

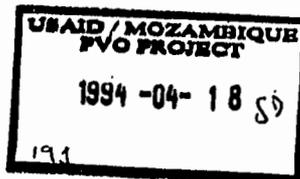
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FINAL EVALUATION OF THE ADRA RURAL REHABILITATION PROJECT

(USAID Grant 656-0217-G-SS-0017)

VILLANCULOS, MOZAMBIQUE



Submitted to

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

MAPUTO, MOZAMBIQUE

By

ADVENTIST DEVELOPMENT AND RELIEF AGENCY INTERNATIONAL

SILVERS SPRINGS, MD

TEAM MEMBERS

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February 1994

INTRODUCTION

In 1990 the Adventist Development and Relief Agency (ADRA) was granted \$1,233,849 to provide support for a program of rural rehabilitation in Inhambane Province of Mozambique over a period of three years.

The program is targeted to promote agricultural recovery assistance to subsistence farmers while decreasing emergency assistance for same. The focus of the program is to promote, through a network of local farmers, extension workers, farming methods that are productive and suited to local conditions through demonstration plots and selection of improved seed qualities.

This final evaluation for this project reports on the goals and objectives met or not met and qualitative and quantitative analysis using the original project document and the recommendations of the Mid-Term Evaluation as it standard to evaluate.

MAP OF MOZAMBIQUE

The ADRA Rural rehabilitation Project is located about 700km's northeast of the Mozambican capital of Maputo in the village of Vilanculos. This village is where the Regional office for ADRA is located. This project covers the following four districts, Vilanculos, Inhassoro, Gouvro, and Mabote, which are in the Province of Inhambane (see country and province maps on the next two pages.

**PURPOSES FOR THE EVALUATION OF THE ADRA RURAL REHABILITATION
PROJECT IN VILANCULOS, MOZAMBIQUE**

1. To ascertain how well the goals and objectives set down by the project proposal document were adhered to.
2. To make a record of the successes of the project and make appropriate remarks about them.
3. To have a record of the goals and objectives that were not met during the duration of the project and make an analysis of why those goals and objectives were not achieved.
4. To evaluate the allocation of project funds. To see if allocation of those funds were according to the guidelines set down by the donor agency and according to the project proposal document.
5. To give feedback to the donor agency to help it make decisions in the future on the funding of similar projects in Mozambique and/or other countries.
6. To have a record of the experiences that were learned in the project. This evaluation document could be used as a resource so that in the future similar projects can build from the experiences and knowledge learned in Vilanculos, Mozambique.

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OBJECTIVES AND GOALS OF THE PROJECT

The following table lists the major objectives and goals of the project, the results achieved and the percentage of achievement for each objective.

TABLE #1

OBJ. NO.	OBJECTIVE	GOAL	ACHIEVE- MENT	% OF GOAL
1.	RECRUITMENT AND TRAINING OF DISTRICT SUPERVISORS	4	4	100
2.	RECRUITMENT AND TRAINING OF EXTENSION WORKERS	36	36	100
3.	CREATION OF DEMO-PLOTS FOR TRADITIONAL CROPS	54	16	29.63
4.	DISTRIBUTION OF SEEDS FOR TRADITIONAL CROPS	600mt	322.3mt	53.7
5.	CREATION OF DEMO-PLOTS FOR VEGETABLES CROPS	10	11	110
6.	DISTRIBUTION OF SEEDS FOR VEGETABLE CROPS	500kg	1,571kg	314
7.	CREATION OF FRUIT TREE NURSERIES	4	4	100
8.	DISTRIBUTION OF FRUIT TREES	21,000	11,416	54.36
9.	DISTRIBUTION OF TOOLS	6,000	5,407	90.11

On the whole the project has met and fulfilled most of the objectives and goals as set down by the ADRA Rural Rehabilitation Project document.

The goal of having 54 demo-plots for traditional crops may have been a little ambitious in the original document. Maybe there should have been at least one demo-plot for every extension worker, which would have been a more realistic goal.

In regards to the goal of distributing 600mt of traditional crop seeds over the life of the project it may have been a little unrealistic, but there is also the possibility that after the

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first harvest that some of the farmers saved enough seed to be able to plant their next crop without having to go back to ADRA for more seed in the next planting season.

The distribution of the vegetable seeds was an overwhelming success to the point that it was a complete under estimation of what was really needed or anticipated.

Because of a lack of a good reliable source for seed for the fruit trees it was difficult to achieve the goal set for the amount of trees to be grown and distributed. Also there was the lack of plastic bags to plant the seeds into for the nurseries. But this last problem could have been solved by finding an alternative method that could have used local materials in place of the plastic planting sacks.

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EXTENSION WORKERS

One of the goals of this project was to recruit and train 36 individuals as Extension Workers(EW) from the different villages of the 4 targeted districts of Villanculos, Inhassoro, Govuro, and Mobate which are about 700 kilometers north of the capital of Mozambique, Maputo. Besides the EW's 4 other individuals were to receive the same training as the EW's, but also have further training beyond the level of the EW's and be made district supervisors.

This goal of 36 EW's(29 men and 7 women) and 4 supervisors(men) was achieved by 31 July 1993. The EW's were distributed in the four districts in the following manner, Villanculos(12), Inhassoro(9), Govuro(6) and Mabote(9). One supervisor was assigned per district.

At the time of this evaluation there were 25 EW's(20 men and 5 women) and no supervisors. The reasons for this decrease in EW's and supervisor's are the following. One EW died. Two women and eight men were let go because of theft, dishonesty in reporting and not fulfilling the duties of a EW. The four supervisors were let go because of thievery. The thievery involved crop seed (peanuts and beans) that had been obtained through UNICEF.

The districts now have the following number of EW's, Villanculos(9), Inhassoro(4), Govuro(4), and Mabote(8). These 25 EW's have the responsibility of 28 villages. New supervisors(6) are being trained at this time and should be in place in a short time

PARTICIPANTS AND PRODUCTION

From October 1990 to 31 December 1992 the project had helped 14,467 families. Included in this group are many displaced families that have since either returned to their homes or have been absorbed into the villages of the province. In 1993 over 23,000 of the 46,705 families that are in the target districts were assisted by the project. Each family averages 5.5 persons over the four districts, which works out to be about 126,500 persons. Of these families helped all received some training in improved techniques in the cultivation, planting and production of traditional crops, over 8,200 received further training in producing vegetable crops and another 1,050 plus were given instruction in fruit culture and production. Up to this point some have received seeds and/or fruit trees, some received seeds and/or fruit trees and tools, and some received seeds and/or fruit trees, tools and follow up training and follow through to harvest. Seeds for the traditional crops included maize, peanuts, cowpeas, sorghum, and millet. Vegetable crop seeds included, tomatoes, leaf lettuce, peppers, collards, onions. The fruit crops included papaya, citrus, coconut, mango.

For the traditional crops enough seed was sold to plant one hectare or more of land. The farmers were instructed that it is best to have a rotation of either corn, sorghum or millet with some legume crop such as peanuts or cowpeas to maintain or

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improve the fertility of the soil. For the vegetable crops there is no limit on the size of area could be planted, but because vegetables crops require more intense labor per area planted and a good steady, almost daily, water supply. Most of the vegetables crops were planted in garden areas of about 100 mts².

Table #2 gives production data for the traditional crops of some of the participants in the District of Villanculos for the 1992/93 crop year.

