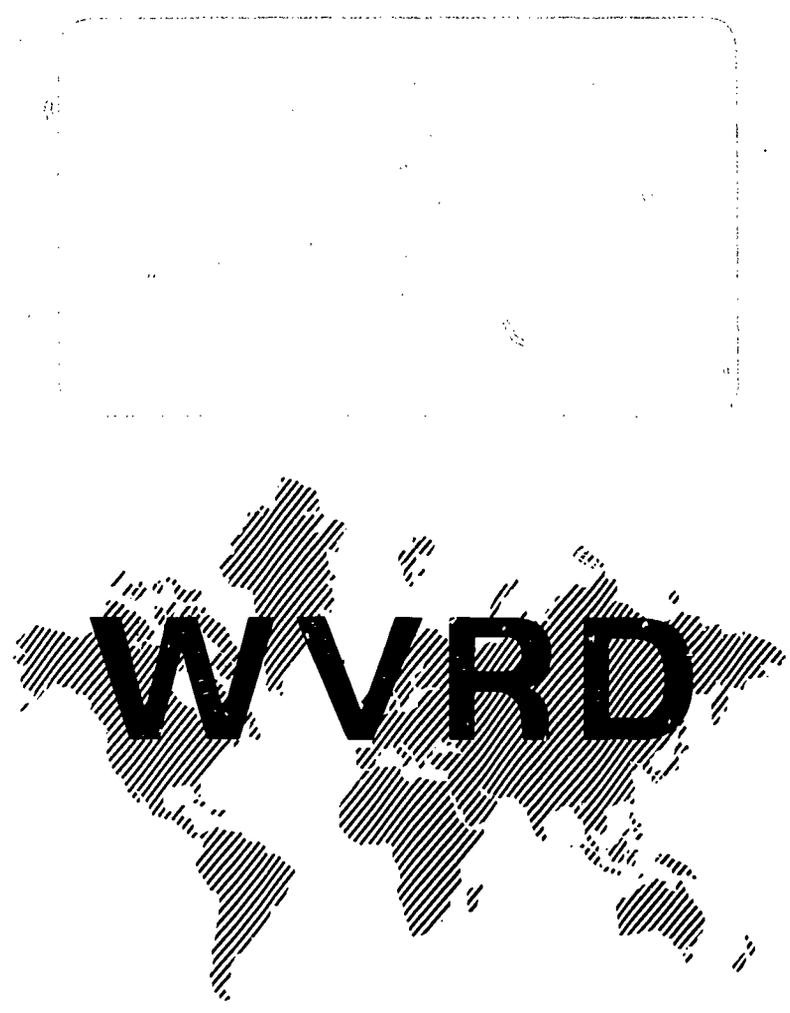


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World Vision Relief & Development, Inc.

PD-ALC-963

A.I.D. Matching Grant Program
Africa Water Program

END-OF-PROJECT 1987-1990 REPORT

SUMMARY

AFRICA WATER PROGRAM

Three Year Matching Grant Cooperative Agreement OTR-0293-A-00-7143-00

The Africa Water Program Matching Grant was funded from January 1, 1987 through September 30, 1990. The initial six months was funded on an ad hoc basis prior to the actual start of the formal grant on July 1, 1987, and the last three months of the grant was a "no-cost" extension period. The grant came from the FVA/PVC office of A.I.D. to enable World Vision to undertake a program of capability enhancement and implementation of water supply and sanitation (WS&S) projects in Africa. Funding for the program was as follows:

USAID	\$1,916,000
WASH	\$ 328,000
WVRD/WVI	\$8,450,000

The GOAL of the program was:

To enhance the health and productivity of the rural poor in five African countries by improving, constructing, and maintaining clean water works.

The PURPOSE of the program was:

To establish an ongoing institutional capability within WVRD headquarters and a field program management structure to plan, implement, and manage effective water development programs in five target countries in Africa. (*This was later reduced to four*).

The four country projects under the Africa Water Program have benefitted some 500,000 people in more than 500 communities during the period FY 1987 through FY 1990.

While the Africa Water Program Matching Grant is now over and the final evaluation has been completed, the four projects which have been the primary ones benefiting from the grant are continuing. A "start-up" workshop is to be held in January 1991 with assistance from the WASH Project, for a complete new 5 year phase of the Ghana Rural Water Project. This will permit an additional 500 wells to be drilled and will add a further 200,000 to 250,000 beneficiaries to the above total.

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I. BACKGROUND TO GRANT AND PROJECT CONTEXT

A. The Background to World Vision

In 1950, World Vision was founded by Dr. Robert Pierce in response to the critical needs of Korean orphans. At that time, a network of sponsors were brought together who would contribute monthly to the support and nurture of their sponsored children. As this sponsorship network grew, the World Vision scope of community development activities expanded and the emphasis shifted from providing care primarily to orphanages and schools to assisting families and communities in becoming self-reliant. World Vision initiated projects involving health care and education, vocational training, agricultural production, and other forms of income-generation. World Vision also began to meet the emergency needs of the victims of natural calamity and civil unrest. Through this work, World Vision has developed an efficient and effective emergency relief system which has brought food, clothing, medical supplies and care, and immediate housing to disaster victims all over the world. More recently, in response to the critical and extensive needs in Africa, World Vision began to engage in large-scale integrated development projects. Water development, agroforestry, agricultural rehabilitation, road building and other types of infrastructure, Child Survival, and the development of private initiatives involving entire regions or complete people groups are being explored.

Four of the primary goals of World Vision are to minister to poor and needy children/families, provide emergency relief, develop self-reliance, and to strengthen leadership in the developing world.

World Vision is an international partnership of 15 fund raising support offices and 38 field and program offices located throughout the world. The United States support office of World Vision is the largest, providing about 65% of the Partnership support. Currently World Vision field offices are managing a total of 5,649 projects worldwide, including 4,933 Child & Community Assistance Projects, 66 Emergency Relief and Rehabilitation Projects, and 534 Community and Large Scale Development Projects. In the majority of cases World Vision field offices and field programs are totally staffed with national staff except for specific situations where competent indigenous staff are not available.

Domestically, World Vision interacts with A.I.D. through World Vision Relief and Development, Inc. (WVRD), which has technical and management staff to cover most aspects of program management and technical support and evaluation of the implementing field office(s).

Today, 40 years after its start, World Vision is enabling people in over 80 nations of the developing world to live productive and self-reliant lives. The FY90 budget for field operations was \$181 million plus \$49 million in food Gifts-in-Kind.

B. Background to the Grant

In November 1986, WVRD was awarded a matching grant of \$2.2 million from A.I.D.'s FVA/PVC office to enable World Vision to undertake a program of institution building

entitled the Africa Water Program (AWP). Of the total of \$2.2 million, \$1,916,000 was to be provided in cash, with the remaining \$328,000 specifically earmarked for technical assistance through the USAID Water and Sanitation for Health Project (WASH).

The grant document, in Enclosure 2, listed the following as the Program Goal:

"To enhance the health and productivity of the rural poor in five African countries by improving, constructing and maintaining clean water works."

Enclosure 2 then went on to list the following as the Program Purpose:

"To establish an on-going institutional capability within WVRO (now WVRD) headquarters and a field program management structure to plan, implement and manage effective water development programs in five target countries in Africa (Senegal, Mali, Ghana, Kenya and Malawi)."

C. Background to the Socio-Economic Circumstances

The program was conceived in the wake of the devastating droughts and famine that have plagued Africa since the early 1970's. World Vision made a major commitment to development activities in Africa aimed at counteracting the causes of famine and the disastrous effects of drought in poor rural communities. World Vision had, therefore, significantly increased its support of small community development projects and embarked upon a number of larger scale area development activities, the primary objective of which was to provide adequate water supplies to poor rural communities. While recognizing that inadequate supply of water is only one of the problems challenging these communities, World Vision believed that an adequate water supply is central to sustaining an improved quality of life in rural areas.

At the time of applying for the grant, World Vision had already initiated major water development activities based upon drilling wells in Ethiopia, Ghana, Kenya (Karapokot Project), and Senegal (Louga Project). In Kenya the Maasai Peoples Project was also underway and had started life as the Maasai Water Project, but it was already seen that a broader more sensitive strategy was going to be needed. In Malawi, the need for a rural water program had been identified, and this became the first water project to be designed and initiated under the grant. In Mali a major development initiative was envisaged at the time of submitting the proposal and it was believed that the foundation for this intervention would be the provision of potable water, etc. Ultimately water did become a major feature of the program there, but it was utilized for agriculture and groundwater recharge and was not, therefore, included under the matching grant program.

As the effects of the Africa drought had intensified, World Vision had, on one hand, recognized the pressing need for improved rural water supplies, and had identified a stronger donor interest in funding this type of longer term answer to the drought. However, the PVO had limited in-house capability to meet the enormous challenge and it was clear that a capability enhancement program was needed if we were to be able to respond effectively to the challenge before us. A program review had been

started in the fall of 1985 from which, a year later, a detailed proposal for support was prepared and submitted to A.I.D.

The reason that external funding through the A.I.D. matching grant program was seen to be required was that World Vision's private donors were committed to finance the actual water development projects that would bring water to the rural needy of Africa, but did not have the same enthusiasm about, or commitment to, the basic training and capability enhancement activities that were necessary in order to be able to accomplish this worthy objective.

II. PROJECT METHODOLOGY

A. Objectives of the Matching Grant

1. As given in Section 1.2, the following was listed, in enclosure 2 to the grant, as the Program Purpose:

"To establish an on-going institutional capability within WVRO (now WVRD) headquarters and a field program management structure to plan, implement and manage effective water development programs in five target countries in Africa (Senegal, Mali, Ghana, Kenya and Malawi)."

In order to be able to accomplish this program purpose, the following Principal Activities were then listed:

- a. Secure experienced staff to manage activities and provide management oversight for large-scale water development projects.
 - b. Establish a regionally based technical information and documentation center to manage and implement these projects.
 - c. Institute a comprehensive program of technology transfer, training, and technical assistance for field staff.
 - d. Strengthen the existing regional technical team's capability to provide on-going technical assistance and training to field staffs.
 - e. Establish small technical resource units within five field offices.
 - f. Procure materials, equipment, and technical services for the implementation of selected water projects.
2. The expectations at the start of the program were that full implementation of program strategies and activities would enable World Vision to realize the following outputs:
 - a. Improved management of a flow of extensive project inputs under seven large-scale water development activities.

