material multiplication, demonstration fields, and extension activities to increase impact on intensification areas within each of these CADER's, (2) improve the training and motivation of extension agents, and (3) raise the technical quality of interventions.

Specific recommendations through PACD are:

- Consolidate and intensify extension activities in well defined geographic areas to maximize impact. In support of this approach, assign specific families to individual extension agents, relocate demonstration fields to intensification sites, establish on-site plant material multiplication, and reduce on-station research at CADER's. CARE agrees with this approach, and initiated some actions along these lines in November 1987, just prior to the evaluation.
- Improve the overall quality of CADER extension through identification and training of full-time supervisory counterparts at the CADER level, establishment of an incentive/reward system to improve extension agent performance, completion of farmer survey analyses, and development of a simple process for soliciting farmer feedback on extension packages.
- Improve the farmer-acceptability of technical packages by improving the choice of plant material with more emphasis on maintaining soil fertility for improvement of crop yields. Support from CARE Regional Technical Advisors needs to be increased to a trimestrial frequency.

The vehicle repair/garage component requires development of a strategy for its hand-over to CEFADER, or alternatively, for its privatization. A group of 11 mechanics is still in training at the central garage facility on Grande Comore; the first group of six will graduate in December 1988, or September 1988 if training is accelerated over the summer. Two of these advanced trainees were recruited from Anjouan; with periodic supervision from CARE's garage advisors on Grande Comore, they will return to staff the Anjouan CEFADER garage (constructed with A.I.D. funds and soon to be completed). A.I.D., CARE, and CEFADER will need to agree on the role of these garages in future (e.g. whether they will continue to provide training, or just services), so that hand-over can be phased in over a two year period (ending by December 1989). The Grande Comore garage is in the process of becoming financially self-sufficient under Comoran administration, as it gives priority to maintenance and repair of the 110 vehicles in the CEFADER fleet on this island, is paid for these services by CEFADER (though somewhat irregularly at present), and has the capacity to generate additional income by servicing 40-50 CEFADER-related tax-free vehicles supported by other international donors.

The Comoran garage supervisor is developing training skills which would allow him to assume full responsibility for continuation of the apprenticeship training program within the next year, especially if project resources are reallocated to provide him with external short term training in pedagogical methods. If CEFADER approves continuation of the training function at the central garage, an additional 3 apprentices per year could be accepted under his supervision, and training for the 5 second year students now in training could be completed. As mechanics currently in training are sufficient to meet personnel needs of the CEFADER garage system, continuation of the training function would primarily serve attrition and private sector needs, but CEFADER has not to date made a commitment to use of the central garage as a long term training site in this broader sense. The team recommends, however, that A.I.D. and CARE push for this commitment, to ensure that the substantial investments in training aids, classroom construction, and trainer training yield the returns that they are capable of generating for the Comoran economy as a whole.

Under this scenario, continuation of the garage's training function could be paid for by garage profits, but it would likely require a commitment from Peace Corps or the ILO to provide a resident expatriate to continue the monitoring of fiscal and commodity management. If CEFADER is not willing to consider continuation of the training program, it would be preferable for CEFADER to either sell or lease the garage operation to the private sector. Proceeds from sale or rental of the garage could be placed in a special account to support the GOC contribution to continuation of the Anjouan soil conservation activities under a follow-on A.I.D. grant to CARE in FY 1989, and leasing or sale conditions could retain priority for the servicing of the CEFADER fleet. As CEFADER wishes to explore privatization alternatives (including leasing), the team recommends that REDSO provide PDS funds to support analysis of alternatives by a consultant through REDSO's future new Private Sector IQC as part of the design of a follow-on multi-year grant.

Recommended strategy for A.I.D.'s future investments in FY 1989 and beyond focuses on design of a new five year grant to CARE to overlap with the May 1989 completion of current grant activities. It is proposed that the new grant focus primarily on the agricultural sector, e.g. by intensifying our activities in soil conservation/fertility enhancement on Anjouan; expanding into involvement in extension training in other CADER's on Anjouan if consonant with other donors' programs; and support to the long term extension training school on Moheli. Consultancies designed to strengthen CARE/REDSO project monitoring and evaluation in the Comoros should be considered for funding (especially on agricultural policy issues). Funds would also be provided for completion of the hand-over of garage component activities to the Comorian government or private sector by December 1989. Design of the new grant should consider implementation of training in establishment of cooperatives and agricultural joint ventures in accord with the HRDA Country Training Plan approved by AID/W (87 Nairobi 40961). Given the relatively modest impacts on the agricultural sector of soil conservation investments to date, despite the critical importance of this sector in the Comoros, the team believes that A.I.D./CARE resources should not be diffused by start-up of new activities in other sectors during the new grant.

In design of the new multi-year follow-on grant to CARE, it is recommended that REDSO use PDS funds to contract with an IQC firm for a three-week consultancy on privatization alternatives for the Grande Comore and Anjouan garages. PDS funds may also need to be provided for a CARE-managed four-week consultancy to produce an agricultural sector review of secondary sources (land tenure, cash crop production and marketing, national Food for Work policy, and agricultural sector institutional capability) as input for design of the new grant.

Structured annual monitoring by a REDSO team (PDO, Regional Forester) should also be designed into the follow-on grant.

III. Evaluation Methodology

The evaluation team included the REDSO/ESA Project Development Officer as team leader, the REDSO/ESA Regional Forester, and a consultant experienced in the design, implementation and monitoring of auto mechanics training and vehicle repair facilities in Africa (under contract to CARE). The team spent 10 days in Comoros (December 1-10, 1987) on site visits to project activities on Anjouan and Grande Comore Islands; interviews with project staff, GOC officials, the American Embassy, farmers, and other donors; and review of project documentation. An initial review of findings was held at REDSO/ESA Nairobi on December 17, 1987. The draft evaluation report was completed in February 1988 for review by CARE/Comoros in March 1988. CARE's comments were then addressed in a re-draft of the document. Additional REDSO reviews were held on April 6 and 20, and the report was finalized shortly thereafter.

Evaluation Team

Deborah Zubow Prindle, REDSO/ESA Project Development Officer and Team Leader

David Gibson, REDSO/ESA Regional Forestry & Natural Resource Advisor

Vern Cowan, CARE/Comoros Consultant on Garage Component

IV. Project Environment

A. Policy at the National Level:

The GOC has no agricultural research policy at the national level, and technologies historically promoted by agricultural extension cannot cope with declining soil fertility in the Comoros. Land tenure problems are interfering with farmers' receptivity to improved on-farm technologies, as only 30% of land is officially titled at present. Of the remainder, 40% is farmed only on a usufruct basis, and the rest is occupied by forests and villages. In 1987, a land tenure study was carried out by French-funded advisors. The study presented five scenarios for land tenure reform for GOC consideration, but no action has been taken to date.

National policy on the use of WFP rations in Food for Work programs is now under discussion. With maize meal (not preferred by consumers) as the basic component of the WFP ration, the perceived value of rations is low, and WFP/GOC negotiations are considering a shift towards rice in the ration's composition. At present, only about 10% of rice consumed in Comoros is locally produced. A study of rice prices and domestic production incentives is needed to assess whether rice inflow from a change in WFP rations would lower rice prices and thereby reduce domestic producer incentives.

Cash crop pricing and marketing policies require further study as well. Land under ylang ylang is being converted to food crop production, and harvest labor prices have been declining, though the world market price for this export appears to be stable. It is not clear why area planted with ylang ylang is declining rather than expanding. Vanilla production exports also dropped off sharply from 200 tons in 1986 to 7 tons in 1987. The clove export market is declining rapidly, but producers of cloves are holding out in hopes of better markets in future. Most clove forests are located on steep slopes, and if this market trend continues, producers may eventually begin cutting down the clove trees, greatly accelerating erosion thereafter. As an interim solution, national research, market and policy reform studies are needed to investigate alternative cash crops based on present and future comparative advantage. Experiments are needed to assess prospects for the reclamation of land under cloves, in view of the allelopathic properties of clove trees.

