



~~PD-AAI-721~~

615-0166

UNITED STATES OF AMERICA  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
PD-AAI-549 U.S.A.I.D. MISSION TO KENYA

UNITED STATES OF AMERICA  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20503

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August 4, 1981

Mr. Henry Miles  
AFR/DP/E  
3520 NS  
AID/Washington

Dear Hank:

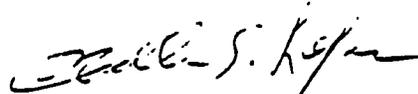
As promised in Nairobi 16257, I am writing concerning the need for a completion report for the CARE/Kenya Water Development Project (615-0166). Unfortunately we find ourselves in a bit of a dilemma in that the key people who were involved in the project for both CARE and AID have left Kenya. There are at least two documents in our file, however, that may together serve the same purpose as a completion report in terms of indicating lessons learned, etc.

An evaluation of the project was done by two ATAC consultants, Huntley Biggs and John R. Schott, in August, 1976. The issuance of their report was followed by an exchange of cables between AID/W and the Mission (76 Nairobi 11258, 77 State 59299, 77 Nairobi 4559). I realize that this evaluation took place at the project's mid-point rather than after its termination. However, a member of my staff who is somewhat familiar with the project, having been here since early 1977, believes that the report and subsequent documents address all of the major substantive issues that would have been deemed important in any subsequent evaluation.

These issues ranged from selection criteria for sub-projects to appropriate levels of cost/benefit analysis for this type of activity and project management. It is doubtful that further review would develop additional issues or result in substantially different conclusions. In fact, the documents point out a number of 'lessons learned' from the project that can be of value for planning similar projects in the future.

Given these facts, it does not appear to be an appropriate utilization of staff time to create a completely new completion report which would basically repeat the earlier documentation. We would therefore propose to submit the 1976 evaluation and CARE/Kenya's final report on the project to be taken together as our final report on this project. Copies of these documents are enclosed. Our copies of the telegrams cited above are on the old hecto form and thus not good for xeroxing. If they are not readily available in AID/W, however, we can have the texts retyped and send them to you. Please let us know. I would also appreciate your reaction and/or comments on this suggested course of action.

Sincerely,



William S. Lefes  
Assistant Director  
for Program

Enclosures:  
Project Evaluation  
CARE/Kenya Final Report

FINAL REPORT TO USAID FOR SELF-HELP  
WATER PROJECTS ASSISTED UNDER  
CARE-KENYA OPG PCN's 70106 & 70107

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CARE-KENYA was able to assist a total of 49 projects over a two year period through their OPG grant from U.S. AID. The original grant of \$300,000 from U.S. AID and \$100,000 from CARE was used to purchase materials to complete phases of the self-help water projects assisted. The grant agreement, however, was amended to \$301,277.12 from U.S. AID and \$103,442.41 from CARE. This was done in order to show the exact inputs of U.S. AID and CARE. CARE expended a total of \$235,146.41 on both its materials and equipment costs and personnel and operations costs over the grant agreement period. The total materials and equipment costs for CARE and U.S. AID was \$383,361.70. The total personnel and operations costs was \$216,532. The CARE administrative recovery from the U.S. AID grant was ~~\$21~~,537.84. These figures will be further elaborated on later in this final report.

CARE-KENYA has attempted to help the Ministry of Water Development to improve its assistance to self-help water projects. The assistance provided by U.S. AID, through the OPG has provided the basis for both CARE and the GOK to improve their abilities to speed up the process of reaching the GOK's goal of piped water to every home by the year 2000. Most of the projects assisted through CARE have either gone on to be reassisted by the GOK through commodity aid programs or by CARE-KENYA again.

All of the sites assisted are still being followed up by CARE-KENYA and their management capabilities are now being reinforced by CARE. From this small effort of capital inputs into the projects, CARE has begun establishing viable management institutions in these areas which should enable these communities to continue running these projects without outside assistance.

This summary will attempt to first provide a general overview of the progress made in these communities over the last four years, as well as, to consider each individual project and the problems CARE and the GOK are now dealing with to improve these water systems and their day to day operations. The overview section will include an overall financial breakdown of all projects assisted. The individual analyses will also include some financial figures and touch on specific problems these communities now face. It should be noted here that since most projects assisted under the OPG only completed phases of schemes, many of these projects are still in the process of being completed or they have gone on to further stages of expansion. Let us first look at the 49 projects assisted individually as far as their problems and the types of inputs involved.

INDIVIDUAL ANALYSES

During FY 76 CARE-KENYA assisted 28 projects under the OPG. Twenty-one sites were selected and assisted during FY 77. This section will attempt to provide an updated progress report and financial analysis of each site.

PCN 70106 - FY 76

1. Kaptel - Nandi District, Rift Valley Province

U.S. AID assisted this project through CARE-KENYA with distribution piping. Phase I of the project was completed in 1976 and at present 54 families, a trading center, a boarding school and a cattle dip are using the water. Phase II of the project has been in progress since 1977 and received additional assistance from CIDA. This phase consists of another intake, pumping station, rising main and storage facility. There are 250 members of the project at present.

Phase I - Financial Breakdown

GOK - MOH & MOWD - \$4,231.00

Community - Land/Labour/Materials - \$7,747.49

U.S. AID - \$2,307.60

A total of 400 people now benefit from this project.