- b. Three to four new large-scale water development projects designed with solid donor support.
 - c. New or revised policies and procedures handbooks for the planning and management of larger-scale technical projects and technically complex development projects.
 - d. Specialized strategies and materials developed and instituted for World Vision's training, evaluation, community participation, and maintenance of water projects and donor mobilization.
 - e. Direct specialized training of more than 150 water development personnel.
 - f. One fully functioning regional technical information and documentation center.
 - g. Five field office technical resource units.
3. Key inputs deemed necessary for realizing the above objectives included:
- a. Senior technical program management specialists who would be recruited on both contractual and full-time basis.
 - b. WASH staff and external consultants who would be engaged as technical advisors and facilitators.
 - c. A grant from A.I.D. to help establish field office technical units.
 - d. A grant from A.I.D. to establish a Technical Information and Documentation Center.
 - e. A grant from A.I.D. to design and implement the WV Malawi Water program.

B. The Primary Beneficiaries of Program

The following were envisaged to be the primary beneficiaries under the program:

1. The rural communities in Ghana, Kenya, Malawi, Senegal, and Mali where large-scale water projects were in existence or were being planned.
2. The respective World Vision field offices in the countries named above.
3. The Regional Technical Team (RTT).
4. World Vision at the corporate level as well as World Vision within support offices.

The terms of the grant stipulated that only five countries in Africa were approved for direct in-country support. These were Senegal, Mali, Ghana, Kenya and Malawi. Subsequently WVRD determined that it would not be beneficial to include Mali in the program, and that country was eventually deleted, leaving the other four countries as the primary beneficiaries under this grant. In addition to the specific countries for direct in-country support under the grant, WVRD have understood that other non-program countries (including Nigeria, Zambia, Zimbabwe, Uganda, and Ethiopia) could receive indirect benefits from the activities of the AWP provided A.I.D. funds were not directly used to fund such activities.

Effective implementation of the AWP started in January of 1987 with a program of activities which included personnel recruitment and retention, technical training and enhancement, program evaluation and design, project planning and design activities and, last but not least, program management and policy formulation activities. The AWP grant was scheduled to end on June 30, 1990, but was extended a further 3 months, by a no-cost extension, to permit the final evaluation to be completed within the term of the grant.

The results of the final evaluation of the program are reviewed in Section III.

C. AWP Proposed Activities for FY90

No evaluation was carried out during FY89, but the following activities were planned during FY90 in order to assure accomplishment of the remaining AWP grant objectives.

Beside each activity, the outcome has been listed:

<p>C.1 Focus maximum technical assistance and oversight on ensuring excellence in all phases of existing water projects.</p>	<p>Somewhat limited by a <u>severe</u> shortage of the funding to enable staffing to operate RTT. Strong support given to Malawi RWP with detailed technical assistance and managerial support.</p>
<p>C.2 Establish a technical information & documentation system to support RTT, the water projects, and the field office Technical Services Units.</p>	<p>Uncertainties in the permanent location of the RTT made it impractical to establish the documentation center alongside the RTT. The documentation center was established in Monrovia, CA on a limited basis in preparation for the planned move to the region. A Documentation Data Base is now set up in the WVRD office.</p>
<p>C.3 Program Evaluation of GHANA RURAL WATER PROJECT</p>	<p>Completed as planned.</p>
<p>C.4 Midterm Evaluation of MALAWI RURAL WATER PROJECT</p>	<p>Initially delayed until June 1990 and then merged into the Final Evaluation of AWP which was performed by A.I.D. consultants Carrol & Jankura.</p>
<p>C.5 Midterm Evaluation of MAASAI PEOPLES' PROJECT</p>	<p>Initially delayed until June 1990 and then merged into the Final Evaluation of AWP which was performed by A.I.D. consultants Carrol & Jankura.</p>
<p>C.6 Ensure that countries in the SAHEL (Mali, Mauritania and Chad) receive support from RTT regarding Water & Child Survival activities.</p>	<p>Limitations of funding with reduced budget allocations impeded potential new programs and limited the scope of this activity.</p>
<p>C.7 Assist support offices in organizing intensive major donor campaigns focusing on multi-year commitments from bilateral donors, church based community groups, and partnerships with other NGOs.</p>	<p>Major effort was committed to developing long term funding for the Ghana Rural Water Project. Commitment to fund this project during FY'91-'95 was received from the Conrad N. Hilton Foundation. (one million dollars per year for 5 years) to be matched by \$2.7 million which WVUS has committed to raise from other donors. Recommendation of the Nov. '89 evaluation will now be fully implemented. This new grant will also benefit some 200,000 new beneficiaries.</p>
<p>C.8 END-OF-GRANT EVALUATION</p>	<p>DONE</p>
<p>C.9 FINAL REPORT</p>	<p>DONE</p>

III. MONITORING AND EVALUATION

After extensive discussions during the early months of 1990 between A.I.D., WVRD and WASH, it was agreed that a final evaluation of the AWP could best be carried out by external evaluators. It was also agreed that the final evaluation would replace the two midterm evaluations planned for the Maasai Peoples Project and the Malawi Rural Water Project. World Vision had felt that the individual country evaluations needed to be of a formative nature whereas A.I.D. required a more summative style of evaluation for the AWP final evaluation. The wiser course was thus taken, to completely replace the project midterm evaluations by the final one for the AWP.

A. Assessment of Performance According to Specified Objectives

A.I.D. contracted for Frank Carrol and Paul Jankura to carry out the evaluation and they were assisted in East Africa by Larry Quist from the World Vision RTT. The following assessment of performance against the six Specified Objectives is taken directly from their September, 1990 report:

Objective and Evaluation:

1. **Secure experienced staff to manage activities and provide management oversight for large water development projects.** **FAIR**

Evaluators Comments:

The management staff currently in place in World Vision/Monrovia is experienced, qualified, and now provides most of the critical management required. This has not always been the case. WVI/Africa has finally settled with a competent and committed staff, although there is still insufficient attention being paid to key components of the program. WVRD is professionally directed and managed with an able staff. The full-time Water Specialist is professional, experienced, and committed to the program. Because of the structure of the organization for this program, these components of headquarters management have not been able to fully mesh their talents and efforts to give the degree of management and oversight that the program has needed.

WVRD Response:

The proposal for the Africa Water Program was submitted at the height of the funding response to the drought crisis in Sub-Saharan Africa. By the time the program was underway, funding was falling dramatically and the financial resources were not available to strengthen the upper and middle management levels in the manner that we had anticipated.

2. Establish a regionally based technical information and documentation center.

FAILURE

Efforts were made early in the program to get the center underway. Preliminary work on the type and quality of information resources and documentation began. A decision was made, however, to locate the center in Washington, D.C. This action met with heavy criticism, and the plan was abandoned. Since that time, all work on it has been curtailed. The lack of anything resembling a documentation center in Africa is deplorable.

We feel that this criticism is unduly severe. We have been faced with very real financial restraints which have meant that the function and size of the Regional Technical Team is reduce from what had been envisaged. We have also been faced with a changing political and economic climate in Africa which has made Nairobi much less attractive as a management center for Africa. The result has been that World Vision does not have a centralized location in Africa where staff and a documentation center could be located in easy access of the potential users. A modest documentation center does exist in Monrovia. However, we accept that this is not on the scale that was originally envisaged.

3. Institute a comprehensive program for technology transfer, training, and assistance for field staff.

FAIR

The strongest projects in this regard are in Ghana and Senegal, where the most time, money, and efforts have been expended. The Kenya program is strong here--except for water development skills and training--but due less to the "comprehensive" nature of a program communicated from above as due to the insight of individuals associated with the project to ensure that these facets were being addressed through locally available resources. The strength in the Malawi project has been in the quality of technical assistance, in particular from the RTT Water Specialist and the contracted private engineer. But it has fallen far short in terms of training and staff development. All of the projects have had degrees of success in transferring their technologies to the communities involved. But the development of a comprehensive program by World Vision headquarters to achieve these facets of development--particularly training packages and staff development--is weak.

We believe that technology transfer has been much better than the evaluators portray. The Senegal and Ghana projects were not visited by the evaluators and are the more mature of the four projects under the AWP. In both countries, the technology has not only been transferred to World Vision field office staff, but also to the recipient communities. This is especially the case in Senegal where local community based industries have been established to carry on the maintenance of hand pumps, and to extend the development of simple vegetable garden irrigation systems using surplus pumping capacity.

4. Strengthen the existing regional technical team's capability to provide on-going technical assistance for field staffs. POOR-FAIR

The RTT has had an up-and-down evolution during the time of the AWP. Its greatest strength was reached during the ATMS contract period when it performed the range of tasks originally designed for it. The subsequent departure of ATMS and the absorption of its staff into World Vision has left the current RTT in a weakened position. Its current strength lies in some of its personnel and the fact that they are all African. Its weakness lies in the complement of skills of the staff and the ambiguous role the staff fulfills in World Vision's African activities. This weakness contradicts the high position of importance that the RTT was proposed to hold for building the institutional capacity of World Vision.

It is perhaps an obvious comment, but latent institutional capacity (that is capacity that is not actively employed) is an expensive luxury. At a time when World Vision is able to embark on few or no new projects, it is hard to justify retaining the capacity to grow rapidly, as was the case when the AWP was launched. The result is that we have had to choose to disperse the technical capacity that we have retained, and keep those dedicated staff employed on the current projects such as those in Ghana, Kenya, Malawi, Ethiopia, and Mali. This is in some ways regrettable, but it has been found necessary in the current fiscal climate. While ATMS did perform well as a sub-contract RTT, they were hard to institutionalize into World Vision without contemplating the long term employment of "counterparts" to assimilate their experience.