B. GOC Institutional Capacity in the Agriculture Sector:

CEFADER has attracted the jealousy of other GOC institutions along with the substantial inflow of donor support for its activities. The fact that CEFADER is receiving so much more external support than other GOC entities may account for GOC reluctance to provide recurrent local currency support for CEFADER and the regional CADER's. The President appoints all CADER directors, and has taken a strong role in other personnel decisions.

Considerable variability was observed in comparing the Anjouan CADER's institutional capacity, level of experience, and available facilities. Boungoueni CADER has about four hectares of land available for on-station nurseries, demonstration and research fields, and grass propagation, while Ouani CADER has no land for these activities. In terms of level of experience, CEFADER and the two eastern CADER's on Anjouan were established in 1979, but the two western Anjouan CADER's (assisted by CARE activities) were only established in 1984.

CEFADER has created a planning unit which is responsible for preparing annual budgets at the national level, but CARE controls A.I.D. project funds which are all deposited in CARE's own accounts. Only use of revolving funds (created by reflows from garage, nursery and hand tool sales) presently requires signatures by both CARE and GOC counterparts. Salaries for CADER extension agents participating in the CARE project are paid from the CARE account. Before a bilateral activity could be considered by A.I.D. in the future, fiscal accountability within CEFADER would have to be assessed. It is not clear whether the GOC would allow CEFADER or its CADER's to independently control receipts from sale of plant materials, though these receipts could contribute to recurrent cost support, if systems for fiscal control could be established and accountability for funds enforced. Experience to date, with CADER's managing IBRD reflows into a revolving fund from sales of tools to farmers, has not been promising.

C. Socio-Economic Issues Affecting Project Achievements:

Tree crops are primarily owned by men, with food crop production a female activity. Though female agricultural extension agents are few in number, CARE has tried to hire as many female agents as possible, succeeding notably in the case of Ouani CADER, where 6 of 16 agents are female. CARE project experience indicates, however, that male agents are also reaching female farmers effectively. Extension agents recruited to work with CARE come from a representative set of villages involved in project activities, but the lack of indigenous social structure at the village level (e.g. none of the "councils of elders" often found in other parts of Africa) has forced CARE to create project-related village committees to provide a vehicle for collective beneficiary participation. The level of commitment and effectiveness of these village committees varies greatly, and as a result, extension agents have worked primarily with "progressive farmers".

D. Other Donors

Nine donors are active in the agricultural sector in Anjouan. There has been insufficient donor coordination in the past, though CARE notes a marked increase in other donors' cooperativeness over recent months. Design of any future new A.I.D. assistance needs to be informed by intensive dialogue with other donors.

WFP food rations are used to pay laborers for: construction of water cisterns, public works for river bank protection; construction of stone terraces, schools, roads; CADER research trials; operation of village nurseries; and payments to farmers for planting grasses and trees for erosion control on their own farms. Though WFP rations were budgeted as a major contribution to CARE grant activities, CARE staff are increasingly concerned about the practice of paying for on-farm erosion control with WFP rations. The following is the main question that A.I.D. needs to jointly review with WFP in design of a new FY 89 multi-year grant for CARE: Do farmers value the new technologies for the on-farm benefits they offer, or do they view participation in these activities merely as a way of earning food rations?

CARE's focus on land and soil conservation activities in Boungoueni and Ouani CADER's on Anjouan Island means that the project relies greatly on local cost support from the World Bank. World Bank credit supports fuel for all Anjouan CADER vehicles, and its Rural Services Project will continue to fund the operational expenses and extension agent salaries for the Ouani and Boungoueni CADER's (except for the extension agents supported by the CARE grant) until May 1989.

UNDP provided one vehicle each for three of the Anjouan CADER's and two vehicles for the fourth CADER (Ouani).

Recent FAO withdrawal from agronomic extension training in Ouani and Boungoueni CADER's has thrown extra burdens on CARE advisors, and FAO's advisor at CEFADER is now swaying national agricultural policy makers towards erosion control measures in Anjouan that CARE opposes. FAO has been supporting an integrated rural development project in Tsembeo and M'remani since 1978, building upon 15 years of colonial extension started by the French in 1963. Technologies currently being adopted by farmers in this area include integration of cattle into rotations for manure production, and diversification into multi-cropping (e.g taro, maize, beans) versus the rice mono-culture traditionally practiced in these areas. One U.N. volunteer is assigned to work with these two CADER's (M'remani and Tsembeo) to assist with follow-up on extension agents. Though CARE uses the site as a demonstration area/training site for farmers from the Boungoueni and Ouani CADER's, both REDSO and CARE have doubts about the technologies being promoted by FAO.

In addition to its long term extension history, the M'remani CADER has benefitted from a land tenure tradition conducive to farmers' adoption of long term soil conservation investments. Most land in this CADER is now held by smallholder cultivators, and the ylang ylang plantations in the area were privatized in the 1960's. Though FAO managed the construction of CADER facilities in Ouani and Boungoueni CADER's, and provided a resident advisor for agronomic extension training in both areas from May 1985 through March 1987, the African Development Bank (ADB) financed these activities (except technical assistance) through a loan to the GOC which went into default in mid-1987. FAO then assumed responsibility for small operating expenses and one more year of support by the FAO advisor resident in eastern Anjouan. The FAO advisor for western Anjouan left Comoros in 3/87, and he will not be replaced due to funding limitations. CARE was thus forced to expand its role in Boungoueni CADER, formerly limited to extension and demonstration of soil conservation/erosion control technologies and the establishment of nurseries for agroforestry and fruit trees. CARE has now assumed responsibility of all extension training in this CADER, and has been trying to assist the CADER with the agronomic trial fields established by FAO. Though FAO has secured funding to support the remaining resident advisor, and Tsembeo and M'remani CADERs' local costs through end of 1988, availability of follow-on funding for extension in eastern Anjouan beyond this period is in question. FAO believes CARE should assume island-wide responsibility for extension activities, training, and supervision in all Anjouan CADER's, if A.I.D. would support this expansion as part of a new multi-year grant starting in FY 1989.

FAO's resident advisor at CEFADER headquarters on Grande Comore Island has recently authored a number of rather alarmist reports on the Anjouan erosion situation, in the hope of attracting increased donor assistance and larger amounts of WFP rations for on-farm erosion control activities. CARE does not share his views, believing instead that the Anjouan situation can be better handled by downplaying the use of WFP rations and working to increase real farmer participation. This FAO advisor favors a shift from maize meal to rice in the composition of the WFP ration, to make the ration more attractive to farmers, but the evaluation team fears the impact of such a shift on domestic rice production.

CARE's activities in Ouani CADER will be greatly affected by FED (European Development Fund), as the FED will fund the "Jimilime Project" for a targetted sub-area of Ouani CADER, leaving CARE to work with the rest of this CADER's area (mainly on "badlands" planting). As CEFADER's regional head on Anjouan is officially seconded to the Jimilime Project, he will spend the majority of his time on the FED target area. CARE will hand over management of its Jimilime demonstration field to the FED Project, at the start-up of FED project activities. FED activities will include road construction, integrated rural development, and erosion control; five new extension agents are now being recruited. The FED also supports a "Food Strategy" Project in the Domoni pre-CADER for erosion control on 5,000 hectares.

FAC (Funds for Aid and Cooperation) is a major supporter of the Anjouan CADERS' agronomic research, and has been more willing to cooperate with CARE advisors than other donors. The FAC advisor resident on Anjouan is helping to screen improved varieties of subsistence crops on-station at CADER's and on farmers' fields. Screening now includes rice, cowpeas, peanuts, and bananas. This advisor recently began to cooperate with CARE advisors on composting, mulching, and soil fertility experiments.

Canadian bilateral aid is funding two volunteers as trainers on staff at the recently established Moheli Agricultural School. The school began in January 1987, and offers a three-year diploma program to agricultural extension agents, including two years of coursework on Moheli and a final year of practical experience. Though a nationwide competitive exam is held each year for all candidates, the President personally selects all trainees accepted for this program (about 30 new enrollees per year). Only experienced extension agents are allowed to apply for this training in 1988. Given the newness of this program, curricula are still poorly defined, and Canadian interest in CARE technical assistance should be explored in design of a new FY 89 multi-year grant.