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2. Sarma - Nandi District, Rift Valley Province

U.S. AID assisted this project through CARE-KENYA with a pumping unit and rising main pipes. Phases I & II. of the scheme are both complete and the project has been fully operational since 1977. The institutions being served are 3 cattle dips, 1 school, 1 church and 5 communal water points. Fifty-one families have individual connections to their homes. A total of 2,009 persons directly benefit from the scheme. Approximately 425 of these are women.

Phases I & II - Financial Breakdown

GOK - DDC Grant & MOWD - \$14,629.00

Community - Land/Labour/Materials - \$8,657.00

U.S. AID - \$5,229.81

The community has experienced no major operational problems since the scheme was implemented. Members contribute monthly for the operations and maintenance costs and have a pump attendant and service the machine regularly.

3. Nyabera - Kisumu District, Nyanza Province

CARE-KENYA assisted Nyabera through the OPG grant to expand its intake and with distribution piping. All materials were used by 1976 and the community embarked on building an additional storage facility. Because the community is a small one with no real cash income

it has taken them 2 years to complete this tank. CARE-KENYA has reassisted them this financial year with a tank cover and the tank should be in use very soon. There are approximately 600 persons benefiting from the scheme, of which 150 are women.

Phases I & II - Financial Brakdown

GOK - MOH & DDC grant - \$6,611.00

Community - Land/Labour/Materials - \$2,915.00

U.S. AID - \$4,442.07

4. Ruiru - Meru District, Eastern Province

U.S. AID funds were used to purchase distribution pipes for Phase II of this scheme. This is one of the largest self-help water projects in the country and the people have been working on it for the past 9 years. The project is not yet completed, but the community is still working hard to provide more residents of the area with water. Since the U.S. AID assistance the community has received additional assistance from the GOK with a DDC grant and some Dutch Commodity AID to replace the gravity main pipes. There are 1,500 members registered with the project. The AID assistance provided distribution pipes which are providing 5,000 persons with water. People in the area use

mainly communal water points. There are no individual connections in the project.

Phase II - Financial Breakdown

Community - Land/Labour/Materials - \$11,253.00

U.S. AID - \$13,126.73

5. Nyaga - Kiambu District, Central Province

The U.S. AID assistance to Nyaga has gone towards the eventual usage of the scheme by the 7,000 residents of the area. The project is still being implemented. The project has been promised 600,000 K.Shs. worth of Dutch Commodity AID in pipes. The community is busy digging trenches in view of the coming assistance. There are 2,000 registered members of the project.

Phase I - Financial Breakdown

GOK - DDC Grant, County Council & MHSS - \$20,084.70

Community - Land/Labour/Materials - \$12,258.00

U.S. AID - \$6,763.55

6. Kendara - Murang'a District, Central Province

The U.S. AID assistance to Kendara was in Stage I of the scheme - Line K. This is one of the largest self-help water projects in the country and has been assisted by the German and Canadian governments over the years. The U.S. AID

assistance went towards piping for one of the main trunk lines of the project. A total of 13,000 persons have benefited from this one line. The project covers one division of Murang'a District.

Stage I - Financial Breakdown

Community - Land/Labour/Materials - \$59,215.00

German Freedom from Hunger - \$44,980.00

U.S. AID - \$14,848.52

CARE has reassisted this project this financial year with the third reservoir at the intake.

7. Olosho Oibor Irrigation Scheme - Kajjado District  
Rift Valley Province

The U.S. AID funds were used to purchase piping for this irrigation scheme's Phase II. The project is a demonstration settlement scheme for Maasai. Water flows by gravity from a man-made dam to the settlement area where it is used for irrigation purposes. The Maasai of the area, over 100 families, are now growing vegetables and are able to provide their families and cattle with water because of the existence of this scheme. CARE has reassisted this project with additional irrigation pipes. The scheme has become fully operational over the last 2 years.

Phase II - Financial Breakdown

Community - Land/Labour/Materials - \$27,485.95

Christians in America - \$24,431.96

U.S. AID - \$6,046.91

8. Isiolo Child Welfare Home Irrigation Scheme - Isiolo District, Eastern Province

U.S. AID assistance was used to provide a pumping unit and irrigation system to this children's home where 350 parentless children reside in Isiolo District. This project has enabled the children of the home to grow their own food and has made them more self-reliant. The project has been operating for more than 3 years now and the children grow vegetables, maize and beans on a five acre plot next to the home. Also the dormitories where they live now have sanitary facilities because of the water.

Financial Breakdown

Community - Land/Labour/Materials - \$2,917.16

U.S. AID - \$3,921.01

CARE - \$ 251.50

9. Ng'ari Cattle Dip & St. Paul's Primary School - Samburu District, Rift Valley Province

CARE-KENYA purchased G.I. pipes to replace PVC pipes at this project with the U.S. AID funds. The water is supplied

from the Maralal Town water supply and was being cut off constantly because of the Samburu Morans spearing the PVC pipes. Now the town's water supply, cattle dip, and primary school are secured because of this assistance.

Financial Breakdown

Community - Land/Labour/Materials - \$ 794.00

U.S. AID - \$1,583.19

There are 870 persons benefiting from this project.