TABLE #2

CROP	PRODUCTION IN KG/HA (SACKS/HA) ^a	WHOLESALE PRICE/SACK IN MTS (DOLLARS) ^b	WHOLESALE PRICE/HA MTS (DOLLARS)
MAIZE	480 (9.6)	27,000 (5.40)	259,200 (51.84)
MILLET	320 (6.4)	25,000 (5.00)	160,000 (32.00)
COWPEAS	230 (4.6)	25,000 (5.00)	115,000 (23.00)
PEANUTS	260 (5.2)	75,000 (15.00)	3990,000 (78.00)
SORGHUM	NA		

a = 50 kg/sack

b = 5,000mts/dollar

Using the data from the above table the cost and benefit is calculated in Table #3.

TABLE #3

CROP	SEED/HA IN KG	PRICE/KG MTS (\$US)	PRICE/HA MTS (\$US)	PROFIT (LOSS)/HA MTS (\$US)
MAIZE	5	500{0.10}	2500{0.50}	158200 {31.64}
PEANUTS	5	1500{0.30}	7500{1.50}	284,000 {56.80}
COWPEAS	3	500{0.10}	1500{0.30}	15,000 {3.00}
MILLET	2	500{0.10}	1000{0.20}	60500 {12.1}

Because there is no reliable information from the Ministry of Agriculture or from non-participating farmers on crop yields averages it is impossible to make a quantitative comparison of the ADRA Rural Rehabilitation Project impact on the overall yield in the 4 districts of the province.

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Also there is not any reliable information on the production of the vegetables. As far as the fruit crops are concerned the trees are too young to start bearing any fruit. There will have to be a period 3-5 years of growth before there are any results and 5-8 years before there is any meaningful production.

ANALYSIS OF THE PROJECT

At the time of the Mid-Term Evaluation in August of 1992, it was recommended(see page 5) that detailed data be collected on the number of persons participating in the program and their gender. Only recently has a census form been designed to begin this work(see Appendix A). Also it was recommended that production records be collected on the different crops. This has been done on an irregular basis. Therefore it is difficult to make an empirical quantitative analysis of the actual success of the project as a whole. On page 14 of the Mid-Term Evaluation it was also recommended that technical assistance be obtained to help the Project Director develop and implement a information system.

It is the collective opinion of the evaluators that there was not developed or implemented a systematic collection of data and information on the number of persons in the project, gender, major age groupings, inputs given or sold to the farmers(seed, tools, labor and etc), land area planted, production yield records on the traditional and vegetable crops grown and harvested, and no monitoring of market prices during the period to obtain data on calculating profit or loss. If such a system had been in place it would be possible to calculate average production costs, and average benefit to beneficiaries from production in both quantity of production and monetary value. Also such an information system would have helped determine the success of the project and its impact as far as cost-benefit and cost-effectiveness is concerned. If such a system had been in place and the system was reliable it would have been helpful to both to the donor agency and grantee to help make decisions on future projects without delay.

It is strongly urged that the Director of the Rehabilitation Project develop such a system and with the help from a computer programmer, that is in the ADRA/Mozambique office, develop a database program to which data can be entered and than tabulated to produce accurate, meaningful and useful information to analyze the success of the project from a cost-benefit and cost-effectiveness standpoint.

Also in the future for any project proposals that is presented for funding that there is an evaluation component that gives guidelines on the parameters of what is to be evaluated and expected from the project.

IMPACT STUDY

The impact of an agricultural project is measured both in terms of its benefits as well as its negative results. The success of the project is closely tied to the general impact in that it is defined as whether the benefits outweigh the negatives and by how much. A deficit would be construed as a deterioration of the project environment at the expense of the project itself. A gain would mean that development did take place.

The lack of a data collection and monitoring system precludes us from undertaking a comparative study of impact in the project area. To be able to capture meaningfully the impact of the project a full fledged impact study should be undertaken in the communities using a 30 cluster survey for example. But the time allotted to us at this juncture does not allow us to do that. Therefore, we have resorted instead to interviewing key participants and focus groups of beneficiaries and extensionists.

There are five areas of predilection where impact of an agricultural project is mostly felt and we will see how did the Rural Rehabilitation Project has impacted the province in these areas of study.

These areas are the following:

- 1) Increase in agricultural production
- 2) Increase in incomes and living standards
- 3) Nutritional gains and food consumption
- 4) Environment and natural resource base
- 5) Status of women

The methods we used to collect pertinent information for an impact study varied from one area of study to the other.

In the first place, to determine increases in agricultural production the team planned a non-random survey of 9 farmers who have benefitted from the project. Answers obtained from key informants such as the Project Director, the Assistant Director, the program Director and the Regional Director were then combined with information obtained from the farmers' focus group.

We selected the farmers in the focus group to represent various characteristics of the farmers in the project area. There were 8 men: three were in their 30's, two in their 40's, three in their 50's. Included in this group were 3 women: one in her 30's, and the two others in their 40's. They came from two different villages in the Vilanculos area, and have all been in the program for three years. They were all cultivating 2 hectare fields. The group consisted of what the Assistant Director would determine as successful ones, less successful ones, and those applying the techniques without any meaningful impact. For a control group, field visits to non-participants were made. Most

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of the farmers in the focus group were planting corn, beans, peanuts. Only a few had sorghum.

To various questions built around a few socio-economical indicators the following observations and inferences were made:

100% of the respondents had planted the improved varieties of seeds ADRA distributed to them.

Since the drought had just ended, the hectares under cultivation were just getting ready for harvesting (within one month for corn). Observational data and conversations with farmers of both groups indicate that there is an expectation of a good yield this year. Part of their reasoning is that the rate of germination is higher than before due to the better quality of seed. Also there is the aspect that the amount of rainfall has been good and well distributed during the growing season of the crop.

A couple of corn fields in three different areas were studied. Each pair of fields chosen consisted of a field A, whose owner had applied the techniques that ADRA had taught him. The other, field B, was adjacent to A and belonged to a farmer not applying the techniques. We were assuming that since the fields were adjacent they shared a lot in internal and external factors affecting the production, such as time of planting and rainfall amounts, but not necessarily the same variety of seed. When A was compared to B in each case it was found that the field A was consistently greener, whereas the control group was less green and more yellow. Field A was planted in properly spaced rows with little space lost, whereas field B was haphazardly planted with the plant placement crowded with more than 4 stems per plant space compared with 2 plants per space for field A. There was no visible difference in height.

The team compared the yield in terms of number of ears of corn from a conservative sample of 20 adjacent plant placements from one of the fields of the first group to a generous sample of 20 adjacent plant placements from the second group. Field A showed 29 ears whereas Field B showed 22, though in terms of total number of stems per sample there were more plants in field B sample than the one of Field A. Field A was expecting a 23% higher yield than Field B.

Another indicator that sheds some light on the increase in agricultural production is the number of family of farmers that have benefitted from the program. A total number of 23,000 families had been in one way or another impacted by the project. If the yield for corn is effectively 23% higher than usual for these farmers, the impact will be positive in that corn is not easy to find on the markets of these areas, therefore, causing us to believe that the usual market price will not degenerate. Consequently, the farmers in the project area stand to gain.

To measure the impact in the area of living standards and income, the team asked the same focus group of farmers questions pertaining to increase in income and in living standards. The answers were coupled with answers from similar questions asked

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to a focus group of 9 women beneficiaries. The following results were obtained.