V. Progress to Date Towards Project Objectives

A. Soil and Land Conservation Component

1. Objectives of this Component

The "Land and Soil Conservation Project Paper" (Weber 1983), defined the basic problem on Anjouan as high density farming of staple crops on a limited and steeply sloping arable land base. While statistics on the amount of arable land on Anjouan are suspect, somewhere between 250 and 350 Comorans are dependent on each square kilometer of arable land for all or part of their livelihood.

Specific problems resulting from demographic pressure and limited arable land area were cited as follows:

- (a) "Off-farm productivity (home industries, employment, etc.) of the rural population is far too low to be able to buy expensive imported food;"
- (b) The population on Anjouan was expected to increase annually by 3.1%. "By 1990 there could be as many as 185,000 people on Anjouan"; and
- (c) "The best agricultural land is often occupied by tropical tree cash crops (ylang-ylang, cloves, vanilla) which have brought relatively low prices on the world market during the last few years."

Within this context, the Project Paper chose the following objectives:

"By the end of the project, the two CADER's involved will have the capability of extending a proven system of land conservation in the districts. Evidence of this capability will be that staple crop yields on the land of 300 subsistence farm families (1,800 people), who farm an average of 0.5 hectares per family will double." (Weber 1983).

2. Outputs of this Component

(a) Quantitative Assessment of Achievements:

In general, the evaluation found that extended technologies have not gained credibility with farmers. This is partly due to disincentives caused by payment for erosion control on farmers' fields with WFP commodities, on the one hand, and partly due to lack of responsiveness to farmers' needs and interests in the choice of technologies on the other.

Anjouan farmers are presently moving from spice-based (cloves, vanilla) cash cropping to subsistence food crop farming. Reduction of income from cash crops and the increasing need for food self-sufficiency are only now stimulating farmers to take action. It will take several more years of donor support to achieve widespread public awareness and participation in erosion control on a large scale.

Historically the following technical package has been promoted throughout Anjouan: Vetiveria sp. grass planted along contour lines with occasional trees (usually Casuarina equisetifolia- common name "Filao"). Theoretically the grass inhibits downhill movement of soil, in turn causing gradual soil accumulation, and finally passive terrace formation. The trees perform an additional engineering function, by providing deep rooted anchorage for the terrace faces. The resulting terraces have gentler slopes which, in turn, further reduce erosion and "stabilize" the land, thereby encouraging the farmer to invest more effort into soil nutrient restoration.

Acceptance of the Vetiveria/Casuarina package has been limited, however, as it only reduces erosion, and does not on its own increase overall farm productivity. Vetiveria's low palatability to Anjouan's free ranging cattle is, however, its major advantage in the eyes of erosion control experts. Casuarina provides neither fodder nor high quality mulch, and does not re-coppice after cutting; it must therefore be replanted if the entire tree is harvested. Also, Casuarina's shade characteristics make the species unsuitable for inter-cropping.

CARE initially followed suit and used the Vetiveria/Casuarina package exclusively, but recent information about local needs and interests have provided project staff with better insights on how to motivate farmers. Declining soil fertility and resulting yield decreases indicate a need to more directly address soil fertility management, not only erosion control. Since the second planting season of the project, CARE has been experimenting with a variety of multi-purpose nitrogen-fixing trees (NTFs) and leguminous cover crops (e.g. to provide leaf litter high in nitrogen content for soil improvement and/or cattle fodder, fuel, and pole wood, especially from species that do not need to be replanted after cutting).

CARE's experiments in alley-cropping offer an excellent and timely innovation. Alley cropping which adds tree foliage from species such as Calliandra, Leucaena, Sesbania, Gliricidia and Pterocarpus to farm fields as mulch, increases organic matter, and has great potential for impact on Anjouan. If combined with alternative species of grass with better livestock palatability (Setaria, Pennisetum, and Tripsacum, for example) planted along contours, this approach can quickly improve soil fertility while concurrently reducing erosion. Though CARE has been growing some alternative species of grasses since December 1985, quantities are still negligible. CARE and the CADER's need to carefully introduce additional plant material and improved planting configurations which respond to farmers' interests while monitoring technical performance. A feedback system is needed, so that the CADER's can learn from farmers' adaptations of project technologies. All leguminous species which require inoculation with Rhizobium to produce nitrogen fixation must be properly treated; otherwise naturally nodulating species should be selected.

While there is little doubt that at least 300 farmers will have adopted part of a package by PACD, the project is unlikely to meet the original expectation of doubling crop yields for 300 farm families. First, neither the historically promoted technologies or even the new "improved varieties" and planting configurations, could probably double crop yields, even under the best (and flattest) circumstances. Reduction of slope either through passive terrace formation (using grass/tree combinations) or through radical terracing (using only huge labor inputs) may have a stabilizing effect, but other structural soil improvements, and the addition of soil nutrients, are needed

for yields to increase substantially. Thus, the original target of doubling yields for 300 farm families was probably never achievable. In any event, lack of adequate baseline information about pre-project production levels, and lack of a proven methodology for measuring an inherently complex farming system's production, make it impossible to quantify yield changes to date from project activities.

CARE's activities have undergone modification as the project has evolved. New objectives have been added, and some deleted, in repeated attempts to improve project tracking. Overall, the Land and Soil Conservation component has met or exceeded most of the targets scheduled in CARE's annual work plans, as discussed below. In many cases, however, these targets were not good measures of progress towards the project's purpose.

(b) Achievements towards Physical Output Targets

Number of Villages Contacted:

The number of villages "contacted" has proved to be a poor measure of project achievement, as the quality of "contact" has been exceedingly difficult to assess. Given that plots (an average of 2.5 plots/family, according to surveys) are scattered at varying distances from villages, farmers' exposure to project staff is often limited to group meetings. All 29 villages in the two CADER's have been "contacted" in this way, potentially affecting 30,000 people, but significant and qualitative impact cannot be determined from existing monitoring systems.

Number of Hectares Treated:

The Project Paper's objective is to extend soil conservation interventions to 300 farm families cultivating an average of 0.5 hectares each. It presently appears that the project will have difficulty reaching this target population. Till now, according to project records, it appears that only 38 hectares have been treated with erosion control measures, usually vetiver grass strips combined with trees. It is difficult to monitor hectares treated, however, as CARE only records linear kilometers of grasses and numbers of trees planted.

To be a good indicator of progress, participation needs to be monitored in more detail. Qualitative assessment is needed, e.g. post-installation maintenance and tree survival rates (good signs of farmer comprehension and real participation), and extent of replication by other interested farmers. CARE believes that this type of monitoring will be feasible now that interventions will be focussed on "intensive watersheds."

In comparing the two CADER's, the Boungoueni CADER has consistently surpassed its targets, while Ouani CADER has consistently fallen short. According to the project needs assessment survey, traditional mistrust of CADER activities, combined with more insecure land tenure, more frequent use of paid labor, and better proximity to off-farm urban employment opportunities, all make Ouani less receptive to extension activities. Boungoueni residents show a much keener interest in project activities, attributable to the more recent establishment of extension services, the better land tenure situation for smallholders, larger farm families combined with lack of access to paid labor, and greater awareness of the soil fertility problem and potential solutions.

Number of Village Nurseries:

Almost the same number of village nurseries were established as was planned in the original grant proposal. Those visited were well run, but perhaps overstaffed, due to low worker efficiency associated with remuneration in WFP commodities. Average annual production ranges from 10 to 20 thousand potted seedlings of up to 10 species per nursery.

Appropriate species have been selected for production. However, staff and time constraints and the large number of sites (25) render technical supervision difficult and inhibit seedling distribution. It is recommended that many of the village nurseries be consolidated, and that they concentrate on species which can be sold to offset recurrent costs. In addition, the "forest nurseries" are inefficient and under-utilized; they should be closed or handed over to the Forest Service.