10. Karweti - Kiambu District, Central Province

The U.S. AID assistance went to provide distribution piping to this water project. A total of 3,918 persons have benefited from this assistance. CARE-KENYA has reassisted another Phase of this scheme with an additional pumping unit and rising main. Two hundred families now have individual connections with water in their homes. There are several institutions in the area receiving water as well. The management committee is very strong and they make sure all pumping equipment receives proper servicing.

Phases I & II - Financial Breakdown

GOK - Materials & design - \$5,349.00

Community - Land/Labour/Materials - \$9,569.00

U.S. AID - \$6,375.82

11. Kikuu - Kitui District, Eastern Province

The U.S. AID assistance was used to purchase the remaining pipes of the rising main. The community is very dependent on the County Council for any repairs to the scheme. This has led to some periods of water shortage. CARE-KENYA is now working with the County Councils in Kitui and Machakos Districts, where many of the problems are, trying to assist them in improving their maintenance capabilities.

Financial Breakdown

GOK - Design & Borehole cleaning - \$ 600.00

Community - Land/Labour/Materials - \$11,527.00

U.S. AID - \$1,702.26

3,600 persons have benefited from this water project.

12. Chavavo-Mahanga - Kakamega District, Western Province

This community was assisted by U.S. AID to expand its intake and to provide some distribution main pipes. Approximately 7,700 persons will eventually benefit from the completed scheme. The project is located within Vihiga Division of Kakamega District, which is one of the most densely populated areas of the country. The Canadian High Commission has reassisted this project through CARE

and a health center is now operating because of this assistance. The community is still working to expand the scheme so that all residents of the area will have piped water.

Financial Breakdown

GOK - MOH & Design - \$11,313.00

Community - Land/Labour/Materials - \$9,237.00

U.S. AID - \$3,403.04

13. Madzui Girls Secondary School - Kakamega District,  
Western Province

U.S. AID assisted this project with an elevated galvanized steel water tank. All materials were utilized in 1976 and the school has been properly operating and maintaining all machinery since that time. Originally the community had expressed an interest in joining the project once it was fully implemented. Unfortunately, the community has not become organized enough yet to begin participating in the scheme. So the water is mainly being used by the school only.

Financial Breakdown

GOK - MOED. & MOWD - \$18,278.00

Community - Labour - \$1,907.00

U.S. AID - \$7,377.29

A total of 435 students have benefited yearly from this project.

14. Keriko - Nyandarua District, Central Province

U.S. AID assisted Keriko Water Project with piping for the rising main of Phase I and materials for a 20,000 gallon masonry tank. There are 836 persons benefiting from the project, of which 306 are women. Since the AID assistance the community has gone on to install an electrical pumping unit and to begin a Second Phase of the project with an additional rising main and more distribution lines. The name of the project has been changed to Lesirko-Kariko so that water can be provided to the entire settlement scheme.

Phase I - Financial Breakdown

GOK - MOWD - \$2,000.00

Community - Land/Labour/Materials - \$8,871.00

U.S. AID - \$9,330.93

15. Bahati - Nakuru District, Rift Valley Province

Through the U.S. AID assistance Bahati was assisted with an electrical submersible pumping unit. There are 635 beneficiaries of this project, of which 159 are women. The project has had some problems with the management committee not being as active as it should be. CARE-KENYA is presently trying to assist the community in reforming its management committee so that the project will become more viable. There

are presently 7 communal water points operating in the project area.

**Financial Breakdown**

GOK - DDC Grant - \$6,285.00

GOK - MOWD - \$1,500.00

Community - Land/Labour/Materials - \$10,082.00

U.S. AID - \$3,052.79

**16. Sacho - Baringo District, Rift Valley Province**

Sacho was assisted by U.S. AID and CARE with a 10,000 gallon storage reservoir. The project presently serves 1,000 persons, of which 250 are women. The project taps water from a spring and it flows by gravity to the tank at an area primary school. The school and trading center are presently served with water. There are plans for a second phase of the project which would provide a proper distribution system to the residents homes.

**Financial Breakdown**

GOK - DDC Grant & MOWD Design - \$3,110.00

Community - Land/Labour/Materials - \$3,271.00

U.S. AID - \$2,598.79

CARE - \$ 542.10

17. Ikumbi - Nakuru District, Rift Valley Province

There are approximately 1,000 persons benefiting from this scheme. The project is to serve the residents of 15 co-operative farms in the area. The entire project as originally designed is implemented and there are two communal water points in use - one at the trading center and one at the dispensary. The project has had some problems when it rains in operating the pump set because the river overflows and it is difficult getting to the pumphouse. U.S. AID assisted the project with the pump and engine.

Financial Breakdown

GOK - DDC Grant & Design - \$8,493.00

Community - Land/Labour/Materials - \$3,170.00

U.S. AID - \$1,913.88

18. Kombayo - Machakos District, Eastern Province

There are approximately 8,000 residents in the project area, of which 2,000 are women. The project takes water from a borehole and pumps it into a 30,000 gallon masonry tank. The tank was constructed with materials from U.S. AID. The project is located in a very dry area, but the people have worked very hard on this particular project. The

County Council of Masaku is supporting the operations and maintenance costs of this scheme. CARE has reassisted the project with a proper tank cover because a larger tank was built than originally designed by the MOWD.