About 30% of the farmers indicated that they had or were expecting some increase in income. They turned out to be the same who are already marketing some of their produce or are planning to do so after the harvest coming up soon. Resorting to some proxy indicators for both focus groups together, we counted that 70% of the farmers were wearing some kind of shoes. A higher proportion of men than women were wearing shoes. Eighteen months ago, during the mid-term evaluation, we had noted that most farmers were not wearing shoes at all. Noted that a few of the farmers interviewed were the same we talked to eighteen months earlier. Over 80% of the men agreed with 100% of the women that clothing was first on their priority list when it comes to household and family needs. The second is school supplies for the children and the third is visiting relatives.

The third area of impact is nutrition and food consumption. The answers reaped from the various focus groups including a focus group of the extension workers yielded the following information. All indicated that they were eating better. There is more food available on the whole.

They are not promoting the cultivation of vegetables as much as traditional crops though most farmers in the program have a vegetable garden. They seem to be looking unknowingly for their source of vitamin rich nutrients from other sources. Consequently, the extensionists are neither focusing on the vegetable growing component as at the time of the mid-term evaluation. To the question of why did they not have any tomatoes in your garden, one woman replied that she was not aware that the extensionist had tomato seeds at her disposal. One other reasons that may be mitigating against the popularity of vegetable gardens is that some farmers attribute diarrhea to the ingestion of green plants.

There is practically no malnourished children in the project area according to the Health Director of ADRA. The children looked fed and more of them are attending school now than during the war. All participants in the various focus groups answered that their children were healthy. Their answers show that there is a palpable reduction of infant diarrheal cases in the project area, especially the bloody stool type. However, there does not seem to be a reduction in acute respiratory infections and malaria cases. No indication was available for measles.

The fourth area of impact is the environment. Due to the project, it has become more and more obvious to the farmers that burning does not help in the long run. Farmers continue to burn not because they are not persuaded of its benefits, but the latter does not provide short term benefits. They want a technique that helps in clearing the land in a short time, with minimum energy input. This is where the use of animal traction could be a benefit of not having to clear and work the land by hand.

Most have manageable sized "machambas" or fields. But a few do have large ones. They are aware that the techniques taught by ADRA does not alter the ecological balance, but maximizes production while keeping everything else in check and in balance. The expected increase in yield seem to justify their hunch that their food security is in planting traditional crops using the techniques taught by ADRA without having to increase the acreage under cultivation. Since water is the main constraint in the production of vegetables, the latter will not be on the farmer's priority list for a while.

The last area of impact we looked into was the status of women in the project area. How did the project impacted the lives and status of women in the project area?

The percentage of women farmer beneficiaries was around 25% of the total number of beneficiaries. That same percentage was reflected in the number of extensionists trained in the program. Though the women produced the same amount as the men, they seem to be more responsive to the techniques and more ready to transfer the knowledge to others. 100% of the women testified that most of the other women with whom they have shared their new knowledge have adopted the techniques. The fields of the women farmers we visited looked as good and healthy and orderly as those of the men. One striking observation is that women farmers in the program would talk level headed with the team members and look into the eyes, whereas the women we talked to and that were not in the program would tend to look sideways or down on the ground.

In the women's focus group 100% participated actively without anyone dominating the conversation with the others agreeing as in the past. 30% of the women had different opinions on many subjects and were eager to share with us without fear or hesitation.

They all said that they were producing more. With more income in view, they are planning to buy clothing, school supplies, visit parents and purchase cooking pans. Very few were thinking of buying a watch and practically none was thinking of buying a bicycle, even though they would purchase one after some of their more important needs were met.

They all agreed that they are now enjoying more respect on the part of the husband as well as men in general. Most were sharing in the privilege of expending income with their husbands. However, there is some indication that there is still some reticence on the part of the men to share their knowledge with the women. The transmission of knowledge seem to follow gender lines, with the men sharing with the men and boys, and the women sharing with the women and girls.

Notwithstanding, there is some anecdotal evidence that this barrier has started to come down amongst the families in the program. The men in the program are more apt to be working together with the wife and children in the same machambas. These seem to be faring better than the others. The indications we have shown that most of those who are not in the program have separate

machambas for the husband and for the wife.

Finally, according to the respondents, the project has helped them to manage their activities and contributed to create a little bit more spare time for the women. A more methodical approach to cultivation has significantly reduced the workload of women in the project area.

Is there gain or is there deficit? The qualitative data collected show that there is a gain. But the absence of quantitative data precludes a cost benefit or a cost effectiveness analysis that would have substantiated the demonstration that development did effectively take place in the project area partly due to the inputs of the project.

INTERVIEWS

During the time the evaluation team was in Mozambique a number of interviews were carried out with a number of persons who were directly or indirectly involved or had a direct or indirect interest in the ADRA Rural Rehabilitation Project. The purpose of these interviews was to get an consensus of how well the project was accepted over a wide spectrum of persons. What follows is a synopsis of some of those interviews.

Miguel Feliz Pinto - Administrator of the District of Vilanculos.

We appreciate ADRA for its intervention in the emergency situation that existed when they arrived here in 1989. Now that peace has been with us for over one year the situation has stabilized and we are returning to some sort of normalcy. The displaced persons are returning to their homes or are being absorbed into the different communities of the District of Vilanculos. The Agriculture project has been a part of this stabilization and will continue to be part of the base to rebuild. Because of the situation during the insurgency the education of our children was disrupted. We hope that ADRA will help us with the development of an educational project and continue to have an on-going agriculture project.

Lucas Jose Vilanculo - Director for the Ministry of Agriculture, District of Vilanculos.

During the time of the emergency situation ADRA came, and through its agriculture program and distributed seed and seedlings to the people so that they could start to plant and would not have to depend upon just emergency food relief. Now the emergency has passed and with the change of directors the focus has changed to sustainability.

With the first director there was more open communication and passing of information of what the agriculture project was doing. But with the change of directors this flow of information stopped. Also when the new project was in the process of being written up I had no input of what could be the focus of the project. But, for the most part I agree with the direction on what the new project is doing.

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The order of priorities for the people here as far as what is important agriculturally is first the planting of traditional crops such as maize, peanuts, cowpeas, cassava, sorghum and millet. Secondly is the planting of fruit, fruit trees and nut trees, such as coconut, citrus, cashew, passion fruit, papaya and pineapples. Thirdly, animal production in the following animals, goats for meat, poultry both for meat and eggs, swine, bovine stock for milk, meat and work. Most of these animals disappeared during the time of the insurgency and need to be replaced so the people can get back to some sort of normalcy. Fourth, the production of vegetable. For this part the gardens need to be near a readily available water source. ADRA could also think about a forest project to help us plant trees that would be used for construction, furniture production, firewood and shade.

Eucalyptus - construction
Pine - construction and wind erosion control
Chamfuta - for furniture construction

Since the peace accord the land that was lost to production due to the war is slowly being put back into production, but the process is very slow because the farmers have very few hand tools and no animals to work the land due to the fact they lost almost all these things during the war.

I hope that ADRA will continue to be part of the development work here in Vilanculos. I am happy with what is happening

When ADRA has a good Demo-plot it should have a field day to invite other district agriculture directors and the farmers to show and explain what they are doing so that the directors and the farmers are encouraged on what can be done and learn the techniques to take back to their own districts and farms and apply them.

Eva and Lucy 2 female EW's in and near Mabote.

Eva is 30 years of age, single parent and has a 8th grade level of education.

She has a one hectare Demo-plot near Mabote. She has planted maize, peanuts, cowpeas and some cooking gourds. The field looked clean and well organized and the crop plants looked healthy and were doing quite nicely.