Number of Central Nurseries:

Central nurseries are located at Boungoueni-CADER and in Ouani town. The Boungoueni nursery appears to be well managed under the direction of a dynamic CADER Nursery Supervisor who is experimenting with varieties of fruit and cash crop trees (coffee, cinnamon, etc.) to entice farmers into the CADER system. There was, however, some evidence of overproduction, and some difficulty in getting the trees distributed in a timely manner.

The Ouani nurseries, on the other hand, were poorly managed, overstaffed, producing less and lower quality stock, and fewer varieties. These nurseries did not accurately track number of seedlings produced by species, maintained very poor ledgers, were unable to provide staffing figures, and set extremely low work requirements for nursery laborers. Inappropriate propagation techniques were also being used. Some of these problems are caused by lack of land at Ouani CADER. Ouani CADER has no space for demonstration fields, grass propagation, or a central nursery on-station. Nursery activities have been relocated from one rented parcel to another, far from CADER headquarters, and are now split between two sites, interfering with supervision, quality control, and worker morale. Water supply is also problematic. Because of space limitations, Ouani CADER is using land adjoining the runway of Anjouan airport for grass propagation, though this site is very far from end users. Frequent turnover in nursery personnel has also been a factor.

Number of Seedlings Produced and Surviving:

The number of seedlings produced accords with the original project design, but the evaluation team is concerned about: (1) whether nurseries and seedling production are the best approach to use for plant material propagation and dissemination, (2) whether the present mix of plant material will attract farmer participation, and (3) reducing recurrent costs of plant material production to foster financial sustainability after donor assistance ends. CARE presently supports the CADERS' purchase of tree cuttings from farmers for free distribution to other farmers. Transport of grasses and seedlings from nurseries to farms is also absorbing considerable amounts of project resources, and this will not be sustainable after donor support ends.

CARE is beginning to select areas with high concentrations of interested farmers' fields, to be designated as "intensification zones" as foci for extension activities. An alternative to nurseries, multiplication of plant material on farmers' fields within these intensification zones, could be considered by CARE in future. Rather than raising seedlings on these sites, the team recommends establishment of parent trees and grasses from which cuttings and seeds could be harvested and sold to other interested farmers. The choice of plant materials for replication will need to conform to clients' need for fodder, fuel, poles for construction, and cash crops, to attract paying customers. Transport costs would be reduced under this scenario, and a commercial basis for farmers' sale of plant material would be developed, thus prospects for long-term financial sustainability might be enhanced.

Number of Extension Staff Trained:

Though 18 extensionists have been trained per CADER, no comprehensive, long-term curriculum has survived CARE advisors' turnover, and a syllabus is clearly needed. The GOC has not yet begun to pay extension agents' salaries, despite Grant Agreement commitments; this throws into doubt the long-term value of training extension agents altogether.

In the face of these concerns about future recurrent costs, the evaluation team believes that more emphasis on farmer training is needed from now on. If enough farmers accept improved LSC technologies during the next few years while donors are still supporting extension system costs, farmer-to-farmer transmission of technologies may be able to continue thereafter on a large scale, with demonstrable impact on Anjouan, whether or not GOC financial support for extension continues.

Although CARE evaluates participating extension agents annually, there is presently little reward for solid performance and no penalty for inadequate effectiveness. Annual evaluations can be organized as competitions, so that good performance can be rewarded by selection for long term training, promotions etc.

Number of Farmers Trained:

Project staff are not monitoring which farmers attend training or receive on-farm consultations. A new monitoring and evaluation system is needed, designed to focus on individual farmers, preferably with a method which allows the tracking of attendance at courses, farmer field days, and on-farm visitation, disaggregated by gender of farmer. This would provide the improved data base for monitoring increased emphasis on farmer training and farmer-to-farmer technology dissemination discussed above.

3. Delivery of Inputs

a) A.I.D. Grant Funds

In the course of project implementation, REDSO approved a transfer of funds from several line items in the Land and Soil Conservation component's budget to supplement the Garage component's budget. CARE still believes, however, that remaining grant funds should be adequate to complete activities presently programmed for the LSC component, and, in fact, a marked reduction in FY 89 operating costs is projected (totalling only 40% of FY 88 costs). These savings will compensate for the higher rate of spending early in project implementation, but funds remaining at PACD are likely to be negligible.

Though CARE supervises project accounts more closely than most donors in the Comoros, a CARE employee was recently able to manipulate and falsify payroll ledgers and then flee to Madagascar with \$12,000 of embezzled project funds. CARE did not dialogue with REDSO early enough on how to handle this incident, and it is now likely that the purloined funds will not be recovered, though appropriate steps are being taken by A.I.D. and the American Embassy in Madagascar to attempt to recover these funds. In future, CARE should communicate more closely with REDSO on sensitive financial or administrative issues, and should forward correspondence through the classified Embassy pouch when confidentiality needs to be maintained.

b) GOC Local Currency Inputs

To date the GOC's financial contribution to this component has been less than 10 percent of levels committed in the Grant Agreement. This performance is entirely inadequate. To date, the GOC has only contributed the small share of local currencies which pay CARE's rental of office space and staff housing.

The Grant Agreement commits the GOC to incrementally assuming responsibility for paying extension workers' salaries. GOC contributions to salaries were to have been 30% in calendar year 1987, 60% in 1988, and 90% by PACD. To date of this evaluation, no GOC funds had been paid for extension workers' salaries.

CARE should continue to pursue GOC counterpart funds for 1987-89 extension salaries.

c) World Food Program Commodity Inputs

More World Food Program (WFP) commodity inputs have been injected into activities than were programmed in the grant agreement. The increased volume of commodities was distributed primarily for community labor for check dam construction and water course fortification, as well as gully plugging in urban areas, rather than for on-farm erosion control activities. CARE has spent an excessive amount of staff time on flood control in Mirontsi and Ouani. These sites were chosen because local people were initially willing to provide labor for flood control, in exchange for WFP food. During implementation, however, local beneficiaries of the flood control activities proved to be either uninterested or unable to do the work, and labor often had to be imported from other sites. Lack of local interest in maintaining the gabions and check dams which CARE has supported is another indication of the low level of local commitment to flood control interventions. CARE should discontinue support for further gully management/protection. To protect investments already made, CARE should attempt to increase community understanding of maintenance practices and the utility of the flood control prototypes constructed.

WFP commodity distribution is not being tracked adequately. Though CARE is not responsible for distribution of WFP commodities, it does identify recipients and program activities, and should thus track task completion. Food distribution needs to be monitored more closely, and more emphasis should be placed on increasing beneficiary awareness of the value of interventions to encourage genuine community participation. In collaboration with other donors, CARE should develop a better monitoring system for commodities within the CADER's.

d) Technical Assistance Inputs

(1) Long-Term Technical Assistance

In general, CARE's resident staff have been recruited in a timely manner. The Anjouan position of project manager/extension trainer has turned over frequently, however, with ensuing re-orientation of extension approach each time, and gaps in training delivery. By PACD, four different individuals will have served in this capacity, on average for little over 12 months each. Fortunately, the other staff member resident on Anjouan has provided continuity throughout most of the grant period.

Working conditions (both climatic and institutional) are difficult in the Comoros; health facilities are poor, and the few amenities available are extremely expensive. Comoros is a hardship post, and Anjouan, in particular, challenges even the most dedicated professional's level of commitment. Anjouan project staff feel that they have low visibility; perceived lack of professional recognition has fostered some apathy and staff turn-over. These frequent personnel changes have had a negative impact on continuity of approach and long-term achievement of project objectives. Extension development activities have suffered particularly from these changes.

The project has required, and thus recruited for, a wide range of skills during its evolution, including foresters, agronomists, extension specialists, and soil scientists, but job descriptions have not always been followed either by CARE/NY headquarters during recruitment or by the technicians themselves, after arrival at post. Several recommendations are offered in Section 4 below which, if followed, should assure that future recruitment would more closely adhere to programmatic needs.