Financial Breakdown

GOK - & Catholic Mission - Materials, Design &  
Supervision - \$8,117.43

Community - Land/Labour/Materials - \$7,117.00

U.S. AID - \$3,382.27

19. Mulot - Narok District, Rift Valley Province

U.S. AID assisted this community with piping for the rising main and a pumping unit. The project is located in Narok District on the border with Kericho District, so the project is used by both Maasai and Kalenjins. A total of 4,650 persons are benefiting from the scheme, of which 1,163 are women. The project has been operating since late 1977 and the community wants to do a Phase II to distribute water further. Presently water is being used at a communal water point near the storage facility.

Financial Breakdown

GOK - DDC Grant & MOWD Design - \$10,432.00

Community - Land/Labour/Materials - \$2,372.00

U.S. AID - \$8,178.25

20. Sikarrar Farm Experimental Borehole - Narok District  
Rift Valley Province

The experimental borehole is being used by approximately 300 members of the group ranch for both their cattle and themselves. The group ranch members got together and are working now to build a proper cattle dip to spray the cattle against most of the local cattle diseases. The number of persons using the water has increased greatly because the group ranch members are now involved in the project as well. They are receiving assistance for the cattle dip from a Canadian environmental agency. The group has expended an additional \$10,000 since the U.S. AID assistance for the initial borehole over the past 3 years.

Financial Breakdown

Community - Mr. Ole Kapusia - \$2,842.00

U.S. AID - \$486.94

21. Bushiangala - Kakamega District, Western Province

The U.S. AID - CARE assistance to Bushiangala of distribution pipes and tank materials has been fully utilized and the community has continued to work to expand the project. The project has benefited approximately 4,600 residents of the area of which 1,150 are women. Since receiving the U.S. AID - CARE assistance the community has received additional

assistance from NOVIB and is to receive the remaining distribution pipes from the Dutch Commodity Aid. The community is very active and CARE will be working with its management committee to see that its management capabilities improve.

Phase I - Financial Breakdown

GOK - Design - \$1,200.00

NOVIB - Materials - \$10,250.00

Community - Land/Labour/Materials - \$5,016.00

U.S. AID - \$6,037.08

CARE- \$3,164.11

22. Wakhungu-Nangina - Busia District, Western Province

The U.S. AID-CARE assistance to the project of piping for the rising main and distribution lines and a storage facility has all been utilized and the community is now working on expanding the project. The MOWD maintains and operates the project. The community pays money annually to the D.C. who then pays the MOWD. There are approximately 10,000 persons using water from the communal water points. About 2,500 of these are women in the area.

**Financial Breakdown**

GOK - Materials & Design - \$19,878.00

Community - Land/Lbour/Materials - \$9,238.00

U.S. AID - \$10,956.26

CARE - \$2,552.67

**23. Karas - West Pokot District, Rift Valley Province**

The U.S. AID-CARE assistance to Karas was utilized during 1978. Phase I of the project providing water to the school and communal water point has only recently become operational, however, The company CARE purchased the pumping unit from incorrectly assembled the pump and engine. This problem was corrected early this year when we returned the pumping unit to Nairobi for the adjustments to be made. The CARE technician reinstalled the pumping unit and the project is now fully operational. There are approximately 1,500 beneficiaries of the project, of which 375 are women.

**Financial Breakdown**

GOK - MOH - \$1,907.00

GOK - DDC Grant & MOWD - \$9,919.00

Community - Land/Labour/Materials - \$2,968.00

U.S. AID - \$4,037.00

CARE - \$4,545.92

24. Nyalikiruk - Baringo District, Rift Valley Province

U.S. AID and CARE assisted the Nyalikiruk community with piping for the rising main. Unfortunately the DDC assistance for the intake was not done by a proper GCK approved contractor. So there have been many problems over the improvement of the intake over the past two years. The MOWD has sent its technicians to repair the dam and as of February 1979 they were still testing to see if they were going to have a constant water flow to the tank. All pipes were utilized in 1977 and the 6,000 members of the community will be able to use the system continuously once the dam has been repaired.

Phase I - Financial Breakdown

GOK - MOWD & DDC Grant - \$13,419.00

Community - Land/Labour/Materials - \$16,353.00

U.S. AID - \$13,013.11

CARE - \$3,528.01

25. Muthiga - Kiambu District, Central Province

The Muthiga Community is still working on the expansion of the project. The CARE assistance was used to build a 20,000 gallons masonry tank. The community has begun work on Phase II of the project now and has had one major

fund raising and been assisted by Freedom from Hunger. The approximately 2,000 residents of the area was now receiving water. CARE is reasisting this project with a chlorination plant.

Phase I - Financial Breakdown

GOK - MOWD - Design & Supervision - \$ 500.00

Community - Land/Labour/Materials - \$8,337.00

CARE - \$6,774.60

26. Muguna Kirimaitune - Meru District, Eastern Province

The 8,000 residents of the area are receiving water through communal water taps since utilizing the CARE assistance of distribution pipes. The health center and maternity wing are now operational as well because of the water. CARE has reasisted this project and now almost the entire system is operational. There are approximately 2,000 women benefiting from the project.

Phase I - Financial Breakdown

GOK - County Council - \$ 55.00

Methodist Mission - Design - \$1,500.00

Community - Land/Labour/Materials - \$13,707.00

CARE - \$8,565.41

27. Gitaru-Kanyariri - Kiambu District, Central Province

The CARE assistance to Gitaru-Kanyariri of distribution piping has been in use for about 2 years now. The project committee still has many organizational problems which the CARE Water Management Advisors are trying to assist them in working out. The community contributes to the costs of the system. One hundred twenty families have water in their homes. The remaining members draw water from the communal water point near the tank. Approximately 4,800 persons are benefiting from the water, of which 1,200 are women.