Because of good distribution of the rainfall Eva felt that there would be a good harvest this year. The corn was just past its silk stage and the ears were filling out and would probably be ready for harvest on 4-5 weeks. The peanuts flowers were "pegging" and there was early development of some of the nuts in the ground. The cowpeas were growing but there was no flowering on them yet.

Eva was asked about the use of crop rotation in the Demo-plot. She answered that she will be rotating the corn and sorghum with a legume crop such as peanuts or cowpeas to maintain and improve the soil fertility. She also incorporates whatever O.M. she has

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to improve the humus and tilth of the soil and does not burn.

She visits her 25 farmers at least every two weeks to see how they are progressing and helps them with problems that may have arisen, The farmers visit the Demo-plot every week to ten days for a general meeting and teaching.

She has a sharecrop agreement with the ADRA Rural Rehabilitation Project. Half the crop is grown for seed to be sold to the farmers for the next cropping season, half she keeps for her own personal use. ADRA provides the seed and she provides the labor for the Demo-plot.

Lucy is single, 23 years of age and has a 7th grade level of schooling.

This Demo-plot is about a hours walk from he village and is quite isolated. It is not convenient to get there by vehicle and at the time of harvest it will be difficult to get the crop from the field to the village or market. The soil for the Demo-plot is of very low fertility and has very little soil water retention.

She has 2 hectares planted to peanuts, cowpeas and inter-cropping peanuts and maize. The peanuts and cowpeas looked fine, not as good as Eva's but will probably get a little above average yield in production at time of harvest. Where the corn and peanuts were inter-cropped the out look is not so hopeful. The soil does not have the moisture retention or fertility to support both plants at the same time in such close proximity to each other. There will be a small peanut harvest, but hardly anything will come from the maize.

It is suggested that a legume crop be grown on the soil for at least two seasons to buildup the fertility and humus of the soil and then plant either sorghum or millet, because of their higher tolerance to draughty and low soil moisture conditions.

On the whole the two women EW's are doing a better job in the care and management of the fields than the men. Also the women EW's have a better rapport with the women farmers than the men EW's have with the women.

FINANCIAL

The financial status of the project is sound at this time. Through the good efforts of the treasurer, the account and the project director the funds have been well managed and have been distributed according to the guidelines set down by the project document. After 41 months of operation the project as of 31 December 1993 is coming in under budget and is solvent. Refer to the Balance Sheet the Summary Statement of Income and Expense.

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ADRA MOZAMBIQUE-RURAL REHABILITATION "D"
USAID GRANT 666-0217-G-SS-0017-00

PAGE 1

MTS = 0.0002
CURRENCY : USD

BALANCE SHEET
DECEMBER 31, 1993

ASSETS	USD	MTS

CURRENT ASSETS		

CASH CONTROL	0.00	0
PETTY CASH-MAPUTO	7,000.00	37,843,584
EM EMERGENCY 912/2	218.77	1,182,720
CITIBANK NY 1667	-185.00	-1,000,152
BARCLAYS BANK SWAZI	2,806.45	15,172,304
BANCO STANDARD TOTTA-RR	121,343.34	656,009,556
A-ADMLC	0.00	0
B-ADMS	-10,180.88	-55,040,141
ACCOUNTS RECEIVABLE-EUD	0.00	0
ACCOUNTS REC'BLE -USAID	0.00	0
TOTAL CURRENT ASSETS	121,002.68	654,167,871
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LIABILITIES		

CURRENT LIABILITIES		

PAYROLL CONTROL	27.00	145,968
TITHES PAYABLE	-1,730.00	-9,252,771
ACCRUED EXPENSES-EUD	0.00	0
ACCOUNTS PAYABLE-OTHERS	0.00	0
TOTAL CURRENT LIABILITIES	-1,703.00	-9,206,803

FUND BALANCE		

FUND BALANCE		

DFA FUND BALANCE	0.00	0
INCREASE/DECREASE	122,705.68	663,374,674
TOTAL FUND BALANCE	122,705.68	663,374,674

TOTAL LIABILITIES AND FUND BALANCE	121,002.68	654,167,871
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19.

APPENDIX A
CENSUS FORM

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ADRA MOZAMBIQUE
Vilanculos

PROJECTO DE ASSISTENCIA AGROPECUARIA

CENSO FAMILIAR AGROPECUARIO

NOME: _____ COMUNIDADE: _____
ENDERECO: _____ DATA: _____

QUE CULTURAS TEM SEMEADAS E QUE TECNOLOGIA UTILIZO?

Cultura	Tecnologia	Area Semeada (Ha)	Data De Plantio	Semente Utilizada		Composto Utilizado (Mt)	Rendimento (Q/M)	Observacoes
				Melhorada (Kgr)	Comum (Kgr)			
1.								
2.								
3.								
4.								
5.								
6.								

QUE ANIMAIS E FRUTEIRAS TEM?

Bovinos	Caprinos	Porcinos	Aves			Caprino	Citricos	Papeiras	Coqueiros		

QUE FRUTEIRAS E FERRAMENTAS TEM RECEBIDOS DA ADRA?

Cajuzeiras	Citricos	Papeiras	Marcuys			Machado	Exada	Machete	Regadeiras	Aciabo	Serras