(2) Short-Term Technical Assistance

The Land and Soil Conservation Component has received very little short-term technical assistance from consultants, CARE Regional Technical Advisors in Nairobi (RTA's), and REDSO technical staff. The breakdown of past short term advisor inputs follows:

<u>AGENCY</u>	<u>DATE</u>	<u>MORONI</u>	<u>ANJOUAN</u>
<u>CARE</u>			
1. Regional Technical Advisor, Ag/Nat. Res.	April 86	1.5 days	1.5 days
2. Training Development Officer	Oct. 86	4.0 days	6.0 days
3. Program Officer for Natural Res., CARE/NY	Oct. 85	3 days	2 days
4. Agroforestry/Survey Specialist (consultant)	Nov. 86	8 days	6 days
5. Agronomist/Crop Researcher (consultant)	Oct. 87	1 day	2 days
	TOTALS	17.5	17.5
<u>USAID</u>			
1. REDSO Regional Forestry Advisor	April 86	5 days	5 days
2. REDSO Engineer	Oct. 85	2 days	3 days
	March 87	2 days	1 day
3. REDSO Project Officer	March 87 & August 85	4 days	2 days
4. REDSO Director	August 85	3 days	1 day
	TOTALS	16.0	12.0

The need for consultants, CARE RTA's, CARE/NY and REDSO experts, has been significantly underestimated by CARE and REDSO staff. Project staff in Anjouan have only received 8.4 days per year of external assistance. Almost the same amount of time has been spent with the CARE Country Director in Moroni. CARE/Comoros values the professional inputs of external advisors as they help to improve the technical quality of project interventions. CARE has not, however, found two day consultations to be very helpful; longer-term professional visits have been more useful.

In future, visits from consultants and REDSO representatives need to be programmed more frequently and should be timed to contribute to important government and multi-donor discussions, to complement the day-to-day informal inputs provided by CARE's resident technicians, especially on agricultural policy and other sensitive issues.

e) Training Inputs

All training under the Soil and Land Conservation component has been organized in-country. About three weeks of training has been given to each extension agent, but it is not clear how much training farmers have received.

Extension training has focussed on nursery management, erosion control methods, basic agronomy and communication skills. Records do not disaggregate time spend on each topic, or gender of trainees. Only six female extensionists are presently working on project activities.

Lack of a clear and monitorable training program has been one of the project's greatest short-comings to date. More emphasis on soil fertility and basic agronomy needs to be integrated into training activities. Two requests for assistance from CARE's Regional Agroforestry Advisor have not been fulfilled.

4. Recommendations for Implementation by PACD

For the Land and Soil Conservation component to achieve its objectives, changes are needed in present technical direction and institutional structure. It is suggested that CARE, CEFADER, and A.I.D. undertake these changes as soon as possible.

- (a) Recommendation for CARE: Consolidate and intensify extension activities in well defined geographic areas to maximize impact. This would include assignment of specific families to individual extension agents, relocation of demonstration fields to intensification sites, establishment of on-site orchards and fields for multiplication of plant material, and reduced investment in on-station CADER research.

Discussion: CARE's experimental modification of technical packages, and CARE's continual re-orientation of extension training have had many positive impacts that are only now beginning to bear fruit.

Till recently the LSC component has scattered its efforts equally over the entire two CADERs, focussing on individual farmers who showed interest- the "progressive" or "early adopter" type of strategy. Unfortunately response was spotty, and few farmers fully subscribed to the CADER system; this dispersed the extensionists over wide areas with limited impact. Because of this extensive approach, demonstration fields, nurseries and research plots were centralized on the CADER stations, or wherever adequate land was available. Impact of research and demonstration has been dissipated by the distances between interested individuals and the demonstration fields. Logistical support from CARE and the CADER's has been stretched extremely thin, as all plant material has had to be transported to scattered farmers' fields. Research activities have absorbed far too much time given present personnel constraints. In short, it was a model worth testing, but it has neither been successful nor an efficient use of project resources.

The evaluation team supports CARE's decision to move toward a more geographically-focussed approach to extension activities. In addition to selecting intensification zones of 40-50 hectares each for action, it is recommended that a critical mass of at least 4 extension agents be assigned to each zone, and that each individual extension agent then be assigned to specific families (about 30 per year) in that zone. Demonstration plots should be located within the intensification zones and their activities should be expanded to include the production of grasses, tree seed, and cuttings for extension purposes. Commercial or privatized production of plant materials should be undertaken on a pilot basis, and the purchase of cuttings from individuals for free distribution to others should be reconsidered.

- (b) Recommendation for CARE: To improve the overall quality of the CADER extension, provide mid-level extension supervisors to act as counterparts to CARE advisors, increase the GOC's financial support to CADER's, develop an incentive/reward system to stimulate extension agent performance, complete analysis of the needs assessment survey, and implement a simplified follow-up strategy to provide systematic and useful farmer feedback.

Discussion: There are no middle-level Extension Supervisors in the CADER's soil conservation and agronomy services. All extension training, supervision and facilities development activities are left to the expatriates, with very limited assistance from overburdened CADER Directors. This is institutionally unsustainable and it prevents CARE personnel from devoting sufficient time to extension follow-up, or monitoring of technical interventions.

Even more important, lack of GOC counterparts makes the entire CADER extension system extremely vulnerable to expatriate staffing changes and external funding fluctuations. CADER Directors are already over-extended and have not, in most cases, been able to become actual counterparts for CARE advisors.

The Agriculture Technicians presently working on the CADER research and demonstration plots on-station should be reassigned to become extension supervisors responsible for extension training, monitoring, and supervision. Precise scopes of work should be developed for these positions, in consultation with the CADER Directors.

The project has been output-driven, relying on activity targets of questionable value as measures of success. It is more important to increase farmers' awareness of soil erosion problems and their impact on agriculture productivity and related solutions. Development of a strong institutional network of informed farmers and well-trained extension agents capable of carrying the message forward is still needed. Uninspired extension agents and lack of performance-based rewards have limited the component's impact and the CADERS' overall institutional strength.

The present extension agents appear to have a good grasp of soil conservation techniques and basic training in communication skills. Training to date has been of good quality but sporadic; more emphasis on communications skills and basic agronomy is required on a regular basis.

CARE's resident Extension Advisor should prepare a comprehensive training plan, based on project experience and CARE's Agroforestry Sourcebook (soon to be completed). The training plan should emphasize basic agronomy, applied communication skills, monitoring, and evaluation. This training plan should be reviewed and approved by CARE's Regional Technical Advisor for Agriculture/Natural Resources.

CARE has collected excellent needs assessment survey data. The survey's results were to be used as a baseline for monitoring and evaluation. Completion of data analysis has been delayed by the large sample size, level of detail in the survey forms, and staff time constraints. Follow-up visits are presently underway, though analysis of the original survey data is not yet completed or available to extensionists and GOC officials. Analysis of the baseline survey data should be assigned a high priority, and follow-up data collection should be put on hold until the baseline survey report is finished. The results should be discussed with the extension agents as soon as possible thereafter. CARE's Regional Technical Advisor for Agroforestry should be asked to assist with development of a monitoring methodology to track farmer participation. These tasks should be CARE's highest priorities over the next three months.

CARE staff and CADER Directors should identify ways of measuring extension agents' performance and providing appropriate rewards and sanctions (including dismissal). During project monitoring, farmer feedback on agents should be elicited as input to individuals' performance ratings.

- (c) Recommendation for CARE: Improve the farmer acceptability and technical quality of extension-promoted packages through diversification of plant material, introduction of planting configurations acceptable to farmers, and reduced emphasis on strict erosion control in favor of fertility maintenance and improvement of crop yields.

Discussion: One of the major reasons for the Land and Soil Conservation component's modest progress has been excessive concentration on erosion reduction technologies, without adequate emphasis on soil fertility and impact on increased crop yields for farmers.

CARE has invested considerable resources in eight on-station research trials spread throughout Ouani and Boungoueni CADERs. These demonstration/experimental fields were designed to validate, improve, and demonstrate plant materials and configurations being promoted through extension activities, particularly alley cropping techniques. Although the original design stressed technology extension, this research has skewed use of project resources towards technology development, absorbing an inordinate share of staff time, particularly given staff limitations. The only two Agriculture Technicians on both CADER's have been assigned nearly full time to these station trials.