Financial Breakdown

GOK - DDC Grant & MOWD - \$10,743.00

Community - Land/Labour/Materials - \$7,897.00

CARE - \$5,824.00

28. Ruthanji-Njiruini - Nyeri District, Central Province

A total of 9,000 persons have directly benefited from the completion of Phase I of this scheme. Some 2,250 of these are women. The community is busy working on Phase II of the project at present. The CARE assistance went towards the pumping unit, rising main and a 30,000 gallon storage facility. The community will be re-assisted by CARE to improve its management committee's effectiveness.

Phase I - Financial Breakdown

GOK - MOWD - Design & Supervision - \$1,000.00

Community - Land/Labour/Materials - \$9,898.00

CARE - \$12,698.01

\* Baseline Data Collection - CARE - \$2,218.71  
for CBA's

(These figures for baseline data collection have been  
given on all SCR's sent in as a CARE M & E cost).

PCN 70107 - FY 77

1. Gachoka - Embu District, Eastern Province.

The U.S. AID assistance was used to purchase distribution piping for Gachoka. The area's 3,000 residents are now using the water at six communal water points in the area. Approximately 750 of these residents are women. The community has begun laying pipes for Phase II of the project. There still remain a few problems with the scheme the water is being drawn from, however, the MOWD is busy trying to work these problems out.

Financial Breakdown

GOK - DDC Grant & MNR Grant - \$7,211.34

Community - Land/Labour/Materials - \$10,390.63

U.S. AID - \$3,712.34

2. Wango Karaba - Embu District, Eastern Province

The U.S. AID assistance provided a pump and engine to this project. The area's 4,000 residents, 1,000 of which are women are now using the water. The Catholic Mission has been handling much of the operations and maintenance costs because the people in the area are newly settled. CARE has reassisted the project with additional distribution pipes.

Financial Breakdown

GOK - DDC Grant - \$8,588.96

Community - Land/Labour/Materials - \$6,611.59

U.S. AID - \$2,466.91

3. Naro Moru - Nyeri District, Central Province

The pipes purchased by U.S. AID for the gravity main of this project were all utilized. The project committee has continued contributing to the scheme and are now in the process of completing Phase I of the project. The 4,000 residents of the area, of which 1,000 are women are now enjoying water at one of the completed reservoirs. CARE reassisted the community during FY 78 with building materials for two 30,000 gallons storage tanks.

Phase I - Financial Breakdown

GOK - DDC Grant - \$8,834.36

Community - Land/Labour/Materials - \$30,600.00

U.S. AID - \$15,703.97

4. Katothya Rock Catchment - Kitui District, Eastern Province

The U.S. AID assistance was used to provide gravity main piping to this rock catchment scheme. The community has been very involved with extending the water to another primary school in the area. CARE reassisted this project with building materials for a storage facility to go along with the one communal water tap presently in use. The area's 3,000 residents, 750 of which are women, are now receiving a continuous supply of water.

Phase I - Financial Breakdown

Community - Land/Labour/Materials - \$9,393.95

GOK - DDC Grant - \$6,424.25

U.S. AID - \$2,108.49

CARE - \$ 133.76

5. Tarakwa - Uasin Gishu District, Rift Valley Province

The U.S. AID assistance for Tarakwa was used to provide piping for the project's rising main. The project is to provide the area's 4,000 residents with a piped water supply. One thousand of these people are women. There have been some problems with the water flow, but the MOWD has promised

to correct this problem as soon as it has technicians available. The school children are presently using the water supply.

Financial Breakdown

GOK - DDC Grant - \$6,216.85

Community - Land/Labour/Materials - \$3,122.98

U.S. AID - \$13,307.47

6. Kiawaithanji - Nyeri District, Central Province

The Kiawaithanji Community was assisted by U.S. AID with a pumping unit, rising main and distribution pipes. The area's 3,500 residents are now receiving piped water near their homes. Approximately 875 of these residents are women. CARE has reassisted this project with a filtering unit which has become operational recently. This is a very involved community and they are actively working to see that their project is operating properly.

Financial Breakdown

GOK - MOH/UNICEF - \$9,936.47

Community - Land/Labour/Materials - \$5,654.38

U.S. AID - \$4,714.09

7. Thua Kyametu - Kitui District, Eastern Province

The U.S. AID assistance was used to provide the piping for

the rising main to this self-help project. The area's 5,000 residents are still busy working on the scheme, however, they are using some water at a c.w.p. where the rising main has ended. There are approximately 1,250 women in the area who are using this water. The Diocese of Kitui has purchased building materials for a storage facility to be built at the end of the rising main, construction of the tank is now underway.

Phase I - Financial Breakdown

GOK - DDC Grant - \$10,165.00

Community - Land/Labour/Materials - \$3,067.00

U.S. AID - \$12,410.47

8. Malindi-Zirulo - Kakamega District, Western Province

The CARE assistance was used to provide the residents of Malindi-Zirulo with two pumping sets to be used on the double rising mains of the project. The area's 22,236 residents will soon have a piped water supply near their homes. Approximately 5,559 of these people are women. At present only one of the rising mains is operating and water is flowing into one 20,000 gallon storage tank. The MOWD is busy installing the second rising main and another reservoir is in progress for that side of the project.