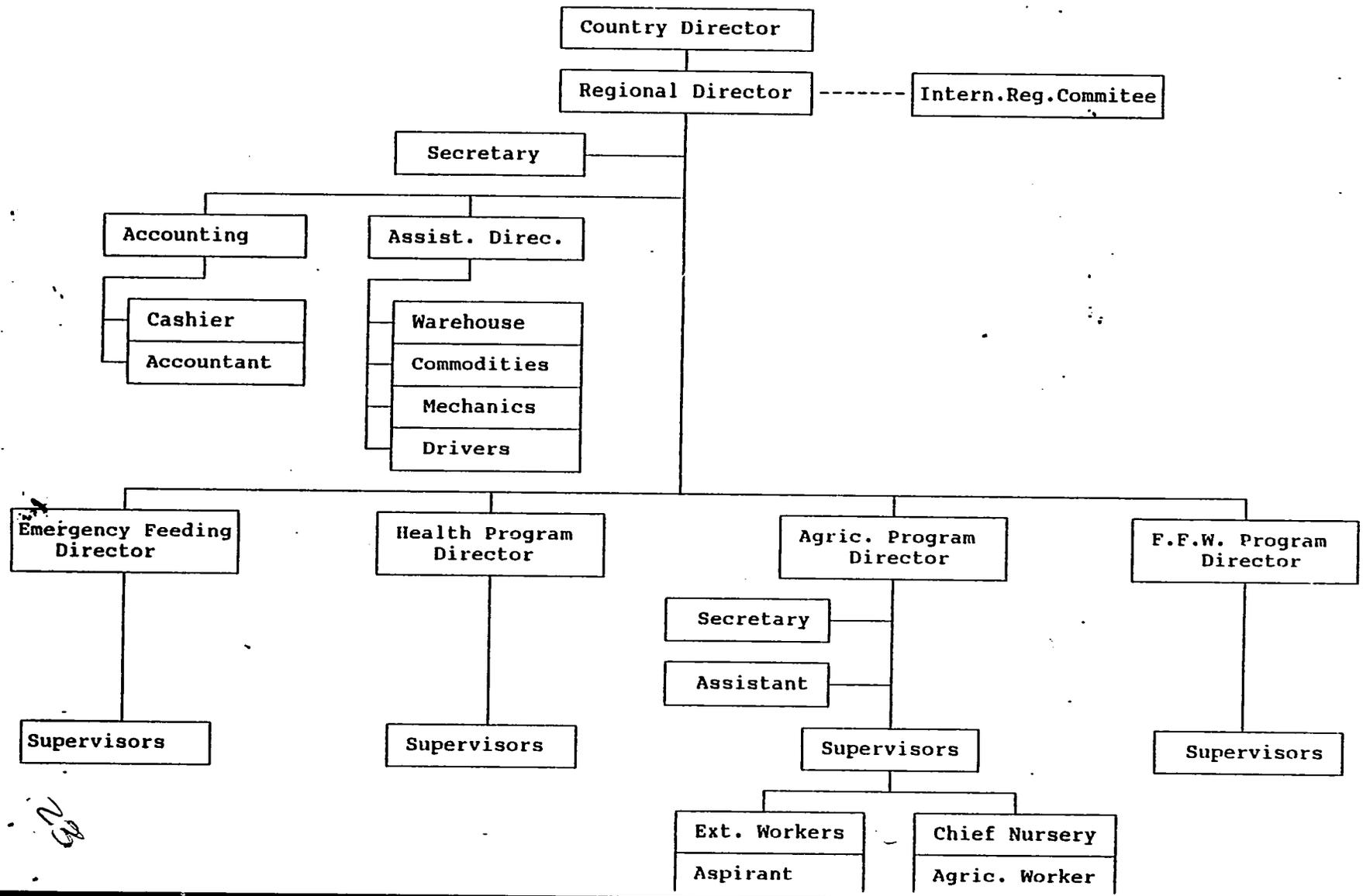
MEMBROS DA FAMILIA

NOME	Edade	Parentesco	Nivel Educativo	Ocupacao	Medicos de 3 anos		
					Cartao de Controle	Nivel Nutricional	Intervalo De Pesaje
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

APPENDIX B

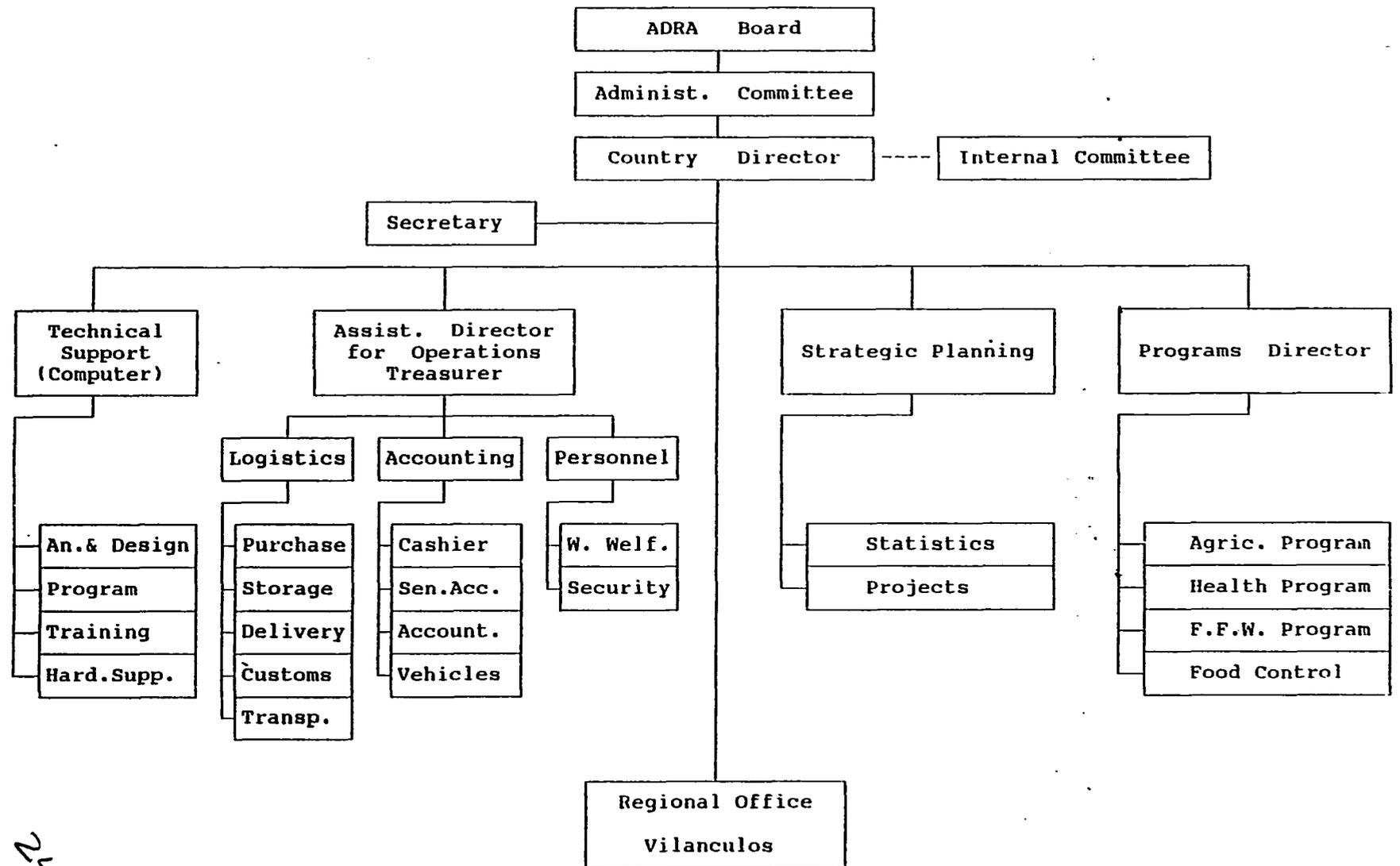
ORGANIZATIONAL CHART OF ADRA/MOZAMBIQUE

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ADRA/Mozambique
Organizational Chart

NATIONAL OFFICE



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APPENDIX C
QUESTIONED ASKED

DIRECTOR OF THE RURAL HABILITATION PROJECT/PROGRAM DIRECTOR/ASSIT
DIRECTOR.