Further, the exact objectives of these very extensive on-station research trials are not well defined. Future on-station research needs to be more clearly tailored to personnel constraints and extension needs. The trials should be reduced in size and number and relocated to the intensification zones (except for a limited number of Boungoueni trials). More attention should be placed on visible improvement of agricultural crops to get farmers on-board. Screening of various tree-grass combinations should continue, but

with more emphasis on soil fertility improvement and demonstrated increase in crop yields. These trials should move increasingly on-farm. Analysis of the needs assessment survey should provide more information on farmers' immediate interests; the extension approach should then be reoriented to address these interests.

Many potentially beneficial species of nitrogen-fixing trees (NFT) are being introduced and promoted without prior treatment with Rhizobium and Frankia inoculants. CARE should continue to experiment with plant material on demonstration plots within the intensive zones. Materials chosen for use in these trials should address farmers' interests, with increased emphasis on multi-purpose and nitrogen-fixing trees and cover crops which can have a positive impact on crop yields and soil structure (through mulching, improved fallows, and green manures). ICRISAT should be asked to provide long-duration varieties of Cajanus; Oxford Forestry Institute can provide Gliricidia sepium trial plasm, and ILCA can furnish Sesbania provenances. CARE should use the proper inoculants to guarantee nitrogen fixation by its plant material; non-nodulating trees should not be distributed.

Until very recently, the CADER's depended on their production of nursery tree stock and Vetiveria grass for free distribution for soil conservation activities. Nursery seedlings and station-grown grasses distributed gratis are expensive to produce, and difficult for farmers to transport from the few nurseries to their farms. Recently the project has begun to purchase cuttings of Gliricidia and Pterocarpus from farmers for free distribution to other farmers; this system is also expensive and logistically difficult, as cuttings are transported at project expense. The recurrent costs of this approach are not sustainable.

Nursery production should be progressively de-emphasized (with the exception of cash crop and fruit trees, particularly grafted varieties for sale) in favor of direct seeding and vegetative propagation. The CADER's should immediately set up orchards for the production of Gliricidia and Pterocarpus cuttings on intensive extension sites. CARE should also set up tree seed orchards for species such as Leucaena, Calliandra and Sesbania and consider the promotion of direct seeding along contours on appropriate sites. Equally important, the CADER's should set aside nursery areas for grass production close to these intensive sites.

To monitor and validate the effectiveness of technologies promoted through the CADER's, simple experiments should be designed to measure the comparative value of different trees and grasses for soil fertility and erosion control. For example, a series of rudimentary soil analyses would indicate comparative advantages of different soil fertility and erosion configurations. Organic carbon and percolation rates could be measured to monitor improvement in soil structure and fertility under different alley cropping configurations.

- (d) Recommendation for CARE: CARE should more actively pursue GOC counterpart contributions, as outlined in the Grant Agreement with A.I.D. and Letters of Understanding between CARE and the GOC. The GOC should be required to open a special escrow account in a commercial bank and deposit into this account 1987, 1988 and 1989 extension works' salaries for joint programming and disbursement by CEFADER and CARE.

Discussion: The GOC's only financial contribution to grant activities has been payment of expatriate residence and office rental; GOC commitments in the Grant Agreement toward extension agent salaries from January 1987 through PACD have not been acted on. This apparent lack of GOC commitment raises serious concern about the sustainability of the agricultural extension system after donor support ends.

- (e) Recommendation for CARE: Improve project monitoring systems through use of short-term technical assistance by CARE RTA's and other consultants, and clarify the roles of resident CARE advisors.

Discussion: Once CADER extension supervisors are put in place, CARE's resident LSC project manager on Anjouan should be responsible for general administration, liaison with other donor and GOC officials, and all technology selection and testing activities. CARE's second resident advisor should be titled Extension Advisor, responsible for the training and follow-up of CADER extension supervisors and extension agents, and the development of an extension monitoring component. Collaborative but distinct responsibilities should be reflected as soon as possible in revised job descriptions for both resident staff positions. The evaluation found that CARE had not programmed adequate short-term technical assistance for the development and monitoring of the extension system. The CARE Regional Technical Advisor for Agriculture/Natural Resources should plan to make regular trimestrial trips to support extension development.

- (f) Recommendation for A.I.D.: In-depth annual project monitoring by a REDSO/ESA team is strongly recommended.

B. CEFADER Garage Component

1. Objectives of this Component:

"To have the CEFADER workshop staffed entirely by Comorians and operating on a self-sufficiency basis; and for the average availability rate of the CEFADER/CADER vehicle fleet to exceed 80%." (Bouvier, "CEFADER Workshop and Apprenticeship Training: Multi-Year Plan, FY 1984-1988", CARE/Comoros, October 1983 as revised April 1984.)

2. Outputs of this Component:

Plans have been prepared for moving the garage towards financial self-sufficiency, and Comorian staff are progressively assuming more responsibility for training mechanic apprentices and managing garage operations. If present trends continue, the garage is likely to be ready for hand over to Comorian management by December 1989 (seven months beyond PACD). Design of the follow-on multi-year grant to CARE, planned for start-up before the current grant's 5/89 PACD, will need to provide bridge funding to carry garage component activities through this transition period.

The CARE RTA for Small Enterprise Development prepared pricing policy guidelines for the garage during a recent TDY in Comoros, and resident CARE/Comoros advisors have conducted considerable research, using suppliers' catalogs, to determine which mail order source can supply a given part at the cheapest price. As part of the hand-over strategy's development, CARE should consider having this RTA assess whether the garage could afford to work through a European procurement agent to place its orders, and whether this would be cost effective. The Grande Comore garage has the potential for becoming financially self-sufficient under Comorian administration, while giving priority to maintenance and repair of the 110 vehicles in the CEFADER fleet on Grande Comore Island, if the garage is paid for these services by CEFADER on a regular and timely basis, and if the garage can generate additional income by servicing 40-50 CEFADER-related tax-free vehicles supported by other international donors. The garage has the physical facilities and manpower to service 160 vehicles, on a regular basis, as required for this financial plan, but CEFADER payments for service to its own vehicles are irregular and partial at present. At this time, also, the garage is just beginning to open its doors to vehicles which are outside the CEFADER fleet, thus the next year will be critical for assessing whether, in fact, the planned financial self-sufficiency can be achieved.

The decision was made early in implementation of this component, to open the garage with unskilled apprentices who would become trained auto mechanics through a multi-year program of classroom instruction and supervised on-the-job experience. The wisdom of this decision has been thrown in question by the ensuing delays required for selection and training of apprentices before full services could be made available for the CEFADER fleet, and the other clients needed for financial self-reliance. The decision to recruit unskilled apprentices also required substantial investment of project funds in purchase of training aids, resident expatriate trainers, curriculum development, and construction of classroom space. CEFADER has not to date made a commitment to use of the central garage as a long term training site, and in fact, creation of a new long term vocational training program is conspicuously absent from the statement of project objectives. There has always been an inconsistency in design and implementation of the garage component, between CEFADER and CARE goals for the project. CEFADER has consistently been interested only in the objectives outlined above, to wit: an adequate level of services for the CEFADER fleet, and financial

self-sufficiency for garage operations. CARE, on the other hand, has always had an additional goal of creating a sustainable long term vocational training program to serve the Comorian economy's need for well trained auto mechanics. The team recommends that A.I.D. and CARE push the GOC to make a final decision on this issue. The team hopes that the GOC will make a commitment to the continuation of the apprenticeship training program, to ensure that the substantial investments in training aids, classroom construction, and trainer training yield the returns that they are capable of generating for the Comorian economy as a whole.