Phase I - Financial Breakdown

GOK - DDC Grant - \$11,536.46

Community - Land/Labour/Materials - \$5,935.50

CARE - \$8,418.65

9. Matuu - Machakos District, Eastern Province

The U.S. AID-CARE assistance was used to purchase building materials for a 20,000 gallon storage tank. The community has had a few problems with the water supply over the last year because the rising main was not properly laid. The MDWD has recently sent technicians to the project to relay the rising main. The distribution pipes have all been laid and the project should become fully operational from May. At that time the area's 6,000 residents will receive piped water near their homes. Approximately 1,500 of these are women.

Phase I - Financial Breakdown

GOK - DDC Grant - \$16,809.82

Community - Land/Labour/Materials - \$5,183.05

U.S. AID - \$5,789.18

CARE - \$1,073.00

10. Nguluni - Machakos District, Eastern Province

The U.S. AID-CARE assistance was used to provide a storage

tank and some piping for a borehole in the area. The community has suffered from long periods of drought thus it has taken them many years to get the project off the ground. The Catholic Diocese has contributed towards the project as well. The County Council has been working with the community on the operations and maintenance of the pumping unit. There are approximately 7,000 residents of the area, 1,750 of which are women.

Phase I - Financial Breakdown

Community - Land/Labour/Materials - \$2,592.10

GOK - DDC Grant & MOWD - \$8,981.23

U.S. AID - \$6,615.15

CARE - \$1,079.40

11. Ronge Chini - Taita/Taveta District, Coast Province

The U.S. AID-CARE assistance for Ronge Chini went to provide gravity main piping. The project is designed to provide the area's 3,081 residents with piped water. There are approximately 770 women in the area. The community has installed all the materials and has begun construction of a storage tank. CARE has reassisted the project with some distribution pipes and some additional tank building materials.

Phase I - Financial Breakdown

Community - Land/Labour/Materials - \$2,774.36

U.S. AID - \$24,022.88

CARE - \$1,562.76

12. Ribe Makobeni - Kilifi District, Coast Province

The U.S. AID-CARE assistance went for the purchase of rising main pipes and a storage facility. There are 2,000 persons residing in the area, of which 500 are women. The water is being taken from the Mombasa Pipeline. The community is now using the water supply at a kiosk in the area. The MOWD is providing maintenance to the project because the water is being tapped off of one of its major pipelines.

Financial Breakdown

Community - Land/Labour/Materials - \$1,195.35

GOK - CD Grant - \$ 819.67

U.S. AID - \$3,126.69

CARE - \$ 426.87

13. Bondeni - Nyeri District, Central Province

The U.S. AID -CARE assistance for Bondeni went for the purchase of building materials for a 20,000 gallon water reservoir. The community has 3,500 residents, of which 875 are women. The people of the area are now busy trying

to extend the scheme so that more persons will benefit from it. There are 76 individual connections and a few communal water points which are fully operational. The water is being tapped from a river in the area and pumped into the 20,000 gallon tank, from which it reticulates by gravity to the community.

Financial Breakdown

GOK - DDC Grant - \$19,467.09

Community - Land/Labour/Materials - \$6,104.76

U.S. AID - \$ 758.92

CARE - \$2,448.61

14. Ithekahuno - Nyeri District, Central Province

The CARE assistance was used to provide a pumping unit to the Ithekahuno community. There are approximately 12,000 residents of the area who will benefit from the project once it is totally completed. About 3,000 of the residents are women who have been traveling great distances daily for water. Water is being pumped from a river in the area to a storage tank from which it flows by gravity to the community. CARE is working with the management committee to see that the community properly operates and maintains the project.

Phase I - Financial Breakdown

GOK - DDC Grant \$10,943.58

Community - Land/Labour/Materials - \$11,201.97

CARE - \$5,368.07

15. Rapedhi Water Project - South Nyanza District, Nyanza Province

The Rapedhi Community was assisted with piping for the rising main. The project is being implemented with the DDC in the area. The project is meant to serve the area's 3,500 residents, of which 875 are women, with a piped water supply. CARE reassisted the project last financial year with a tank cover. There have been a few problems with the terrain and road crossings in the rising main section. The MOWD or CARE will have to assist the community in the replacement of some of the PVC pipes with G.I. pipes to go through the rocky areas and across the roads. This is the only reason the project has not become fully operational yet.

Financial Breakdown

GOK - DDC Grant - \$19,059.72

Community - Land/Labour/Materials - \$ 635.32

U.S. AID - \$7,480.82

16. Giathieko - Kiambu District, Central Province

The U.S. AID assistance to Giathieko went towards two storage facilities and for some distribution piping. The area's 10,000 residents are now using the completed system. There were

several problems with this particular project due to the poor management by the chairman of the project. The second storage tank has recently been completed, but some of the distribution piping was removed from the project to two other projects in the area by CARE. The community had purchased some distribution piping by the time the U.S. AID assistance reached the project so the remaining pipes were given to other deserving projects in the area. This removal of piping was done with the CDO and DDO's concurrence. There are approximately 2,500 women in the area.