1. HOW MANY AGRICULTURE EXTENSION WORKERS HAVE BEEN TRAINED IN THIS PROGRAM ?
 - a. MEN
 - b. WOMEN
2. HOW MANY OF THEM ARE STILL ACTIVE ?
 - a. MEN
 - b. WOMEN
3. IF NO LONGER ACTIVE, WHY NOT ? (DEATH, MOVED OUTSIDE THE AREA OR WHICH THIS PROJECT COVERS, PERSONAL PROBLEMS, ETC)
4. HOW MANY FARMERS OR PARTICIPANTS HAVE BEEN THE IN THE PROGRAM FROM ITS INCEPTION ?
5. HOW MANY ARE STILL CONSIDERED ACTIVE ?
6. IS THERE DATA THAT WOULD GIVE US AN IDEA ON HOW MUCH PRODUCE IS BEING PRODUCED, ON THE AVERAGE, FROM EACH GARDEN ?
7. FROM YOUR PERSPECTIVE, HOW HAS THIS PROJECT AFFECTED THE LIVES OF THE PARTICIPANTS ?
 - a. ECONOMICALLY
 - b. SOCIALLY
 - c. NUTRITIONALLY
 - d. SELF-ESTEEM
8. ON THE WHOLE, HOW HAS THE PROJECT HAD A IMPACT ON THE ECONOMY AND THE SUPPLY OF FRESH GARDEN VEGETABLE AT THE VILLAGE LEVEL AND THE REGION ?
9. WHAT ARE THE CATEGORIS OF TYPES OF PERSONS THAT HAVE BEEN OR ARE INVOLVED IN THE PROJECT ? (NORMAL VILLAGERS, REFUGEES OR DISPLACED PERSONS, SCHOOL AGE GROUPS, HANDICAP, PRISON, ETC)
 - a. MEN
 - b. WOMEN
 - c. AGE DISTRIBUTION OF EACH GENDER
 - 15 - 20
 - 21 - 30
 - 31 - 40
 - 41 - 50
 - 51 +
10. DO THINK THAT THE LOCAL GOVERNMENT OR THE MINISTRY OF AGRICULTURE IS ABLE TO MANAGE OR CONTINUE ON SUPPORTING THIS PROJECT IN ITS PRESENT FORM IF FUNDING FOR ADRA IS NOT FOUND? IF NO WHY NOT ? IF YES WHY SO?
11. IF YOU WERE TO HAVE INPUT INTO WRITING UP OR DEVELOPING A PROJECT PROPOSAL SIMILAR TO THIS ONE HERE IN MOZAMBIQUE:
 - a. WHAT WOULD YOU RECOMMEND TO STAY THE SAME ?
 - b. WHAT WOULD YOU ELIMINATE OR CHANGE ?
 - c. WHAT WOULD YOU DO DIFFERENTLY ?
 - d. AND WHY ?
12. IS THERE INFORMATION ON HOW MUCH IT COSTS, ON THE AVERAGE, TO GET A FIRST TIME GARDENER OR FARMER STARTED AND PRODUCING?
 - a. SEED
 - b. EQUIPMENT
 - c. TOOLS
 - d. LABOR
13. HOW MUCH FOOD OR PRODUCE IS GROWN AND HARVESTED, ON THE AVERAGE, PER HECTARE PER YEAR ?

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14. ARE THE FARMERS SELF-SUPPORTING AFTER ONE OR TWO CROPS ARE HARVESTED TO BE ABLE TO PURCHASE THEIR OWN SEED, TOOLS AND ETC, WITHOUT FURTHER ASSISTANCE FROM ADRA ?
15. DETAILED COPIES OF THE FOLLOWING
 - a. CURRICULUM USED IN THE TRAINING PROGRAM
 - b. REPORTS
 - c. REPORT FORMS USED BY THE EXTENSION WORKERS (EW)
 - d. FLOW CHART OF ADRA/MOZAMBIQUE
16. HOW HAS ADRA/M GOTTEN THE LOCAL GOVERNMENT INVOLVED IN IMPLEMENTING THIS PROJECT SO THAT THEY FEEL THEY ARE A PART OF THE DEVELOPMENT AND SUCCESS OF THE PROJECT ?

FARMER - FOCUS GROUP OF ABOUT 7 FARMERS

1. HOW LONG HAVE YOU BEEN A PART OF THE RURAL HABILITATION PROJECT ?
2. HOW OR WHY DID YOU GET INVOLVED ?
3. HOW HAS THE PROJECT BENEFITED YOU AND YOUR FAMILY ?
 - a. ECONOMICALLY -
 - i. HAS YOUR INCOME INCREASED DIRECTLY BECAUSE OF YOUR PARTICIPATION IN THIS PROJECT?
 - ii. WITH AN INCREASE IN YOUR INCOME WHAT HAVE YOU PURCHASED TO MAKE LIFE BETTER OR MORE COMFORTABLE FOR YOU AND YOUR FAMILY ? (RADIO, BICYCLE, MOTORCYCLE, NEW COOKING UTENSILS FOR YOUR WIFE, CLOTHES, SHOES AND ETC ?)
 - b. NUTRITIONALLY - HAS THE HEALTH OF YOU AND YOUR FAMILY IMPROVED BECAUSE OF THE AMOUNT AND THE KINDS OF VEGETABLES AND PRODUCE YOU ARE EATING FROM YOUR VEGETABLE GARDEN PLOT ?
 - c. SELF ESTEEM
4. DO YOU SELL AND/OR BARTER THE VEGETABLES AND FRUITS YOU PRODUCE IN THE MARKET AND/OR WITH YOUR NEIGHBORS ?
5. DO YOU SELL HERE ONLY IN YOUR LOCAL VILLAGE ?
6. DO YOU ALSO SELL YOUR PRODUCE IN OR TO ANOTHER MARKET AREA ?
 - a. DIRECTLY
 - b. THROUGH A MIDDLE MAN
7. IF YOU SELL THE PRODUCE OR CROP YOURSELF TO OTHER VILLAGERS OR IN ANOTHER MARKET OUTSIDE YOUR VILLAGE HOW MUCH DO YOU RECEIVE PER KILO OR SACK FOR YOUR CROP ?
8. IF YOU SELL TO ANOTHER PERSON WHO MAY SELL YOUR CROP IN THE MARKET WHAT IS THE PRICE YOU WILL RECEIVE PER KILO OR UNIT FOR YOUR CROP ?
9. HOW MUCH OF THE CROP THAT YOU GROW DO YOU AND YOUR FAMILY CONSUME DIRECTLY ?
10. HOW MANY OF YOUR FAMILY MEMBERS HELP IN THE PLANTING, CARE AND HARVESTING OF THE CROP ?
11. WHAT CROPS ARE EASY TO GROW ?
12. WHAT CROPS ARE MORE DIFFICULT ?
13. WHAT CROPS HAVE YOU TRIED GROWING BUT DID NOT HAVE VERY GOOD SUCCESS AND HAVE DISCONTINUED GROWING THEM ?
14. HAVE YOU TALKED WITH YOUR EW ABOUT YOUR SUCCESSES, AND NOT SO SUCCESSFUL CROPS ?
15. EXPLAIN TO US THE METHOD OR METHODS THE EW HAS TAUGHT YOU IN PRODUCING YOUR CROPS ? (IS THE INFORMATION THE EW'S HAVE GAINED IN THEIR COURSE WORK AT THE TRAINING CENTER BEING TRANSFERRED IN A MEANINGFUL WAY TO THE FARMERS SO THAT THERE IS AN INCREASE IN PRODUCTIVITY ?)

16. WOULD YOU SHOW US YOUR CROP ? (MAKE COMMENTS ON HOW THE CROP PHYSICALLY LOOK)

EXTENSION WORKER - FOCUS GROUP OF 7 EW'S (5 MEN & 2 WOMEN

1. HOW LONG HAVE YOU BEEN INVOLVED IN THIS PROJECT ?
2. BRIEFLY EXPLAIN YOUR TRAINING PROGRAM.
3. HOW AND WHY WERE YOU ASSIGNED TO THE VILLAGES AND REGION TO WHICH YOU ARE WORKING ?
4. HOW MANY PERSONS HAVE YOU TRAINED IN THE METHODS THAT WERE TAUGHT IN THE PROJECT ?
5. HAVE YOU ALSO TAUGHT THESE METHODS TO PERSONS NOT IN YOUR ASSIGNED AREA ? FOR EXAMPLE TO FAMILY MEMBERS OR FRIENDS WHO MAY NOT LIVE IN THE AREA THAT THIS PROJECT DOES NOT COVER OR PARTICIPATE IN.
6. WHAT ARE THE KINDS OF THINGS YOU REPORT ON TO THE OFFICE OF THE PROJECT OR YOUR SUPERVISOR ?
7. HOW OFTEN DO YOU MAKE A REPORT ?
8. ARE THE PERSONNEL OF THE PROJECT READILY AVAILABLE TO ANSWER YOUR QUESTIONS OR HELPFUL IN SOLVING PROBLEMS THAT MAY ARISE IN THE COURSE OF YOUR WORK ?
9. DO YOU SOMETIMES DISCUSS OR SHARE IDEAS AND PROBLEMS WITH YOUR FELLOW EW'S OUTSIDE OF THE FORMAL MEETING THAT MAY OCCUR?
10. TELL US OF SOME YOUR SUCCESSES ?
11. WHAT HAS BEEN SOME OF THE CHALLENGES IN BEING A EW ?
12. FROM YOUR PERSPECTIVE, WHAT HAS BEEN THE ATTITUDE OF THE LOCAL GOVERNMENT TOWARDS THIS PROJECT ?
13. HOW MUCH ARE YOU PAID ?
14. IS IT ADEQUATE ?
15. IF YOU WERE TO HAVE A SAY IN HELPING DEVELOP A DOCUMENT FOR ANOTHER PROJECT WHAT WOULD BE SOME OF THE SUGGESTIONS YOU WOULD MAKE ?