Only one experienced mechanic was hired to participate in the whole project, a Comorian garage supervisor previously trained in Madagascar, who had already been working in the garage since 1981. Other Comorians, however, were available in the labor market with at least some previous training and experience as mechanics. The project could have hired these semi-skilled mechanics, and given them supplementary training, without starting to create an apprentice program from scratch. For example, another skilled local mechanic was hired for a one year period, to ensure that CEFADER vehicles would be repaired on a timely basis during the start-up of the apprenticeship program, but his participation was seen, unfortunately, as a stop-gap measure. Selection of the first set of 10 apprentices, and start-up of a training program could not take place until until August 1985 (early in year 2 of project implementation), after the completion of major garage improvements. Of this group, 6 have remained in the program; the four drop-outs resigned for a variety of reasons including feeling over-qualified for the program, personal problems, loss of interest in the work, or alternative job opportunities outside the Comoros. In April 1987, a second group of 7 apprentices were admitted to the training program, but two have dropped out. A group of 11 mechanics is thus still in training at the central garage facility on Grande Comore; the first group of six will graduate in December 1988, or September 1988 if training is accelerated over the summer. Two of these advanced trainees were recruited from Anjouan; with periodic supervision from CARE's garage advisors on Grande Comore, they will return to staff the Anjouan CEFADER garage (constructed with A.I.D. funds and soon to be completed). The Comorian garage supervisor is developing training skills which would allow him to assume full responsibility for continuation of the apprenticeship training program within the next year, especially if project resources are reallocated to provide him with external short term training in pedagogical methods. If CEFADER approves continuation of training at the central garage, the 5 students admitted in April 1987 could complete their training by December 1990, and new groups of 3 apprentices per year could be accepted for training under his supervision, without disrupting on-going garage services. The mechanics currently in training are sufficient to meet the personnel needs of the CEFADER garage system; continuation of the training function would primarily cover attrition and serve private sector needs in the broader economy. Apprentices are performing well to date, given the status of their training. For example, the evaluation team observed that one apprentice (a candidate for deputy workshop supervisor) was creatively using his metal-working skills to design and construct new tools for specific garage tasks.

Construction activities are almost completed at both the Grande Comore and Anjouan garages. At Grande Comore garage, the only remaining construction activity will soon be finished- mounting of a chain and tackle block for engine removal. All structural work at the Anjouan garage site was scheduled for completion by end of December 1987, and this garage is expected to open for services in September 1988. It will be staffed by two advanced apprentices originally recruited from Anjouan, who will be assisted by a local hire clerk. This garage will initially service only CEFADER vehicles, and its operation will be closely linked to the main garage at Grande Comore, where all procurement will be undertaken. The Anjouan garage will do its own invoicing, but receipts for services will be deposited in the CEFADER revolving fund in Moroni. Only petty cash will be retained in Anjouan.

Commodity management at the Grande Comore garage is well systematized. All stock is recorded on bin cards for ease in tracking its location and the timing of reorders. A detailed report on the garage component by evaluation team member Vern Cowan offers additional suggestions to increase the security of attractive items, increase amounts charged to clients for consumables, etc.

CEFADER and CARE staff should now develop a strategy for hand-over of the Grande Comore and Anjouan garages to CEFADER, or alternatively, for their privatization. A.I.D., CARE, and CEFADER will need to agree on the role of these garages in future (e.g. whether they will continue to provide training, or just services), so that hand-over can be phased in by December 1989. Under this scenario, continuation of the garage's training function would be paid for by garage profits, but it would likely require a commitment from Peace Corps or the ILO to provide a resident expatriate to continue the monitoring of fiscal and commodity management. If CEFADER is not willing to consider continuation of the training program, it would be preferable for CEFADER to either sell or lease the garage operation to the private sector. Proceeds from sale or rental of the garage could be placed in a special account to support the GOC contribution to continuation of the Anjouan soil conservation activities under a follow-on A.I.D. grant to CARE in FY 1989, and leasing or sale conditions could retain priority for the servicing of the CEFADER fleet. CEFADER wishes to explore privatization alternatives (including leasing).

3. Delivery of Inputs

CARE has created a free-standing auto mechanics training program outside of the GOC vocational training system, by choosing to develop its own training program at the CEFADER garage. This has put the whole training element at risk in terms of future continuity, and has required higher levels of inputs than would have been required if semi-skilled mechanics rather than unskilled trainees had been recruited for project activities. ILO has recently reopened the Ouani vocational training school on Anjouan (its third re-opening), and a shorter less in-depth training program for mechanics will be offered there. CARE originally decided not to attempt reopening of auto mechanics training at that facility because of the recurrent cost problem. If training at the CEFADER garage will be discontinued after A.I.D. assistance ends, training aids purchased for the CARE project should probably be transferred to the Ouani vocational training school so that they will continue to be used.

The apprenticeship program has been delivered as an integrated curriculum, rather than as originally designed, with separate syllabi for auto mechanics, welding, electrical work, and metal working. Apprentices have developed de facto informal specializations based on the informal on-the-job experience they have received. CARE has delayed providing driver's education to the apprentices; this should be corrected immediately. All auto mechanics need to become good drivers so that they can test drive vehicles properly. Training methodology also needs other improvements. For example, apprentices often receive classroom training on one topic, and then spend the rest of the day working on-the-job on an entirely different set of tasks. CARE should adjust the theoretical part of the students' training to reflect work actually in the workshop at any point in time. A standard auto mechanic's workbook can be used, to check off each module as it is performed; gaps can later be filled through exercises structured for this purpose, if core elements of the curriculum are not covered in the course of normal workshop operations.

Not enough emphasis has been placed on training CEFADER drivers to undertake preventive maintenance and monitor the routine servicing needs of their assigned vehicles. To achieve the project objective of 80% availability of the CEFADER fleet, more emphasis will need to be placed on preventive maintenance; a new group of drivers will need to attend a half-day workshop each month, until all are made aware of their responsibilities, with refresher sessions thereafter.

CARE has experienced difficulty in recruiting qualified committed resident advisors for the garage activities. One administrative advisor had to be fired after 18 months, and one project coordinator also had to be replaced after seven months on the job. Neither advisor had the necessary technical skills or cultural sensitivity. These hiatuses in advisors' inputs, and the timing of annual leaves, have delayed the delivery of training. For example, from March through July of 1987, only 18 hours of training were given to apprentices, rather than the 49 hours planned for that trimester. As two of the three resident advisors' contracts are ending at this time, it is recommended that only one new advisor be recruited, for a job description that combines the roles of assisting with Comoranization of workshop supervision and apprentice training. To ensure success in the recruitment process, interviews on TDY in Comoros are highly recommended. The advisor already in place is working effectively towards Comoranization of the administrative aspects of garage management (commodity handling and financial management) and should be given overall responsibility for management of the garage component until CARE assistance ends. Cost savings from this reduction of the number of expatriate advisors can be used to fund short term external training for the Comoran staff, to accelerate the hand-over process.

4. Recommendations for Implementation by PACD

- (a) Recommendation for CARE: Obtain a final decision from the GOC on whether the apprenticeship training program will be continued beyond PACD, and assess the impact of this decision on planned financial self-sufficiency of garage operations under the alternatives of CEFADER or private sector management. If the GOC decides to discontinue training of apprentices after PACD, reach agreement on how the second group of apprentices will complete their training (scheduled for December 1990, one year after the recommended termination of A.I.D. bridge funding under a new grant), and decide on disposition of project-funded training aids thereafter (e.g. consider transferring them to the recently reopened vocational training school at Ouani, Anjouan). If the GOC agrees to continue the apprenticeship program, provide short term external training in pedagogical methods for the Comorian Workshop Manager and his deputy, using cost savings from reduction to two expatriate advisor positions in the garage component to fund this training.
- (b) Recommendation for CARE: To achieve financial self-sufficiency by PACD, recruit an adequate number of non-CEFADER clients as subscribers for garage services (at least 50), work with CEFADER to improve the timeliness and completeness of payments for services, use a European procurement agent to speed deliveries of parts and supplies if cost-effective, review garage pricing policies quarterly with the RTA for Small Enterprise Development, sell out-dated stock, and continue to pursue GOC payments for garage services, which must be brought up to date. (FYI: The team realizes that this will not be easy to implement, as GOC arrearages in counterpart contributions to the World Bank "Rural Services" project caused indefinite suspension of World Bank project funding as of March 1988. CEFADER vehicles funded by this project are major clients of the CARE-sponsored garage.)
- (c) Recommendation for A.I.D.: As CEFADER wishes to explore privatization alternatives (including leasing and sale), the team recommends that REDSO provide PDS funds to support analysis of alternatives by a consultant through REDSO's future new Private Sector IQC. If GOC decides to privatize garages on the basis of this study, a REDSO Engineer should assess whether a separate access road can be constructed at the Grande Comore garage for a reasonable cost.
- (d) Recommendation for CARE and the GOC: If CEFADER decides not to privatize the garage after PACD, explore whether ILO or the Peace Corps would be willing and able to fund a resident advisor for an additional 2 year period after A.I.D. support ends. This advisor would primarily provide transition assistance with management of commodities and accounts.