5. Establish small technical resource units within five field offices (subsequently modified to 4). FAIR

Discounting the fact that only four countries were ultimately included in the AWP, the progress on this objective has been adequate. The field offices' technical staffs have their major strengths in health and child survival. The resource unit personnel in both Kenya and Malawi require additional training. Only in Ghana and Senegal, with the strong emphasis on engineering achievements, are there fully trained technical water staff. The community development skills of these staff members, for the most part, are adequate. In addition to personnel, the concept of technical resource units should also encompass project level information and documentation. Staff are starved for appropriate reference material. Field office and project personnel should be made aware that an entity known as a "technical resource unit" exists.

We feel that this is a valid criticism. Once again, lack of funding has contributed to this problem.

6. Procure materials, equipment, and technical services for the implementation of selected water projects. GOOD

Of the external technical assistance provided, World Vision gets high marks for the consultants used and the work performed--the rapid assessment teams in Ghana and Senegal not achieving as high marks as the other endeavors. However, the fact that

additional requirements for such assistance went unperceived or unsupported detracts from the overall performance in this area. Much equipment and materials have been procured through the program, but some projects (e.g. Malawi) have been experiencing procurement problems, which have been understandable in the macro-economic environment.

No comment.

B. Assessment of Performance According to Priority Activities Specified in the AWP Proposal

The evaluators then went on to evaluate the performance under the grant according to the priority activities specified in the AWP proposal. The rating for these points is given without either the evaluators' comments or a response to them. For more detail, the reader is referred to the evaluators' report.

- | | |
|---|----------------|
| 1. Developing a comprehensive corporate water development program strategy. | FAIR |
| 2. Establishing coherent program linkages between headquarters, regional, and country field programs. | FAIR |
| 3. Recruiting experienced project managers to lead project implementation. | GOOD/EXCELLENT |
| 4. Using experienced technical consultants in the design and redesign of projects. | EXCELLENT |
| 5. Hiring and directing experienced technical staff for project implementation. | FAIR/GOOD |
| 6. Developing and administering specialized training programs for regional, field office, and project staff. | POOR/FAIR |
| 7. Devising program strategies for the rehabilitation of non-functioning projects and the consistent upkeep of effectively functioning equipment. | GOOD |
| 8. Devising and overseeing a financial management and project reporting system. | POOR |
| 9. Devising community mobilization strategies. | GOOD/EXCELLENT |
| 10. Developing a fund-raising and resource mobilization strategy. | FAIR/GOOD |

- | | |
|--|-----------|
| 11. Instituting a monitoring and evaluation system that ensures early and consistent feedback to correct mistakes and adjust to new information. | POOR/FAIR |
| 12. Establishing a library of technical materials and information resources. | POOR/FAIR |

C. Sustainability

The evaluators then went on to review the performance of World Vision under the AWP against an analytical framework for sustainability based on "The Effectiveness of Private Voluntary Organizations." These results, also, are given in summarized form:

- | | |
|---|----------------|
| 1. Local institutional capacity. | GOOD |
| 2. Local participation. | GOOD |
| 3. Compatibility with social and cultural patterns. | GOOD/EXCELLENT |
| 4. Local partnerships. | FAIR/GOOD |
| 5. Economic realities. | GOOD |
| 6. Environmental constraints. | GOOD |
| 7. Long term implications. | FAIR/GOOD |
| 8. Policy environment. | GOOD/EXCELLENT |
| 9. Information networks. | FAIR/GOOD |
| 10. Financial support. | POOR/FAIR |

D. Evaluators' Summary

The evaluators' summary puts many of the above comments into perspective and is worthy of repeating here:

"A final comment about the performance of World Vision is in order. An assessment of the organization based upon the objectives and activities stated in the proposal could only yield a rating of fair-to-poor performance. They have done some things well, but too many areas of poor performance remain. Yet, after spending six weeks with the organization and several more reviewing and cogitating about the work, it seems that World Vision's performance is better than the ratings indicate. The organization has come a long way in moving from the "relief" mode of operations by itself to include a "development" mode. They have accomplished good things in the

field--not necessarily complete "holistic" achievements--but nevertheless worthwhile to the communities in which they are working. The WV partnership has shown an ability and commitment to develop worthwhile and sustainable projects. There is a definite role for World Vision to play in the development community. And judgements about World Vision's performance must be tempered by the facts that its own organizational structure has been a hindrance to WV and that senior management are aware of and attempting to resolve these problems. It may behoove WV to have an external consultant to assist them in looking at changes that need to take place. And it certainly would be prudent for the Partnership to obtain assistance in developing a monitoring system, comprehensive programs for training and staff development, and the establishment of the documentation center. World Vision should be encouraged to continue its growth in development work."

IV. REVIEW AND ANALYSIS OF PROJECT RESULTS BY COUNTRY

In this section the project activities in each country covered by the AWP grant will be reported upon. It must be borne in mind that all but the Malawi Rural Water Project started before the start of the AWP and all four are continuing after the grant has finished. Thus the results reviewed represent a change in an on-going project plus a level of enhanced learning for World Vision, not only in the countries covered by the grant, but also across Africa and into the other continents where World Vision is working.

A. GHANA

The World Vision Ghana Field Office submitted a proposal for improvement to water supplies for its sponsored communities late in 1984. Some of these initial requests were approved and 50 wells were sunk in 1985 with 28 yielding water. An independent commercial firm was contracted to do the actual drilling.

It was decided to expand the drilling program to cover 100,000 people and to include K-VIP latrines. A study was made on "Water and Sanitation Problems in Ghana" which gave out details of the urgent need for good potable water supply.

A four year water drilling, health and sanitation programme was approved at the end of FY85. The **Ghana Rural Water Project (GRWP)** commenced drilling in Fiscal Year 1987. The project initially comprised a test drilling phase in the Volta, Greater Accra and Eastern Regions and a production drilling phase in the Western, Central and Eastern Regions, but later spread over most of the country.

The **OBJECTIVES** for the Ghana Rural Water Project were:

- * to provide a reliable supply of safe clean, potable water throughout the year.
- * to provide sanitation at an initial level to serve the needs of the children and to assist the community.
- * to increase the community awareness and knowledge of water related diseases and the benefit of hygiene.

- * to increase the community awareness and knowledge of faecal related diseases and the need for, and benefits arising from improved sanitation practices.
- * to develop and provide an appropriate technology solution to the problem of high iron content in certain ground water sources.
- * to reduce the burden on "the water gatherers" who are usually the women and children.

1. GHANA - Project Milestones

FY 1987 - FY 1990

- 400,000 RESIDENTS OF RURAL COMMUNITIES AND INSTITUTIONS HAVE ACCESS TO WATER
- 428 BOREHOLES SUCCESSFULLY DEVELOPED
- 442 PUMPS INSTALLED
- 186 VOLUNTEERS TRAINED & NOW MAINTAINING PUMPS
- 191 COMMUNITIES ACTIVELY INVOLVED IN DEVELOPMENT PROJECTS

	FY 87	FY 88	FY 89	FY 90	TOTALS
SUCCESSFUL WELLS	74	131	144	79	428
COMMUNITIES	34	58	71	28	191
INSTITUTIONS	23	30	31	23	107
POPULATION	100,000	100,000	150,000	50,000	400,000
ADMIN DISTRICTS	8	11	23	13	
REGIONS	5	3	7	2	
VOLUNTEERS TRAINED			79	107	186

Note:

In addition to the 428 wells listed above, a further 28 wells were drilled prior to the start of the grant bringing the total of successful wells at the end of FY90 to 456. Under funding from the Conrad N. Hilton Foundation and other sources, World Vision is now drilling a further 500 wells.

2. GHANA - The Benefit to Women

The large number of beneficiaries on the previous page come from estimates made by World Vision field staff and community leaders of the peak number of people benefitting from the wells that have been drilled. The actual number will vary month-by-month and even year-by-year as traditional sources of water become more scarce. A criticism that we have made of the project in our own evaluations is that we have drilled in a "Relief" manner. That is that we have responded to the most needy regardless of their location and so have a widely dispersed pattern of operation and maintenance. This will have an adverse effect on the long-term sustainability of the wells, but has greatly enhanced the number of dry weather beneficiaries.

It is hard to desegregate the number of beneficiaries by gender since it is only the women and children of Ghana that carry water, but when a woman comes, she certainly would also be carrying water for the men of her family. Clearly, in terms of effort the women and children will benefit the most, not only in terms of reduced labor to carry water, but also in terms of greater access to the cleaner water and improved use of it.

The hygiene, sanitation and health educational components of the program, thus far, have been weaker than we would have wished. These components are targeted virtually completely at the women and children in association with other mother and child healthcare (MCH) activities. Thus in terms of full benefit gained, it will be dominantly the women and children who gain from this project.

3. GHANA - Problems Encountered

The principal problem which has been encountered with this project has been a lower level of funding than was envisioned at the planning stage. This problem has been further exacerbated by much of the funds that have been raised being earmarked by the donor for well drilling. The result of this situation is that the "software" activities of the program have not had the attention that was needed. Drilling has advanced much faster than the associated components of training and sanitation.

A second problem that has been evident throughout the early years of the work has been that the project was established "outside" the normal field office activities and there has been relatively poor integration of one with the other. This was understandable and somewhat anticipated for the staffing level of the project was nearly as large as that of the remainder of the field office activities. It was felt inappropriate to have integrated the two activities from the onset. This has, however, now been done. A result of the activities being kept apart was that wells were often drilled in needy communities where there were no other WV activities and no long term WV presence. This meant that both education and sustainability were questionable. However, it must be emphasized that this lesson has been learned and a solution has been implemented as the

following quote from the Field Director to the WV-Ghana Advisory Board shows:

"In compliance with the recommendations of the recent Evaluation Report on the Ghana Rural Water Project (GRWP), full integration of the GRWP into the Field Office administrative, management and operational structure will be implemented by October 31, 1990."