MINISTRY OF AGRICULTURE

1. FROM YOUR PERSPECTIVE, AS A REPRESENTATIVE OF THE GOVERNMENT OF MOZAMBIQUE, WHAT ARE YOUR THOUGHTS ON THIS ADRA RURAL REHABILITATION PROJECT ?
2. IF YOU WERE TO HAVE INPUT INTO THE DEVELOPMENT OF ANOTHER PROJECT SIMILAR TO THIS, WHAT ARE THE THINGS YOU WOULD SUGGEST TO POSSIBLY HELP IMPROVE THE SCOPE OF THE NEW PROJECT ?
3. WHAT HAS BEEN THE IMPACT OF THE ADRA PROJECT ON THE ENVIRONMENT ?
 - a. SOIL FERTILITY
 - b. SOIL EROSION
 - c. BETTER USE OF THE LAND OR HAS MORE LAND BEEN TAKEN OUT OF THE BUSH TO INCREASE THE LAND AREA FOR PRODUCTION ?
 - d. WATER RESOURCE MANAGEMENT
 - e. DOES THE MOA HAVE A PROGRAM TO PROVIDE SEED FOR THE PEOPLE TO USE IN THEIR GARDENS ? IF YES HOW MANY KILOS OR TONS OF SEED ARE GIVEN OUT OR SOLD TO THE LOCAL POPULATION ?
 - f. WHAT PROGRAMS OR PROJECT DOES THE MOA HAVE FOR IT OWN PEOPLE IN THIS DISTRICT ?
 - g. WHAT OTHER TYPES OF PROJECTS WOULD YOU SUGGEST ADRA COULD POSSIBLY DEVELOP FOR THIS AREA OF MOZAMBIQUE ?

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APPENDIX D
COURSE CERTIFICATES

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ADRA

**Agência de Desenvolvimento e Recursos Adventista
MOÇAMBIQUE**

CERTIFICA

Que: _____

completou satisfatoriamente o curso de "Horticultura"

Vilanculos, 26 de Fevereiro de 1993

[Signature]
Direcção de ADRA/Moçambique
ADRA

[Signature]
Lucas José V.
Director Distrital de Agricultura
Vilanculos

[Signature]
Jorge Jarpa V.
Director do Projecto Agrícola
Adra/Vilanculos

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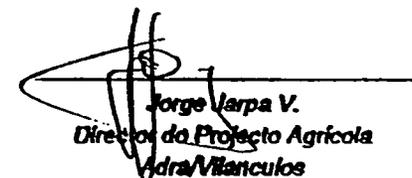
**Agência de Desenvolvimento e Recursos Adventista
MOÇAMBIQUE**

CERTIFICA

Que: _____

completou satisfatoriamente o curso de "Fruticultura"

Vilanculos, 29 de Janeiro de 1993





ADRA

**Agência de Desenvolvimento e Recursos Adventista
MOÇAMBIQUE**

CERTIFICA

Que: _____

completou satisfatoriamente o curso de "Culturas Tradicionais"

Vilanculos, 24 de Setembro de 1992.

Dwight Taylor
Dwight Taylor
Director ADRA Moçambique



Jorge Jarpa V.
Director do Projecto Agrícola



**Agência de Desenvolvimento e Recursos Adventista
MOÇAMBIQUE**

CERTIFICA

*Que: _____
completou satisfatoriamente o curso de "Economia e Administração"*

Vilanculos, 28 de Mayo de 1993

*Dwight Taylor
Director de ADRA/Moçambique*

*Jorge Jarpa V.
Director do Projecto Agrícola
Adra/Vilanculos*

MONITORING AND EVALUATIONS

Monitoring can be defined as a process of measuring, recording, collecting, processing and communicating information to assist project management decision-making.

In relation to agriculture, monitoring focuses on the (1) operation, (2) performance and (3) impact of agricultural projects.

(1) Project operations embraces the many tasks performed regularly or intermittently which are essential for the proper functioning of a project. For example: the operation and maintenance of machinery and equipment, the delivery and distribution of project resources including farm inputs, such as seeds, tools, fruit trees and etc.

(2) Project performance refers to the level of achievement of project targets such as, area of land under cultivation, extension and adoption rates, project yields production levels.

(3) Project impact relates to the effects of project operation and performance on the rural people, both on and off a project, as indicated by change in levels and distribution of farm yields, farm income, family nutrition and welfare, etc.

Purposes of Project Monitoring

The purpose of project monitoring is to indicate to those concerned (donor agencies, project management) whether project objectives are being achieved and, more practically, whether operation, performance and impact of a project is "on course". To see whether tasks are being carried out according to schedule; whether input and outputs are achieving design of "benchmark" levels; whether project impact is in accord with project objectives or whether these objectives need adjusting in the light of experience. ... As far as projects are concerned, decisions and actions should be taken by project management which should be the prime user of information generated by project monitoring.

Monitoring and Evaluation

An essential link between monitoring and improved project management, to which monitoring is intended to contribute, is the related activity of on-going evaluation. On-going evaluation involves the comparison of actual project operation, performance and impact with those originally specified or planned. On-going evaluation is the analysis, by project management of monitored information on a continuing basis, with the view to enabling it where necessary to adjust or redefine policies, objectives, institutional arrangements and resources effecting the project during implementation.

Ex-post evaluation also uses monitored information to assess project operation performance and impact at a given point in time (usually end of project) and assist the planning of future projects.

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Effective monitoring and evaluation activity comprises three features or operations.

1. The collection of appropriate information, which is monitoring.
2. A practical consideration or assessment of the data which is on-going evaluation.
3. The taking of appropriate action in the light of monitoring and evaluation.

There is a subtle distinction between the decision-making process involved in the second and third activities, the decision what to do and the decision to do it. Actual monitoring or collection of data is a pretty neutral activity.

Monitoring Indicators

A central feature of monitoring activity is the verification and/or measurement of the operation, performance and impact of a project. This requires the specification of variables or indicators of project inputs, outputs, effects and internal factors or constraints. The selection of appropriate indicators is not without its difficulties. Where there are 'objectively verifiable measures' of facts and events, such as delivery of fertilizer, tools, or seeds, yield and production levels, there is little difficulty. But sometimes it is not possible to observe and measure project results directly and in these cases, indirect or proxy indicators have to be used. For example, general standard of living, better housing, clothing, better or lack of general health.