- (e) Recommendation for CARE and GOC: To reach the objective of 80% CEFADER fleet availability by PACD, institute monthly one-day workshops for CEFADER drivers, to teach preventive maintenance practices.
- (f) Recommendation for CARE and GOC: Accelerate Comoranization of garage management and apprentice training as much as possible, and use improved teaching methods recommended Vern Cowan's consultancy report of December 1987, e.g. closer linkage between classroom and on-the-job training on a daily basis, more use of teaching aids during classroom lectures, etc.
- (g) Recommendation for A.I.D.: Under the new follow-on grant, hold a review of garage operations one year after their hand-over to Comoran management, as part of REDSO monitoring activities, to record lessons learned from this transition.

VI. Strategy for Future A.I.D. Interventions in the Comoros

It is recommended that strategy for A.I.D.'s future investments in FY 1989 and beyond focus on design of a new five year grant to CARE to overlap with the May 1989 completion of current grant activities. It is proposed that the new grant focus primarily on the agricultural sector, e.g. by intensifying our activities in soil conservation/fertility enhancement on Anjouan; expanding into assuming responsibility for extension in all CADER's on Anjouan if consonant with other donors' programs and with possible assistance from Peace Corps; and possibly support to the long term extension training school on Moheli particularly for curriculum design and supervision of trainees during their final year practicum. Short-term consultancies should be funded strengthen CARE project monitoring and evaluation in the Comoros (especially on agricultural policy and institutional development issues). In recommending that A.I.D. and CARE continue to focus on extension, it is expected that other donors will assume major responsibility for agronomic research. Coordination with other donors active in the agricultural sector will be essential during design of this follow-on grant, and annual monitoring by a REDSO team including the Project Development Officer, and the Regional Forester, is strongly recommended.

Funds would also need to be provided for completion of the hand-over of garage component activities to the Comorian government or private sector by December 1989. If the Grande Comore garage will be privatized by lease or sale, a REDSO Engineer should be asked to assess whether a separate access road can be provided cost-effectively as part of hand-over activities under the new grant.

Design of the new grant should consider implementation of the HRDA Country Training Plan approved by AID/W (87 Nairobi 40961); during the first year, an in-country workshop on establishment of agricultural cooperatives could be held for Comorian women's groups, and during the second year, another workshop could address creation of agricultural joint ventures for private sector entrepreneurs.

The design team should also assess CEFADER training needs in agricultural policy, planning and financial appraisal of agricultural projects, and determine whether these needs can best be met by direct A.I.D. disbursement for external training, or alternatively by adding them to the CARE grant for in-country workshops. As CARE/Comoros is now independent of CARE/Kenya, overhead support to CARE would be calculated only on CARE/Comoros costs and support from CARE/NY. Funds for assistance from CARE RTA's could be budgeted at cost as periodic short term consultancies.

Given the relatively modest impacts of soil conservation investments to date, despite the critical importance of this activity in the Comoros, the team believes that A.I.D./CARE resources should not be diffused by start-up of new activities in other sectors during the new grant.

VII. Studies Needed to Plan Future Interventions

1. REDSO/ESA should consider providing PDS funds (four person weeks; \$15,000) to contract for a CARE-managed agricultural sector review of secondary sources which addresses:
 - (a) National policy on the use of WFP rations in Food for Work programs, especially concerns about the use of WFP commodities to pay farmers for erosion control activities on their own fields, and a study of rice prices and domestic production incentives to assess whether rice inflow from a change in WFP rations would lower rice prices and thereby reduce domestic producer incentives.
 - (b) national land tenure policy and recommendations currently under review by the GOC.
 - (c) cash crop pricing, marketing policies, and world market trends (e.g. for ylang ylang, cloves, and alternative cash crops in which Comoros might have a competitive advantage like coffee and cinnamon), and a review of available literature on potential for inter-cropping alternative cash crops in the clove forests (as currently practical in Indonesia), and reclamation of land now under cloves.
 - (d) assessment of CEFADER's capability in agricultural policy analysis, planning and financial appraisal of agricultural projects (especially within its planning unit which is responsible for preparing annual budgets at the national level), and fiscal control within CEFADER and its regional CADER's on Anjouan, e.g. experience in managing revolving funds.
2. Under the future new Private Sector IQC, REDSO/ESA should use PDS funds (three person weeks; \$10,000) to contract for a study of alternatives for privatizing the Grande Comore and Anjouan garages through sale or lease, including a strategy for use of the proceeds as GOC counterpart towards continuation of the Anjouan soil conservation activities, and leasing or sale conditions which retain priority for the servicing of the CEFADER fleet.

Annex A: List of Persons Interviewed

Mr. Kassimo M'Saide, Director-General, CEFADER
Mr. Mouhtar Rachide, CEFADER Technical Director
Mr. Hachim Ben Hamiza, Branch Chief of CEFADER on Anjouan
Mr. Karl Danga, Charge, U.S. Embassy/Comoros
Ms. Christy Gavitt, CARE/Comoros Country Director
Mr. Naraina Varde, CARE/Anjouan Project Manager/Extension Trainer
Mr. Jon Veerkamp, CARE/Anjouan Agronomist, LSC Component
Mr. Peter Rumsey, CARE/Comoros Garage Management Advisor
Mr. Claude Champagne, CARE/Comoros, Vehicle Repair Trainer
Mr. Barry Weightman, FAO Advisor to CEFADER
Mrs. Nack Binty, Hirondelles Home Economics School
Mr. Guy Charles, Director of Employment and Professional Training
Ms. Floriane de Sadelier, Technical Advisor to Women's Project
Mr. Jaïndou Cheick, Ministry of Civil Service
Mr. Ahmed Salim, Secretary General of the Chamber of Commerce
Mr. Zainil A.S. Massond, Head of Industrial and Services Division
at the General Direction of Plan
Mr. Omar Houmadi, Deputy Director of Industries, responsible for
artisans within the Ministry of Industry
Mr. Nassar Nafian, CADER Director, Boungeuani
Mr. Houmadi Houssein, CADER Director, M'remani
Mr. Mohammed Bacar, CADER Director, Ouani
Mr. Michael Stapelton, FAO Consultant, Integrated Rural Development Project,
Anjouan
Mr. Mohammed Ali, Governor, Anjouan

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Annex C: Financial Inputs to Soil/Land Conservation Component

The table below shows the schedule of financial inputs as programmed in the Grant Agreement, actual accruals from available documentation, and deviations based on projected resource allocation.

SOURCE	FY 85	FY 86	FY 87	FY 88	FY 89	CUMULATIVE TOTALS THROUGH 12/87
<u>A.I.D.</u>						
programmed	163,100	239,400	269,700	361,500	211,100	1,244,800
accruals	129,463	237,220	321,269	385,598*	211,100*	1,284,650
deviations	(33,637)	(2,180)	+51,569	+24,098*	N/A	(39,850)
<u>Government of Comoros</u>						
programmed	17,500	33,000	52,950	77,000	101,050	281,500
accruals	6,177	5,491	11,341	N/A	N/A	23,009
deviations	(11,323)	(27,509)	(41,609)	N/A	N/A	(258,491)
<u>World Food Program</u>						
programmed	0	5,000	21,000	50,000	98,000	174,000
accruals	14,540	36,537	41,574	N/A	N/A	92,651
deviations	+14,540	+31,537	+20,547	N/A	N/A	81,349

- * Budgeted Projections.
- N/A Not Available
- + Positive Deviation
- () Negative Deviation