A third problem was that the drilling activity was too widely spread over the country, as the following table shows. The drilling team even worked in as many as 7 Regions of the country in the same year:

REGION	FY	87	FY	88	FY	89	FY	90		
	TOT	WET	TOT	WET	TOT	WET	TOT	WET	TOT	WET
ACCRA	13	8	--	--	24	10	5	3	41	21
VOLTA	7	7	86	61	--	--	--	--	93	68
EASTERN	28	20	44	26	9	5	116	76	198	127
WESTERN	17	13	--	--	--	--	--	--	17	13
CENTRAL	46	26	--	--	5	2	--	--	51	28
NORTHERN	--	--	106	44	31	18	--	--	137	62
UPPER EAST	--	--	--	--	21	16	--	--	21	16
BRONG AHAFO	--	--	--	--	106	82	--	--	106	82
ASHANTI	--	--	--	--	18	11	--	--	18	11
TOTAL	111	74	236	131	214	144	121	79	682	428

In the Ghana project, there is a cooperative sense of building on strengths and moving forward to new ideas. When compared to reports in 1987, there are MAJOR improvements.

4. GHANA - Impact on Local Institutions

The impact on local institutions has many levels. After a weaker start, this project now has excellent cooperative relations at national and local government levels and also with the leadership of the communities themselves. The following points extracted from the GRWP FY 89 report will serve to illustrate this:

IMPACT

- A) Health education activities developed the understanding of the health conditions for which the project was instituted.

- B) Beneficiary communities, responsibility in achieving the goals was stressed and community members were motivated into assisting the project by way of labor, maintenance fee contribution and local materials like sand, gravel etc.
- C) Training and monitoring provided the support for sustenance.

SOCIO-ECONOMIC BENEFITS

- A) Reduction of guinea worm and diarrhoea diseases
- B) Migration back to villages hitherto abandoned because of scarcity of water.
- C) Improved personal and environmental cleanliness.
- D) Enhanced women's involvement
- E) Enhanced self-help spirit in the communities.

COMMUNITY INVOLVEMENT

- A) Communities initiated meeting through their leaders to discuss current development problems including health.
- B) Task Performance Committees, e.g. Water Maintenance Committees, have been formed to take up recognized duties.
- C) Membership of the committees had to be voluntary, indicating personal decisions to assist in solving some of the community problems.
- D) Sanctions were raised among the members of the community to bring to book deviants who do not report for communal labor or do not pay communal the levy.
- E) The project have encouraged group responsiveness and collective responsibility.
- F) The project and its education component has assisted communities to properly define development goals.
- G) Apathetic individual behaviors which could constitute or encourage disease harboring conditions in the community were vehemently opposed, especially by the members of the local sanitation committees.

PROJECT SUSTAINABILITY

- A) 25 WVI personnel were trained in 3 consecutive workshops organized by WVI and ATMS.
- B) The Pump Maintenance and Training Team trained 79 local volunteers in 32 communities. The team serviced and repaired 51 hand pumps.

The situation has improved even further during FY90.

5. GHANA - Comparison of Accomplishments with Those Proposed

The GRWP has done comparatively well in terms of the easily measured milestones of wells drilled and beneficiaries served during the life of the project. The principal failures have been in the important "software" areas of education,

sanitation, maintenance and sustainability. This has improved during the past two years and major advances are planned during FY91 and the following four years.

It would be wrong to hold the country team completely responsible for the shortcomings of the project in these areas. In fact, many of the software activities that were needed to make a sound project were not properly financed and the field office neither had the staff nor the transport to be able to thoroughly cover so widely spread a target audience with the necessary software activities.

In the design of the second phase of the project, these deficiencies have been recognized and are being addressed in detail. A full funding commitment has been made for all the balanced activities and the drilling rate is being slowed down to be commensurate.

B. KENYA

A pre-feasibility study in mid-1985 was followed by a directional study early in 1986. The latter pointed out the dangers of single sector water programmes of the type originally proposed - construction of 62 large dams. An integrated and innovative development approach was proposed, thus transforming what had been a water development programme into the **Maasai People's Project (MPP)**.

The MPP was to have a broad scope, and the following key entry points were identified:

1. Rangeland available to the Maasai has decreased dramatically and continues to do so.
2. Maasai have been "neglected" in development planning.
3. Social & Cultural structures are changing and in some cases "deteriorating" in Maasailand.
4. Poor health is prevalent and health services are inadequate.
5. Population is increasing rapidly.
6. Subsistence from cattle herding is incapable of supporting all the people.
7. Biomass incapable of supporting all the cattle.
8. Insufficient water available - clean or otherwise.
9. Water source management is very inadequate.
10. Many Maasai are generally suspicious of intervention.
11. Some Maasai are keen to improve their lifestyles.
12. Wildlife conservation measures are putting a grossly unreasonable burden on the Maasai.
13. Single ownership ranches seem to be more successful than group ownership ranches.
14. Horticulture and zero grazing are not unknown to Maasai.
15. There is some very successful private ranching carried by Maasai in Maasailand.

1. KENYA - Milestones

FY 1987 - FY 1990

Water

- 12 MACHINE-BUILT WATER PANS (HAFIRS)
- 36 HAND DUG WATER PANS (HAFIRS)
- 6 WATER HOLES DUG BY FAMILIES THROUGH THE MPP
- 5 WATER TANKS - 10,000 GALLONS - AT SCHOOLS
- 1 WATER HOLE WITH HAND PUMPS
- 1 CAPPED SPRING

The average daily consumption of water has doubled.

Health & Sanitation

- 15 SINGLE PIT LATRINES
- 10 DOUBLE PIT LATRINES
- 58 IMPROVED HOUSES COMPLETED
- 10 IMPROVED HOUSES IN PROGRESS

Agriculture

- 410 FARMERS SUPPLIED WITH HYBRID SEEDS & TOOLS
- 26 CHICKEN HOUSES COMPLETED
- 19 RAT-PROOF LOW-COST GRANARIES - COMPLETED
- 6 RAT-PROOF LOW-COST GRANARIES - IN PROGRESS
- 10 MAASAI TRAINED IN DONKEY PLOWING & CARTAGE
- 3 CARTS SUPPLIED

Environmental Conservation

- 1 TREE NURSERY ESTABLISHED
- 10,000 SEEDLINGS PLANTED IN COMMUNITIES
- 4,000 SEEDLINGS AT NURSERY
- 19 COMMUNITIES TRAINED IN CONSERVATION
- 6 IMPROVED BEE HIVES ESTABLISHED AT NURSERY

Training

- 50 COMMUNITY LEVEL 1 DAY AWARENESS WORKSHOPS COMPLETED
- 31 COMMUNITY LEVEL 1 DAY SKILLS WORKSHOPS COMPLETED
- 3 COMMUNITY LEVEL 3 DAY SKILLS WORKSHOPS COMPLETED

Schools

- 453 DESKS DISTRIBUTED
- 18 TEACHERS' HOUSING UNITS COMPLETED
- 1 NURSERY SCHOOL CLASSROOM - COMPLETED

Small Business Enterprise

- 24 COMMUNITY MEMBERS GIVEN SMALL SCALE LOANS

Listing the varied mixture of milestones in this way gives some indication of the variety of community activities that are involved with this project. The project with the Maasai started in the early '80s and grew into the "Maasai Water Project". About the time that the AWP proposal was being submitted WV recognized that, even though it was the expressed need of the Maasai, water alone was a potentially dangerous focus for the project. The project was refocused through the Project Start-Up Workshop at the beginning of the AWP grant in January 1987, and the activities were diversified with a very heavy community participation process (as opposed to task) orientation.

This process orientation, with a wide spectrum of community developmental activities being brought together, has given this project a very special and successful form. This was the project which was highly praised by the evaluators, Carrol and Jankura. The project has provided some very solid evidence that "process orientation" can be very much more effective than "task orientation" in the evolution of a community development project.

The strategy for this project evolved to:

1. Make it look large-scale to World Vision, but small-scale from the grass roots level.
 2. The priority should be on both "process" and on local "ownership".
 3. The measure of success is what the Maasai do for themselves, and not what WV does for them.
 4. Use Maasai (project staff) to help Maasai.
 5. Begin with Maasai solutions and build on them.
 6. Try a little of something and see if it works.
2. KENYA - The Benefit to Women

Even though the project did not have a directed focus on women, it was recognized early on that a special effort was needed to ensure that they were effectively addressed. The Maasai, as a tribe, are conventionally led by elders and are male dominated. It was important that the women were a part of nearly everything that was done. Throughout the life of the project, the majority of the community workers (all Maasai) were women. This has enabled their needs to

be recognized and addressed effectively. The following list of **BENEFITS to the community** which comes from the A.I.D. evaluation report, gives an example of how effectively women and children have been served to date:

- a. **Improved Water Supply:**
A large water pan constructed.
- b. **Improved Food Supply:**
Development of home gardens, and improved grain storage facilities.
- c. **Improved Health:**
More balanced diets
Boiling water
Boiling milk
Learned ORT techniques
Children taken to clinic (inoculations); and knowledge of midwifery.
- d. **Improved Community:**
Community school nearby improved housing tree seedlings & other techniques for soil conservation.
- e. **Major attitude Behavior changes:**
A sense of working together for the benefit of the community.
Women expressing their ideas in group meetings and action taken on those ideas.
Established committees, which have brought the families and the community closer together.

Any activity which improves the supply of water to the Maasai in the area of Maasailand where WV is working benefits the women and children greatly for the whole burden of fetching water falls on them. However, it can be seen from the above comments that the benefits which are being obtained are not merely limited to water alone and perhaps the most telling comment for the longer term is that the voice of women is now being more frequently heard and accepted.

3. KENYA - Problems Encountered

The main problems that were encountered with the MPP were those that have already been noted. The Maasai were a proud and independent society that are now faced with problems of lack of quality land and restricted freedom of movement which left them in a poor position to face the effects of an encroaching society, a growing Maasai population, and in the mid '80s, a drought.

The project can do little to change the external problems, but is giving the participants additional developmental skills to help them face a changing future. Once more it is relevant to emphasize that we found that the development process lessons were more important than the project physical achievements.

4. KENYA - Impact on Local Institutions

The primary local institution with which the project has had impact has been the Maasai society, that is the people themselves. Hopefully the project will help them receive a few tools which will assist them in facing a world that is changing very rapidly. The project is truly community based and so has few links into the external structure of local government. Initially there were some problems with the local District government in Narok, but as the work progressed and the benefits to the communities were seen, the tension eased.