Monitoring Project Operation, Performance and Impact

It is necessary to underline an important distinction that should be made and understood between two different but related monitoring activities

1. Monitoring systems are concerned with recording of project operation and performance.
2. Project impact which deal specifically with the measurement of the impact of the project in the community in which the project is occurring.

Monitoring of project operation and performance mainly involves the continuous measurement and recording of scheduled tasks, timetable activities and expected outcomes. Observation and recording of tasks and activities is often frequent and sometimes daily. The purpose of the monitoring activity is to provide information for the on-going evaluation and often day-to-day management response.

The monitoring of project impact is mainly concerned with the effects and impact of project operations on its beneficiaries, relates to the rural people embraced by a project and, in some cases, those people outside a project who experience positive or negative influence from it.

An monitoring and evaluation system is an information system for decision

makers. The design must therefore start by answering the three basic questions:

1. Who needs the information?
2. On what?
3. For what type of decision?

From the answers to these will arise the further question:

- What type of information?
- From what source?
- How precise and frequent?
- Collected how and by whom?
- How will it be processed and analyzed?
- How will it be reported and to whom?
- How long will data collection, analysis and reporting take?
- What staff and equipment is required?
- How much will it cost?

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WORK PLAN FOR DATA COLLECTION

PHASE I

1. THERE ARE 6 SUPERVISORS
2. THERE ARE 25 EXTENSION WORKERS IN 28 VILLAGES.
3. ASSIGN 4 EXTENSION WORKERS PER SUPERVISOR
4. NEED TO INTERVIEW 6-8 FARMERS PER EXTENSION WORKER THAT ARE PARTICIPATING IN THE ADRA PROJECT
5. INTERVIEW 2-3 NON-PARTICIPATING FARMERS PER EXTENSION WORKER VILLAGE

PHASE II

1. THE SUPERVISOR AND EXTENSION WORKER GO TOGETHER TO INTERVIEW THE FARMERS
2. NEED TO BEGIN THE INTERVIEWING NOW! DO NOT WAIT TILL TIME OF HARVEST. NEED TO IDENTIFY THE FARMERS. BEGIN COLLECTING THE DATA, NAME, AGE, SEX, MARRIED AND ETC.
3. MAKE UP A FILE FOLDER FOR EVERY VILLAGE WITH THE NAME OF THE VILLAGE AND THE EXTENSION WORKER AND THE SUPERVISOR. PUT THE DATA COLLECTION FORMS FOR EVERY FARMER IN THAT FOLDER FOR EVERY VILLAGE. THE FOLDER MUST BE BROUGHT BACK TO THE AGRICULTURE PROJECT OFFICE IMMEDIATELY AFTER THE INTERVIEWS ARE FINISHED AND PUT IN A FILE CABINET IN A SECTION CALLED DATA COLLECTION.
4. BEGIN ENTERING THE DATA INTO THE DATABASE PROGRAM AS SOON AS A FOLDER COMES BACK FROM A VILLAGE. DO NOT WAIT TO COLLECT ALL THE FOLDERS. CHECK-OFF EVERY FOLDER AS IT COMES INTO THE OFFICE AND AS THE DATA IS ENTERED INTO THE DATABASE PROGRAM.
5. THE SUPERVISOR NEEDS TO EXPLAIN TO THE EXTENSION WORKER AND THE FARMERS THAT HE WILL RETURN AT THE TIME OF HARVEST TO COLLECT THE DATA FOR THE CROP YIELDS.
6. THE SUPERVISOR AND THE EXTENSION WORKER REALLY NEED TO COORDINATE AND KEEP IN COMMUNICATION WITH EACH OTHER ON THIS ACTIVITY SO THAT AS MUCH AS POSSIBLE ALL THE FARMERS THAT WERE INTERVIEWED BEFORE ARE ALSO A PART OF THE DATA COLLECTION OF THE HARVEST.

PHASE III

1. AT THE TIME OF THE HARVEST THE FOLDERS ARE GIVEN BACK TO THE SUPERVISORS WHO HAD THEM ORIGINALLY AND THEY GO BACK INTO THE VILLAGES TO RECORD THE HARVEST DATA.
2. AFTER THE DATA IS COLLECTED THE FOLDERS ARE BROUGHT BACK TO THE AGRICULTURE PROJECT OFFICE.
3. THERE IS THE POSSIBILITY THAT IF MORE THAN ONE CROP IS INVOLVED THE SUPERVISOR WILL NEED TO RETURN TO THE VILLAGE TO COLLECT THE DATA FOR EACH ONE OF THE CROPS. BUT IT IS IMPORTANT THAT THE FOLDERS COME BACK TO THE OFFICE AFTER EVERY CROP IS RECORDED.

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4. AS THE FOLDERS COME BACK INTO THE OFFICE THE DATA IS ENTERED INTO THE DATABASE PROGRAM. WHEN ALL THE DATA FROM A PARTICULAR CROP HAS BEEN ENTERED IT CAN BE TABULATED AND ANALYZED. NO NEED TO WAIT FOR ALL THE CROPS TO BE IN TO BEGIN DATA ANALYSIS OF A PARTICULAR CROP. BUT ALL DATA FOR A PARTICULAR CROP DOES NEED TO BE ENTERED BEFORE ANALYSIS CAN BEGIN.

5. THE ACTING PROJECT DIRECTOR HAS TO KEEP ON TOP OF THIS MONITORING SYSTEM TO MAKE SURE THE SUPERVISORS ARE PROPERLY TRAINED AND ARE ACCURATE IN THE COLLECTION OF DATA.

EXPLANATION: THE SCALE HAS A MAXIMUM OF 50KG OF WEIGHT. THE WEIGHT OF EACH INDIVIDUAL SACK SHOULD BE LESS THAN 50KG. BECAUSE IF A SACK WEIGHS MORE THAN 50KG IT WILL RECORDED AS ONLY 50KG. IF A SACK DOES WEIGH 50KG SOME OF THE GRAIN SHOULD BE TAKEN OUT OF THE SACK UNTIL THE SACK IS LESS THAN 49KG SO THERE IS AN ACCURATE WEIGH OF THE CROP AND IT CAN BE RECORDED PROPERLY. THE GRAIN THAT WAS TAKEN OUT OF THE SACK SHOULD BE PUT INTO ANOTHER SACK TO BE WEIGHED.

ALSO THE WEIGHTS OF EACH INDIVIDUAL SACK SHOULD BE RECORDED ON THE BACK OF THE DATA COLLECTION FORM OF EACH FARMER AND FOR EACH CROP. THAT WAY THERE IS A RECORD OF HOW MANY SACKS WERE RECORD AND THE TOTAL CAN BE VERIFIED. THE TOTALS SHOULD BE ADDED UP AT THE OFFICE BY THE SUPERVISOR WITH THE AIDE OF A CALCULATOR AND THEN VERIFIED BY THE ACTING DIRECTOR BEFORE ENTRY INTO THE DATABASE.

BON CHANCE!!!

EQUIPMENT

1. CLIPBOARD.
2. 3-5 SHARPENED PENCILS.
3. DATA COLLECTION FORMS.
4. FILE FOLDER PROPERLY MARKED BY VILLAGE, EXTENSION WORKER AND SUPERVISOR.
5. SCALE, WITH ROPE TO HANG FROM A TREE AND A CROSS MEMBER BAR TO PUT THROUGH THE METAL RING TO HOLD THE SCALE.
6. WATER JUG OR CANTEEN.
7. A SACK OR BRIEFCASE TO CARRY THE EQUIPMENT.