Financial Breakdown

GOK - County Council - \$3,846.15

Community - Land/Labour/Materials - \$10,637.44

U.S. AID - \$15,858.74

17. Nginduri - Kiambu District, Central Province

The U.S. AID assistance to Nginduri went for distribution piping. There are now 151 members with water in their homes. The community leadership is very active and they are carrying out a very good management program for the project. CARE is re-assisting this project with a filtering system and with additional management knowledge. The community is working very hard to improve the project as much as possible. There are 2,000 residents in the area, of which

500 are women.

Phase I & II Financial Breakdown

GOK - County Council \$3,460.12

Community - Land/Labour/Materials - \$10,952.88

CARE - \$6,524.43

18. Bibirioni - Kiambu District, Central Province

The U.S. AID assistance was used to provide distribution piping to this project. There are approximately 150 members of the 481 members with piped water in their homes at present. The remaining members are using c.w.p.'s until they complete paying their full membership. The community wants to install an electrical pumping unit. CARE has begun to assist the management committee with its book-keeping system so that the project can be more effectively managed. There are approximately 10,000 persons in the area, of which 2,500 are women.

Financial Breakdown

GOK - County Council - \$4,227.64

DDC Grant - \$14,788.47

Community - Land/Labour/Materials - \$37,673.17

U.S. AID - \$5,075.00

19. Kiambaga - Nyandarua District, Central Province

The Kiambaga community was assisted by U.S. AID with piping for the rising main. There are approximately 3,500 residents of the area, of which 875 are women. The community has utilized all materials provided, however, they are having some organizational difficulties which has impeded the progress of the scheme. Despite the fact that the pumping unit is installed and the rising main laid, the community has not begun construction of the storage tank to complete Phase I of the project. CARE is providing management advisors to the community to assist them in reorganizing the management committee so that the project can begin functioning again.

Phase I - Financial Breakdown

GOK - DDC Grant - \$16,250.00

Community - Land/Labour/Materials - \$7,125.00

U.S. AID - \$16,753.06

20. Katyethoka Rock Catchment - Kitui District, Eastern Province

Katyethoka was assisted by CARE with building materials to complete the catchment area and gravity main pipes. The community has been working on and off for the past 2 years on implementing the scheme. The management committee has not

been very effective and is now being more closely advised by our water technician to see that the gravity main is completed. This is a marginal arid area and the residents are widely dispersed. Hopefully within the next 2 months the gravity main will be completely laid and the 9,850 residents of the area will be receiving water at the foot of the catchment area. At present many of the area's 2,462 women are climbing to the catchment itself to collect water.

Financial Breakdown

GOK - DDC Grant - \$6,734.43

Community - Land/Labour/Materials - \$9,847.52

CARE - \$2,841.36

21. Kigumo - Murang'a District, Central Province

Kigumo was assisted by CARE with building materials for three storage reservoirs of the following capacities: 50,000 gallons, 30,000 gallons and 20,000 gallons. All three tanks have been completed and the community is now using the Dutch Commodity Aid from the MQUID to distribute the water to the consumers of this division in Murang'a. There are approximately 107,500 persons in the area who will eventually benefit from this project. About 26,875 are the women who are actively engaged in the procurement of water for their families. Because this project is very large it

will take the community a number of years to fully implement the entire project.

Phase I - Financial Breakdown

Community - Land/Labour/Materials - \$87,500.00

GOK - MOWD & DDC - \$187,500.00

CARE - \$20,839.66

\* Baseline Data Collection - CARE - \$2,059.41

OVERVIEW OF OPG ASSISTANCE

Of the forty-nine projects assisted during FY 76 - 77 the distribution of projects by provinces was as follows:

Central Province	- 16
Coast Province	- 2
Eastern Province	- 12
Western Province	- 5
Nyanza Province	- 2
Rift Valley Province	- 12

Most of the projects assisted were in Central, Eastern and Rift Valley Provinces. These areas led in assistance because of the fact that the MOWD was able to provide designs in these areas and the self-help committees met most of CARE's selection criteria.

Coast Province lagged behind in assistance because it wasn't until FY 77 that the MOWD began doing designs in that area of the country. Western Province had problems because of the lack of designs done by the MOWD. Nyanza Province has had several problems with its self-help projects because the Harambee effort has not been strongly pushed in this area. So many of the projects CARE was given in this area did not meet our selection criteria. However, since these projects were assisted CARE has assisted other projects in Nyanza because the MOWD has begun to emphasize the self-help section more. We acknowledge the fact that many of the projects assisted are weighted in only three provinces and that we did not assist any self-help water projects in North-Eastern Province. The MOWD has never given us any designs for self-help water projects in North-Eastern Province because most of the water projects in that province are done by the MOWD itself. The distribution of projects assisted by CARE has been changing a bit over the last two years since more projects are being designed in Coast Province. However, Nyanza and Western Provinces are still lagging behind the other three provinces in self-help water projects. The GOK, however, has begun to design more large scale projects in these two provinces and is receiving assistance in rehabilitating self-help water projects in these areas from the Canadian Government. We shall

now look at the financial assistance to these projects from U.S. AID, CARE, the GOK, and the Communities themselves. It should be noted here before we bring up the main shortcomings in the assistance that the implementation of all schemes assisted is basically dependent on the communities themselves and this is why a few of the schemes assisted have not as yet completed the phases assisted or the total water projects.

The following is a breakdown of inputs put into the 28 schemes assisted by U.S. AID & CARE during FY 76. Only the materials and equipment (M & E) inputs for CARE are given here. The personnel and operations (P & O) costs will be discussed separately.