5. KENYA - Comparison of Accomplishments with Those Proposed

It is hard to rate the Maasai Peoples Project in this context since the concept was one of process rather than task (and so milestones). The evaluation has rated the project very highly indeed. In fact the A.I.D. evaluators reported:

"MPP earns HIGH rating, given the effect of the community linkages, the self-help development theory imparted, and the skills and knowledge transferred."

The evaluators also reported that:

"The MPP is an excellent example of the community development process properly executed, resulting in a transfer of technologies and a sustainability of project benefits."

We believe that the lack of milestones in the conventional sense was justified by the progress that the participating communities are making.

C. MALAWI

This was the first, and only, project that was initiated under the mechanisms of the AWP grant.

In June of 1987, World Vision Malawi drafted a project identification document for a rural water project which was needed to support the activities in rural communities with which the field office was working.

A representative from WV Malawi attended the AWP Project Design Workshop which was held in Nairobi during October, 1987. The Africa Region Vice President of World Vision International then decided to send a joint team comprised of WASH, RTT and Field Office personnel to the target areas, in order to develop a project designed for the **Malawi Rural Water Project (MRWP)**.

The **OBJECTIVES** for the Malawi Rural Water Project were:

- * to improve the technical skills of WVM staff relating to water and sanitation development.
- * to improve management skills in WVM relating to water and sanitation development.
- * to rehabilitate 15 existing boreholes in WVM assisted communities.
- * to develop ground water resources in an "integrated" mode at 15 sites.
- * to develop piped water systems at 5 sites.
- * to establish community-level maintenance for all systems installed in project sites.
- * to promote the construction and use of latrines.
- * to promote sanitation and hygiene practices in project sites.
- * to promote oral rehydration therapy (ORT) and growth monitoring in all homes housing young children in project sites.

1. MALAWI - Project Milestones

The following scope was set for the project over the five year period commencing in FY88:

Budget: The project would have a budget of \$1.34 million, which was subsequently revised to \$2,2 million, of which \$320,000 was to have come from A.I.D.

Technologies: The project would employ 2 water supply technologies:
1. Gravity fed piped water.
2. Boreholes with hand pumps.

Health: A Health Education and Sanitation Promotion (HESP) component would be initiated.

Rehabilitation: 15 existing boreholes would be rehabilitated.

Beneficiaries: 63,500 people in 35 rural communities were planned to benefit from the project.

2. MALAWI - The Benefit to Women

Once again, the women and children, as the water carriers will obtain both the most direct benefit and the most indirect benefit from the principal project

activities. This, however, comes more from their customary roles within the society than it does from the specific design of the project.

The criteria set for selection of benefiting communities was:

For the provision of piped water to communities not benefiting from the existing USAID program:

- a. the need for accessible clean water is evident.
- b. government officials have given their agreement.
- c. the community has shown a high level of participation in previous development activities.
- d. the community shows a reasonable degree of unity and agreement.
- e. the community represents all interested groups in the community.
- f. the Ministry of health is active in the community.
- g. the community can provide housing for the water operator.
- h. the community agrees to all MOWS conditions for participation.
- i. there is a school, health clinic or community center needing water.
- j. water is to be used primarily for drinking and domestic purposes.
- k. the cost is within WVM financing capabilities.
- l. the MOWS agrees to take over the operation and maintenance after WVM phases out.
- m. the water source has sufficient flow and the watershed is protected.

For the provision of a World Vision sponsored borehole:

- a. there is no viable possibility of a piped water project.
- b. MOWS has approved the site and the survey.
- c. the community is prepared to provide labor, sand and stones.
- d. the community is prepared to identify a person to be trained as the handpump caretaker.
- e. the site will be conducive to an integrated program.
- f. the community accepts the Government of Malawi policy of 250 people per borehole.
- g. there are no MOWS or other NGO plans to install boreholes or wells
- h. sufficient quantities of groundwater are available to supply 27 liters of water per person per day.

3. MALAWI - Problems Encountered

The project has been beset, throughout, by reductions of funding despite of the initial approval having been received. This has been a reality that all the projects have faced and still remains for all except the Ghana Rural Water Project.

There has been a discontinuity in project management when the initial project manager was promoted within the organization and a satisfactory replacement was not found. During this period the project became overly dependent on the

Water Specialist from the RTT who had been seconded to the project on a temporary basis.

From the very beginning there have been difficulties in recruiting suitably qualified technical staff which have not been overcome. In the opinion of the evaluators, the project was too ambitious for the level of staff that were available and for the budget that was allocated.

The project suffered from considerable delays in the procurement of handpumps from the only supplier in Kenya. The selection of the East African manufactured Afridev pump brought with it considerable pain.

There was a waning of community interest in some of the participating communities.

Logistical problems were a source of many difficulties.

4. MALAWI - Impact on Local Institutions

The project worked closely with the various ministries of the Malawi Government and was, through this, the beneficiary of their experience through the USAID funded program. Thus it can more fairly be said that the true impact came to the project, not from it.

5. MALAWI - Comparison of Accomplishments with Those Proposed

The program was consistently under funded, and was too ambitious for the level of staff that was available. The result is that many of the goals have not been achieved. In spite of these failings, the following accomplishments have been achieved:

1. One gravity piped system nearing completion - Chipoka.
2. Feasibility studies nearing completion in three sites.
3. Design and materials procurement complete for one site.
4. Forty-nine productive boreholes drilled and fitted with Afridev handpumps in four villages:

Muonekera	15 boreholes --- 6,933 people
Mpanda/Namitsitsi	16 boreholes --- 4,916 people
Nzimhiri	15 boreholes --- 6,831 people
Chikonde	3 boreholes --- 3,030 people
5. One hundred and thirty-six improved "Sanplat" latrines distributed.
6. Three health education sessions per week through village health volunteers and growth monitors.
7. Five hundred children registered for growth monitoring in project villages.
8. Greater than 20 percent adoption of ORT.

D. SENEGAL

World Vision's regional office in Dakar was opened in 1984 as a Sub-regional office for **Africa Drought Program** in West Africa. Major efforts were underway to deal with the concept of **MACRO-project** and **Large Scale Development Project**. The resources and personnel of the **Research and Communication Center** in Dakar were utilized to initiate "pre-feasibility" studies.

Three introductory studies were prepared by Dakar staff to describe regional problems and potential areas for further investigation. A multi-disciplinary research team comprised of a sociologist, economist, community planner, civil engineer, nutritionist, agriculturalist, accountant and general administrator was hired to develop regional strategies and follow up on pre-feasibility studies with specific recommendations. The challenge of the team was to get pilot projects started and establish a basis for appropriate approaches in other West African nations facing similar problems.

As originally envisioned, the "Comprehensive programme for coordinated assistance among Wolof and Peulh of the Louga Department" gave priority to protection and controlled exploitation of remnant woodlots and agricultural areas of the Louga Region. Efforts were targeted at the "poorest of the poor", in particular women and children who had the least financial resources and resided in rural areas untouched by government assistance. The Louga Department was one in which there were no partner agencies and thus World Vision needed to be fully operational.

A preliminary survey carried out in 1985 identified a **MAJOR** need for **potable water**. Extensive interaction on the part of the multi-disciplinary team with rural villagers revealed just how significant the need for water was and how the deterioration of the environment would continue unless something was done on a large enough scale to really make a difference. The desert was encroaching on agricultural land, livelihoods were destroyed, wells dug by hand were dry and the health of children very poor.

The decision was made to **develop water resources** as "a strategy for interface and cooperation" which would enable the team to follow through with the feasibility study, initiate other relevant, complimentary projects to meet the needs on a wide enough basis. Drilling bore holes was identified as the means to bypass an upper aquifer that was frequently dry and large amounts of equipment and India Mark II handpumps were purchased.

Initial efforts were concentrated in the poorest areas with the greatest need. Logistically and hydrologically it proved to be an area in which it was nearly impossible to operate and early results of well drilling were very poor. A major reorganization within WVI lead to reassignment of many of the multi-disciplinary team and a field director was placed in Louga.

The idea of using water supply as an "entry point" into rural villages continued. Selection of villages to receive wells was coupled more closely with capacity of the drilling equipment to tap a reliable aquifer. Success of the drilling program increased

dramatically and by 31 August 1987, ONE HUNDRED WELLS were drilled 82 of which produced excellent water and on which at least one handpump was installed. Louga staff continued with their earlier direction of providing integrated health and agricultural components to provide synergistic impact on community development.

WASH consultants made a Rapid Assessment of the Louga rural water project in 8-21 May, 1987 with very intensive analysis of the history, capabilities and potential of the Louga project. At this point 52 bore holes had been drilled 43 of which were successful and on which pumps were installed.

1. SENEGAL - Project Milestones

FY 1987- FY 1990

180,000	RURAL WOLOF AND PEUL OF THE LOUGA REGION HAVE ACCESS TO EXCELLENT WATER
300	BOREHOLES SUCCESSFULLY DEVELOPED
397	PUMPS INSTALLED (Includes double pumps)
29	BUSH TECHNICIANS EQUIPPED & NOW REPAIRING PUMPS
5	BUSH ANIMATORS TEACHING AND MOBILIZING VILLAGERS
32	BUSH CONSULTANTS PROMOTING DEVELOPMENT
55	BUSH PROMOTRICES ADVANCING PRIMARY HEALTH CARE
285	VILLAGES IN THE LOUGA AND KEBEMER DISTRICTS ARE ACTIVELY INVOLVED IN COORDINATED DEVELOPMENT ACTIVITIES

2. SENEGAL - The Benefit to Women

The program in the Louga Region of Senegal which came under the AWP is generally referred to as the "Louga Project", but was set out as four distinct but interrelated projects:

Louga Potable Water Development Project;
Water Extension and Training (WET);
Louga Backyard Tree & Vegetable Project; and
Louga Child Survival Project

The first of these projects covered the well drilling and clearly brought considerable benefits to the women, who were primarily (although not totally) the

water carriers; however, this project was largely one of physical works. The other three projects were directed largely at the women and children, who are also the primary beneficiaries. Of the four projects, only the first two strictly fall under the AWP grant, although it is surplus well capacity that has made the small horticulture project possible.

The Louga Potable Water Development Project is the "hardware" project, and the WET Project provides the "software" components of community development. Progress made in training rural villagers in using water is used as a jumping off point for other community development activities.

The women of the villages have been trained to report pump failures to local bush technicians, who walk or ride donkey carts to the village and repair the pump, with payment coming from the villagers. A wide spectrum of training has occurred as members of the WET team have visited villages and conducted training on the proper utilization of the pump, why soap is important, and how the pump (and well) are the "property" of the village itself. A new sense of ownership is developing as the pumps need repair and as bush technicians (their own neighbors) have assumed complete responsibility for raising feeder pipes and changing cylinders.

The responsibilities of the WET team are:

- (a) Meet with village leaders and other authorities to decide whether or not a borehole will be drilled in the village.
- (b) Encourage villagers to become involved in agricultural and health activities of the Louga Integrated Development Project.
- (c) Train and support networks of volunteers to work in the three areas of development:

1. Potable water
2. Agriculture
3. Health

Extensive surveys and interaction on the part of the early Louga team in villages established a foundation which has been built upon to recognize the real needs as well as desires of the rural residents. The encouragement of the Rapid Assessment Team in 1987 to do more in community training and development spurred the World Vision Louga staff to develop relevant projects to address the needs and concerns pointed out in evaluations and reports. The WET project is the best example of close cooperation of the Africa Water Program consultants and results in the field. Significant attention has been given to the community participation aspects of rural development in Louga and numerous documents highlight progress made in the last three years. The overall Louga program is definitely more sustainable as a result, and the villages are trying new pilot activities or "projects" without significant external input from any organization. This can be seen as successful intervention in which the provision of water allows further independent development to occur.

In retrospect, the words of encouragement of David Yohalem to the Louga staff in 1988 have proven exceptionally relevant:

"The project is achieving its operational objectives efficiently and seems to be moving in a direction which will lead to positive performance effectiveness. The WET team approach should be closely monitored and assessed over the next five years because it may have important implications for other World Vision large-scale development projects and technology-driven Water Supply and Sanitation projects in general"

Women are the primary beneficiaries of the WET Project.

3. SENEGAL - Problems Encountered

The dominant problem that the Louga Project(s) has experienced during the life of the AWP has been the same lack of adequate funding that has affected all the other projects covered by the grant. This has led to the WET activities being not as expansive as we would have liked them to be.

A further problem has been that the World Vision Louga project team members have not availed themselves of the potential benefits of the AWP to the extent that could have been done. Some of the blame for this must also lie with the RTT and the Africa Regional Vice Presidents. This situation was highlighted in a memorandum from WASH consultant David Yohalem as early as January 1988:

"The senior staff in Louga is not sufficiently aware of the benefits it can derive from a closer relationship with the AWP and specifically with the RTT. Its initial experiences with AWP activities and its current relationship with other WV International Office bodies have not predisposed it to look upon the AWP as a resource for improving its program. Senior staff are not clear as to the AWP's purpose, the RTT's role in obtaining these goals, and how or why it should access this potential support.

"The lack of Francophone staff on the RTT, its institutional link to the AVP's office, and its proposed role in equipment purchases all contribute to this problem."

4. SENEGAL - Impact on Local Institutions

The impact of the Louga Project(s) on the local institutions at community, district (Arrondissement), regional, and national government levels has been significant.

It is a major tribute to the Project Manager and his senior team that relationships at all levels have been strong and effective.

World Vision have been asked by the Government of Senegal (Minister of Hydraulics) to extend the project southwards into the Region of Thies. Throughout the project to date, he has seconded hydrogeologists from his staff to work with the WV team. Already the community survey team have surveyed 32 new villages in the Thies Region and 10 have been selected for the first phase of this expansion. The list of villages has been submitted to the MOH for their approval.

At the community level the communities are changing somewhat in their own institutions of leadership, and new life has been given to many villages as the youth of the village see a future with hope and many of the young men return from the cities to which they had migrated in despair. The role of women is stronger than before, and the vegetable gardens have brought not only more food, but also more income and independence to them.

5. SENEGAL - Comparison of Accomplishments with Those Proposed

It is hard to compare the accomplishments with those proposed, for so much has changed. The 250 target wells have been completed, but so much more has been done which was not so clearly defined in the early design phase. Perhaps a more accurate picture can be given by presenting the currently expected results for the WET project by the end of the project.

The project animators will have:

1. Served approximately 370 villages, with 250,000 population.
2. Trained and equipped 50 "bush technicians" to maintain and repair about 550 pumps.
3. Trained 60 "volunteer health workers (assainistes)", 70 "volunteer promotrices" (female community development workers), and 100 "volunteer bush animators".
4. Helped and assisted, in collaboration with other partners, to equip 45 villages with solar energy systems for water supply and domestic lighting.
5. Helped and assisted blacksmiths in the World Vision zone of action to create five big workshops for the manufacture of agriculture tools.
6. Organized and assisted village women to create 15 workshops for dyeing, needlework, and potteries, and set up 10 outlets where they can sell their garden produce and their works of art.

V. MANAGEMENT: REVIEW AND ANALYSIS OF HEADQUARTERS/SUPPORT FUNCTIONS

A. AWP Program Management

Responsibility for the management and execution of all activities included under the AWP matching grant was initially assigned to a director/team leader, Mr. Nate Fields, whom World Vision had contracted to lead the Nairobi-based Regional Technical Team. Subsequently, the Africa Region Vice President for World Vision International resigned and Mr. Nate Fields accepted this position. This created a discontinuity in the management of the grant, which ultimately was assumed, in February 1990, by the newly appointed Director of International Development Programs for WVRD, Mr. Julian Pitchford.

Initially, Nate Fields and a dedicated group of contracted staff worked to ensure that all activities were planned and managed in a manner consistent with realizing the purposes, specific objectives, and expected outputs of the AWP.

At the start of the grant, WVI and WVRD agreed that World Vision's Nairobi-based RTT should be temporarily seconded under the subcontracted program management group, ATMS International (which was led by Nate Fields). This was done with the understanding that in FY90 those of its staff designated as World Vision regular personnel would be reabsorbed into the RTT or other organs of World Vision, reporting and being accountable to the WVI Africa Vice President. This has now been done, although not all the staff chose to remain, and funding constraints have limited the replacement of all the positions.

Specific functions which ATMS International had been charged with include:

1. Program Development, under which they assist the Africa Regional Vice President and field directors in the development of policies, management systems, and specialized procedures necessary to carry out the Larger-Scale Development, Child Survival, Africa Water Program (LSD/CS/AWP) activities.
2. Project Development and Monitoring, under which they undertake the identification, feasibility study, design, monitoring, and evaluation of LSD/CS/AWP activities.
3. Institutional and Human Resource Development and Training, under which they provide technical and managerial training of World Vision and partner agency staff connected with LSD/CS/AWP activities.
4. Water and Sanitation for Health Project (WASH) Technical Assistance, under which they oversee on behalf of World Vision the technical assistance provided by WASH under the AWP matching grant from A.I.D.

5. Marketing Support and Grant Monitoring, under which they assist the Partnership Services Division of WVI and World Vision's Support Offices to market LSD/CS/AWP projects, by writing funding proposals and concept papers, locating suitable donors, and meeting donor reporting and auditing requirements.
6. Procurement Management Services, under which they assist the field office to source, purchase, insure, and dispatch equipment and supplies to service LSD projects (and other projects if requested).

Evaluation of the progress under the AWP grant has shown that the arrangement of sub-contracted program management and technical assistance was less than ideal, for too much of the experience that was obtained was not truly institutionalized within the organization.

Based upon the experience with this and other concurrent grants, WVRD has added experienced program staff so that all future major grants will be managed from within the organization.

B. Training and Technical Assistance

The realization of the goal of upgrading the capability of the World Vision Regional Technical Team and the field office project management staff has been linked to a strategy of transferring technology "know how" for design, implementation, management, and evaluation of water programs accumulated under the A.I.D.-funded WASH project.

During the AWP, the WASH Project has rendered invaluable assistance in helping to design and facilitate training activities and in participating in several project design and technical assessments which were critical to World Vision realizing the significant improvements in the design and implementation of projects noted in Section II. Over the life of the AWP grant, WASH had provided assistance in the following activities:

1. Consultant in the preparation of WVRD's AWP proposal for A.I.D. funding (October 1986).
2. WASH/WVRD/A.I.D. African Water Program Start-Up Workshop (December 1986).
3. Project Start-Up Workshop for World Vision Kenya--Maasai People's Project (January 1987).
4. Project Start-Up Workshop for World Vision Kenya--Karapokot Project (January 1987).
5. Rapid Assessment of World Vision Ghana--Rural Water supply and Sanitation Project (April 1987).

6. Rapid Assessment of World Vision Senegal--Louga Large-Scale Development Project (May 1987).
7. WASH/World Vision Assessment Meeting (June 1987).
8. WVRD Africa Water Program Water Supply and Sanitation Workshop (October 1987).
9. World Vision Malawi--Water Project Design (January 1988).
10. Senegal--Community Participation Assessment and Project Evaluation Strategy Design (January/February 1988).
11. Ghana--Training Plan for Community Participation and Hygiene Education (June 1988).
12. Kenya--Organizational Assessment (October 1988).
13. Senegal--Louga Water Development Assessment (July 1989).
14. Ghana--Ghana Rural Water Project Evaluation (November/December 1989).
15. AWP Final Evaluation preparation (February/July 1990).

Reports were produced on each activity. The personnel used were well qualified and, as a result, real learning took place regarding the complexities of water supply and sanitation projects.

Aside from WASH, critical support regarding training and technical assistance was provided by WVI Corporate Services. They have the major responsibility to concur with all AWP training and technical assistance activities planned for field offices to ensure adherence to World Vision policies and standards.

C. Logistical Support

Logistical support for the program has been provided by:

1. The Africa Regional Vice President's office, which had the responsibility for channelling all communication to ATMS/RTT and distributing all ATMS/RTT reports.
2. The Africa Regional Finance office, which provided backstopping for all leased items and World Vision personnel seconded to the ATMS/RTT group.
3. The WVI Finance office, which provided monthly funding requests to RTT and monitored contract funding.