<u>INPUT</u>	<u>\$</u>	<u>Percent of Total Cost of Phase</u>
U.S. AID - Materials	\$140,015.10	19%
GOK - MOWD/MOH/MOEd./ County Councils/ etc. DDC Grants	\$179,654.13	25%
Other Foreign Donors	\$ 79,661.96	11%
Communities - Land/ Labour/Materials	\$278,116.60	38%
CARE - materials including Baseline Data Collection	\$ 50,665.84	7%
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	\$728,113.63	100%

The communities contributions to the Phases was the largest portion of the contribution made to complete phases in FY 76. U.S. AID and CARE's contribution was 26% of the total cost to complete a phase. A total of 108,693 persons will eventually benefit from these 28 projects when they are all operational.

The financial breakdown for the 21 projects assisted during FY 77 reveal a somewhat similar picture to those assisted during FY 76. Again only the M & E inputs for CARE and the GOK are given.

<u>INPUT</u>	<u>\$</u>	<u>Percent of Total Cost of Phase</u>
U.S. AID - Materials	\$139,904.18	16%
GOK - DDC Grant/CD/ MOWD/MOH/County Councils etc.	\$388,452.90	46%
Community - Land/Labour/ Materials	\$268,198.95	32%
CARE - Materials including Baseline Data Collection	\$ 52,776.57	6%
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	\$849,332.60	100%

The largest percentage of contribution for the projects assisted during FY 77 was made by the GOK. The community contribution followed close behind with 32% of the capital cost to complete the phases assisted. The U.S. AID and CARE assistance followed

at 22%. A total of 341,118 persons will eventually benefit from these 21 projects when they are all operational.

During FY 76 the GOK contributed \$42,471.00 to CARE's P & O costs. CARE contributed \$60,163.00 locally towards the P & O costs for FY 76. During FY 77 the GOK contributed \$42,257.00 towards CARE's personnel and operations expenses. CARE contributed \$71,541.00 locally to the P & O costs for FY 77. Twenty-one thousand five hundred thirty-seven dollars and eighty four cents of the U.S. AID OPG went for CARE-NEW YORK'S administrative recovery.

#### PROJECT CONSTRAINTS & ACCOMPLISHMENTS

Of a total of 49 projects assisted under the OPG, 38 now are partially or fully operational. The remaining 11 sites have had some implementational problems which are still being worked out by the communities and District Water Officers. However, it should be noted here that all of the materials provided to these 11 sites have been installed, but because of a lack of community organization and government support the projects have not become operational. A few projects, especially those in Machakos and Kitui Districts have experienced operational problems due to a lack of technical expertise from the MOWD. Many of these projects are being assisted by the County Councils

and the Diocese of the area to correct the problems they are now facing. However, CARE is working closely with the management committees in these areas so that the time required to obtain assistance when machinery breaks down can be reduced.

Three projects in Rift Valley Province have had problems because of the existence of no proper management committee once the materials have been installed. The Harambee committees at these sites were effective until all materials were installed then they were just not able to convince the consumers that they should pay for the water. These particular projects are now being worked with by our Water Management Advisors. Hopefully, these communities will begin using their water supplies this year.

Other problems encountered as well have had to do with some community disorganization. In many of these cases these problems have occurred before the phase assisted was completed. This has meant that CARE has had to go back and work with the government officials and the local communities to get work underway again. CARE has tried to instill in the communities the fact that these are their projects and not CARE's so in some areas of the country this doctrine is well understood, while in others it is not. Because CARE has continued to visit all sites assisted some communities have tried again and again to overcome their problems.

But there are those cases where our efforts to date have failed. We have not given up our hope of helping these projects which have not become even partially operational. Because these projects have at least made an effort to use most of the materials provided CARE will continue to work with them until they become partially operational and complete the phase originally assisted by their own efforts.

Many of the problems mentioned in this section are a direct result of the fact that CARE is not the implementing agent for these projects. This is a constraint, but there has been some evidence that in those cases where the communities themselves are actively committed to the projects that they will continue to work and expand the projects on their own. In at least 15 of the projects assisted the communities have gone on to extend their projects further following the initial assistance from U.S. AID and CARE. Some sites have been reassisted by CARE, 13 to be exact, and these have all done further work on their own before reapplying for CARE assistance.

One point which has not been brought out fully in this report was CARE's original goal of relieving rural women of the time spent in the activity of collecting water. CARE has been collecting baseline data of the time spent by rural women in the

task of collecting water during the grant agreement period. Most of this data is now being compiled to be redistributed to the local government officials involved with these projects. CARE has contracted the Bureau of Educational Research, the University of Nairobi to do an evaluation of 8 - 10 of the sites assisted during the grant. When this report is completed U.S. AID will be provided with copies as part of our final evaluation activity of the grant agreement. This report will illustrate many of the other factors which have contributed to both the successes and problems facing many of the projects assisted by CARE-KENYA under the grant.

CARE-KENYA would like to thank U.S. AID for all assistance it provided to CARE during the grant agreement period. On behalf of all the communities assisted, the GOK and CARE we would like to also thank AID for the grant assistance. We hope that U.S. AID will realize that this initial investment into 49 rural communities in Kenya has helped to provide many areas with their first step towards achieving the Government of Kenya's goal of providing pipd water to every home by the year 2000.