4. World Vision field offices, which were responsible for maintaining trusting relationships with local governments and donor representatives, and providing adequate access to program and project activities and information.

The timely responses of all these bodies to ATMS/RTT and WVRD requests have been absolutely vital to the success of the program.

D. Relations with Local USAID Missions

In each of the countries where program activities have been carried out, local USAID Mission officials were briefed and their concurrence sought and secured. World Vision has appreciated the strong encouragement and support provided by the USAID Missions and is looking forward to their continued support.

E. Board of Directors

World Vision support countries and its International Board have been extremely supportive of the Africa Water Program and have carried out very successful fund-raising campaigns focusing on the need for potable water development among rural communities in Africa.

VI. FINANCIAL REPORT

A. Narrative Summary

The financial "pipeline analysis" on the following two sheets reflects actual expenditures up to the end of the World Vision fiscal year, which was September 30, 1990. The grant had been scheduled to end three months earlier but was later extended under a "no cost extension". The first sheet shows that the "actual expenditures" under the A.I.D. column for the full grant period were close to those that were budgeted. The principal deviations from budgeted expenditure were in the "Institution Building" which was \$15,551, or 5.8% over budget, and in "Program Management" which was \$14,003, or 3.3% under budget.

Matching expenditures from WVRD have appreciably exceeded those required under the grant with the final match exceeding the minimum that was required under the budget for the grant by \$7,549,501, (or 360%). However, as has been indicated throughout the narrative, the funding was significantly lower than had been anticipated in the initial proposal to A.I.D.

The second sheet shows the pipeline analysis in more detail and in grant line item format. This sheet also shows the breakdown on a year-by-year basis.

While, for most of the projects the private funding continues to be less than is desirable, a new grant was awarded in September 1990 for the Ghana Rural Water project. This grant comes from the Conrad N. Hilton Foundation and is for the sum of \$5 million spread over FY 1991 through FY 1995 and is to be matched by a further

\$2.7 million that World Vision has committed to raise independently. This will permit a further 500 wells to be drilled and will take good advantage of the existing capital equipment plus the knowledge and experienced that has been gained under the AWP grant.

World Vision Relief and Development, Inc.
 A.I.D. Funded AFRICA WATER MATCHING GRANT
 Grant # OTR-0293-A-00-7143-00
 January 1, 1987 to September 30, 1990

Printed: 20-Dec-90

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	Grant Budget			Actual Expenditures			Remaining Budget (Excess Expenditures Over Budget)		
	A.I.D.	WVRD	TOTAL	A.I.D.	WVRD	TOTAL	A.I.D.	WVRD	TOTAL
Pipeline Analysis:									
Program Costs	934,000	1,077,000	2,011,000	936,602	7,295,795	8,232,397	(2,602)	(6,218,795)	(6,221,397)
Institution Building	267,000	453,000	720,000	282,551	543,369	825,920	(15,551)	(90,369)	(105,920)
T.A. Contingency	130,000	0	130,000	126,850	89,326	216,176	3,150	(89,326)	(86,176)
Program Management	422,000	570,000	992,000	407,997	331,017	739,014	14,003	238,983	252,986
Evaluation	1,000	0	1,000	0	0	0	1,000	0	1,000
Indirect Costs	162,000	0	162,000	162,000	1,389,994	1,551,994	0	(1,389,994)	(1,389,994)
TOTAL	1,916,000	2,100,000	4,016,000	1,916,000	9,649,502	11,565,501	0	(7,549,502)	(7,549,501)

Note: The total matching budget was \$1,965,000. Only \$1,916,000 of this was added to our letter of credit. At the end of the grant period, A.I.D. decided to use the remaining funds of \$49,000 to pay for the final evaluation costs of the program.

World Vision Relief and Development, Inc.
A.I.D. Funded AFRICA WATER MATCHING GRANT
Grant # OTR-0293-A-00-7143-00
January 1, 1987 to September 30, 1990

	FY87			FY88			FY89			FY90			TOTAL		
	AID	WVRD	TOTAL	AID	WVRD	TOTAL	AID	WVRD	TOTAL	AID	WVRD	TOTAL	AID	WVRD	TOTAL
DETAIL															
Pipeline Analysis in Grant Line Item Format															

Program Costs:															
Senegal	0	548,971	548,971	65,000	765,733	830,733	129,626	955,746	1,085,372	65,000	697,101	762,101	259,626	2,967,551	3,227,177
Ghana	0	645,011	645,011	80,000	882,043	962,043	114,993	1,034,934	1,149,927	80,000	746,365	826,365	274,993	3,308,353	3,583,346
Kenya	0	0	0	60,000	140,359	200,359	75,463	301,555	377,018	60,000	312,788	372,788	195,463	754,702	950,165
Malawi (except Prof. Services)	0	0	0	98,512	41,254	139,766	57,294	129,190	186,484	50,714	94,745	145,459	206,520	265,189	471,709
	0	1,193,982	1,193,982	303,512	1,829,389	2,132,901	377,376	2,421,425	2,798,801	255,714	1,850,999	2,106,713	936,602	7,295,795	8,232,397
Institution Building:															
WVI Headquarters Costs (100%)	0	142,900	142,900	0	91,056	91,056	3,488	3,487	6,975	56,700	10,976	67,676	60,188	248,419	308,607
ATMS - RTT Costs (exc. supp. staff)	0	0	0	43,444	78,512	121,956	35,450	81,800	117,250	0	0	0	78,894	160,312	239,206
ATMS - Travel (50%)	0	0	0	43,108	10,777	53,886	15,815	36,903	52,718	0	0	0	58,924	47,680	106,604
Malawi - Prof. Services (50%)	0	0	0	15,244	0	15,244	30,587	24,256	54,844	38,714	62,701	101,415	84,545	86,958	171,503
	0	142,900	142,900	101,796	180,345	282,142	85,340	146,446	231,787	95,414	73,677	169,091	282,551	543,369	825,920
T.A. Contingency:															
ATMS - Short Term Consultant Hi	0	0	0	24,519	6,130	30,649	43,407	35,515	78,922	0	0	0	67,926	41,645	109,571
ATMS - Travel (50%)	0	0	0	43,109	10,778	53,886	15,816	36,903	52,719	0	0	0	58,924	47,681	106,605
	0	0	0	67,628	16,908	84,535	59,223	72,418	131,641	0	0	0	126,850	89,326	216,176
Program Management:															
ATMS - Program Management Costs	0	0	0	85,023	41,105	126,128	48,547	41,499	90,046	0	0	0	133,570	82,604	216,174
ATMS - Other Direct Costs	0	0	0	94,953	31,093	126,046	49,534	78,065	127,599	0	0	0	144,487	109,158	253,645
ATMS - Support Staff	0	0	0	19,917	4,980	24,897	25,477	47,317	72,794	0	0	0	45,394	52,297	97,691
Malawi - Prof. Services (50%)	0	0	0	15,244	0	15,244	30,588	24,257	54,844	38,714	62,702	101,416	84,546	86,958	171,504
	0	0	0	215,137	77,178	292,315	154,146	191,138	345,283	38,714	62,702	101,416	407,997	331,017	739,014
Evaluation:															
Indirect Costs:	0	0	0	61,927	0	61,927	60,848	0	60,848	39,225	1,389,994	1,429,219	162,000	1,389,994	1,551,994
	0	0	0	61,927	0	61,927	60,848	0	60,848	39,225	1,389,994	1,429,219	162,000	1,389,994	1,551,994
GRAND TOTAL	0	1,336,882	1,336,882	750,000	2,103,820	2,853,820	736,933	2,831,427	3,568,360	429,067	3,377,372	3,806,439	1,916,000	9,649,502	11,565,501

VII. LESSONS LEARNED AND LONG-TERM PROJECT IMPLICATIONS

Three of the four primary countries in the program (Ghana, Kenya & Senegal) have, quite naturally, provided most of the lessons. In these countries the work has been in progress for the most time and there has been more scope for the effects of actions to be observed. Out of the AWP, as a whole, several clear lessons have been learned, such as the difficulty of establishing a strong stable Regional Technical Team. Even on this, we do not have a clear consensus within the organization, and are not in complete agreement with the evaluators, either. A strong centralized Regional Technical Team within the region has turned out to be hard to achieve, and an expensive luxury should we be able to achieve it.

A second lesson which stands out is that quite different approaches to projects may have to be employed in different environments and can work well if they fit the community environment which they are to serve. Hopefully this will be shown more clearly in the later parts of this section, as the individual country projects are reviewed.

A. Estimates of Project Costs and Benefits

As was seen in Section VI, the overall funding for the projects has been less than had been envisaged at the inception of the grant. The reduced level of funding is a direct reflection of the lower donor giving which has been experienced by World Vision and most other charitable organizations in the years following the heavy giving during the Africa drought and famine crisis of 1983-1986. While this reduced giving has not jeopardized the integrity of the matching grant, it has led to slower progress within the individual projects. There have also been problems in finding adequate funds to finance all the support technical staff which we would ideally wish to have, and to maintain a sound and strong RTT.

The funding shortfall has also prevented the start of other major water supply and sanitation projects within the Africa region, as had been the hope at the outset. Thus, while the integrity of the grant has been maintained, all the additional "spin-off" which might well have been achieved has been delayed to future years.

In assessing project costs and benefits, the diverse and multi-component nature of the individual country projects makes this somewhat difficult. In Ghana, for example, we know that the project has given some benefit to as many as 400,000 people at the driest time of the year when water is hard to find. However, the entire 400,000 people certainly do not receive all or many of the benefits accruing from the project as a whole. A more representative number would be 200,000 (a little less than 500 people per well). With this in mind, a representative number of beneficiaries over the life of the AWP would be:

Ghana Rural Water Project	400,000
Kenya - Maasai People's Project	6,000

Malawi Rural Water Project	27,000
Senegal - Louga Project	70,000
TOTAL (approximately)	<u>500,000</u>

Thus, taking the total expended from the pipeline analysis of \$11.5 million (although this is not all that has been spent), gives a cost per beneficiary of \$23.

B. Institution Building

Ghana

The World Vision field office in Ghana was established in 1979 and part of its individuality is that it is fully "operational" in that it primarily works directly with communities as its partners and not through an indigenous local church partner (as would be the case in Kenya, for example). One outcome of this was that the WV Ghana had a relatively strong operational team before the water supply and sanitation (WS&S) project started. A second factor is that the country has a good core of well trained and experienced nationals, many of whom are dedicated to helping the needy even if this means living in the "bush".

In establishing a WS&S program such as the AWP (and more particularly one which is primarily based on well drilling) we are breaking one of the current basic tenets of rural community development in that we are, to some extent, deciding what the communities need before we enter them. The Ghana WS&S project was also symbolic of this form of preconception in development. Earlier development work in the rural communities made it clear to the field office that WS&S improvements were an essential foundation for further development. The project was therefore established to meet the vital needs that had been observed by World Vision staff and by many of the communities which they were, at that time, serving.

In Ghana this approach has resulted in many opportunities for learning lessons in institution building:

1. The Ghana Water and Sewerage Corporation (GWSC), which was hostile initially, has been a good source of technical staff and has accepted the benefits to the country of the best of its human resources being further trained by working with modern equipment and with a community-focused (as opposed to infrastructurally focused) organization. The lesson for both is that it can be very beneficial to "exchange" staff and so strengthen the national capability. The GWSC, the Ghana Ministry of Health, and the Ministry of Social Development are now giving considerable assistance to the project.
2. Rural communities can effectively be motivated to take responsibility for an infrastructural intervention (well drilling) in which they cannot completely participate.

3. Rural African communities are willing to establish new management committees and groups which include women and young people and which contrast strongly with the classical committees of elders, if this will better serve a purpose in which they come to believe.

The following specific achievements in infrastructure have been noted:

1. World Vision Ghana has been asked to serve on a steering committee to oversee and coordinate all water supply and sanitation activities in Ghana.
2. The drilling success in the north of Ghana has caused the CIDA-funded Northern Region Rural Integrated Project (NORRIP) to resume its own marginally successful drilling program.
3. World Vision Ghana has assisted other NGOs in installing water supplies and has become known as the largest and most technically competent NGO in the field of water in Ghana.
4. It has developed and strengthened community group leadership--especially in the participative role of women in active leadership.
5. It has motivated and trained local volunteer pump maintenance teams in more than 100 communities. This is a considerable achievement in a rural society where even the wheel goes mainly unrecognized.
6. Within World Vision, a functioning Technical Services Unit staffed by nationals is now in place. Training programs have been institutionalized.

Kenya

The Kenya Field Office of World Vision contrasted strongly with that of Ghana in that it was largely "non-operational" and had principally operated at village level through church partners. In Maasailand it was felt that the Maasai were a proud and independent people facing massive and traumatic changes in their whole way of life. To work with them, we first of all had to understand their needs, and this could best be accomplished by working with them and through them. In fact, it could best be done by developing and training a team of Maasai to help their own people through a critical cross-roads in their existence. In addition to not being staffed with a strong operational technical team, the World Vision Kenya office had very, very few Maasai on its staff.

The lesson here was that we had to recruit and train a new team of well equipped Maasai in order to effectively work with their own people. We had, in effect, to create a new infrastructure from "scratch", before we could start operations in the field.

The evidence before us was that there were no recorded successes when it came to making major improvements in the life of drought-threatened nomadic pastoralists by

bringing them more water (well drilling, etc.), and yet we knew that they needed this if improvements in health were to be made.

This project has been a lesson in patience, and Harry Clark has proven that with patience it is possible to train and develop a team that can work sensitively and creatively with their own people. New infrastructures can be created and communities can contribute greatly in setting new directions.

A further lesson in this is that training takes a long time to produce visible results, and is hard to fund due to the lack of visible results. Training of corporate management and fund-raising staff is also needed to permit the in-field success.

Senegal

The original concept of the Louga project was to respond to the expressed need of both the national and regional governments of Senegal at a time of severe drought and decertification in the Louga Region. The project was to be established by a new expatriate technical team in an area where an operational field office did not exist. The project team was primarily made up of specialists recruited for this task. Time was not taken to build up the team as a team, nor to acclimatize them to World Vision before they went to the field. While this occurred before the project came under the AWP, it can clearly be stated that this was a most unsuccessful venture in infrastructure building and one which has tainted the project. Fortunately, it has been followed by a more successful period of infrastructure (team) building.

The relational infrastructure building with the regional and national governments had a low period during the traumatic phase referred to above. With much patience and diplomacy on the part of the Project Director, a strong partnership has been established with several layers of government, to the extent that many of the key members of the project team have come from government technical departments, and hopefully will return there with broader experience at the end of the project. World Vision is pioneering the concept of small-diameter tube-wells equipped with hand pumps in the north of Senegal and this example is now being accepted and copied by others, with encouragement from government. World Vision is being encouraged by government to extend the project outside the present region.

Malawi

The Malawi project is still in its infancy. But a problem we have had to face has been the great difficulty of recruiting experienced staff in a country where staff members have the opportunity of a safe "cradle-to-grave" career with government. This has been a severe drain on the water resource capacity of the RTT due to the long-term secondment of Larry Quist to the Malawi project. Here we have learned, once again, that the in-house infrastructural requirements of a large-scale WS&S project may be very hard to build up rapidly if we seek to use national staff. We have also learned that a project as complex as this can also be a major drain on the managerial resources of a field office which is still inexperienced in project management.

Generic

Another lesson we have learned is that while it may be important to establish a highly competent regional group of technical specialists, it is also very difficult to do so, and it is very expensive to keep them together without specific projects for them to work on most of the time. However, without good technical competence at some point within the organization, it is hard to effectively interact with international technical agencies and with major donors wishing to implement programs in cooperation with PVOs. It is only through such major funding sources that we will be able to provide the stable funding needed for the successful implementation of long-term transformational interventions. Here we are having to learn that the needs of external infrastructures also have to be served and satisfied if we are to have consistent success in this type of ministry. At the present, it seems that the support offices that bear the responsibility for fund raising may also have to carry many of the technical staff that are needed to design and launch complex projects.

C. Estimates of Sustainability

Sustainability is taken to be a process of investment and reinvestment by beneficiaries themselves that continues after the termination of donor involvement.

Over the past several years, World Vision has learned that sustainability is enhanced by:

1. Local participation in as many of the phases of the project as possible. In this way the beneficiaries have the best opportunity to take "ownership" of the work and accept that its long-term success is in their hands.
2. The use of technology appropriate to the community being served.
3. Adequate and patient training of local users in the on-going operation and maintenance of the project.
4. Utilizing existing community-based organizations and having them accept responsibility for mobilizing community resources to support the projects.

In particular the following specific lessons has been learned:

Ghana

The question of sustainability has always caused concern for the Ghana Rural Water Project. There are many reasons for this concern, such as:

1. Ghana Water & Sewerage Corp. (a government ministry) has claimed responsibility for pump maintenance and yet has been unable to discharge this responsibility. Fortunately this is now changing and we are beginning to be able to transfer this responsibility down to the community level.

2. Many rural communities have no experience with even the most primitive forms of mechanization. This continues to challenge us, but as we experiment with other forms of VLOM pump, even here there is hope.
3. The sustainability components of the World Vision project have been poorly funded and there has been pressure to drill as fast as possible to meet donor expectations.

This situation is now in the process of being corrected with considerable success:

1. Some 186 volunteer community-level maintenance personnel have now been trained.
2. World Vision has a strong operational maintenance team that trains, monitors, and, when needed, repairs pumps. This is now moving towards being a "backstop" instead of the "front line" approach.
3. Training programs for long-term maintenance and repair have been institutionalized.
4. A strong spirit of ownership of the wells is being developed in most recipient communities, and they are readily prepared to pay for additional maintenance and repairs which they are unable to perform within the community.
5. A new phase of the GRWP is now being launched, wherein both the under funding and under-staffing of the software components has been addressed.

Kenya

The Maasai People's project has concepts of sustainability intrinsic within its roots for it is centered around community mobilization and training. Tribal Maasai are being motivated, supported, and trained to determine their own future in the face of major external and internal changes.

It will take many years before we are able to fully assess the outcome of this approach, since it is implicitly happening at a slow pace, and yet external changes are happening within the country at a rapidly accelerating pace due to the high population growth rate (the highest in the world), and other factors.

There are no significant mechanical interventions within this project. Thus, the question of physical sustainability of equipment is less relevant.

One valuable principle of sustainability which we have managed to demonstrate has been the smooth transition of management from one dominated by expatriates to one which is wholly Maasai. Training and workshops through the AWP have played a major role in this success.

Senegal

Although there are many aspects of the Louga potable water project which are similar to that in Ghana, the culture of the people and the infrastructures which surround them are markedly different. The local culture is much more conversant with mechanization and with principles of private economic trade. A strong lesson which can be learned from this is that the project must be designed to fit in to the culture in which it will be implemented. One solution does not fit all!

The following achievements have been made:

1. Community workers and multiple-village maintenance and repair staff have been, and are being, trained to carry out work on the pumps and wells. This repair and maintenance work is being financed by the communities.
2. The communities are now, in many cases, motivated to take a more active role in determining their future through further developmental activities.
3. The India Mk.II hand pump has now been adopted as the standard pump by a neighboring project being implemented under Italian funding. Through this the long-term base for the supply of spare parts and new pumps is being enhanced.

Malawi

It is too early to see too many lessons of sustainability from the work in Malawi.

D. Benefit Distribution

Ghana

The primary benefits from the provision of safe potable water are being realized by the women and children, both in terms of better health, and in reduced drudgery.

This is most apparent in the northern region where we are aware that a single pump frequently benefits more than 1,000 people when water is scarce. Here, clearly, the benefit is still spread very thinly.

In the southern regions, the level of available water is higher, as is the impact of health, hygiene, and sanitation education.

Kenya

We believe that the Maasai People's Project will benefit the whole culture in a variety of ways. Clearly more safe water will primarily benefit the women and children most of all, for they have historically taken second place to the tribal cattle on which their

survival depended. However, the project is most certainly not a basic one of WS&S in isolation.

If the Maasai can be assisted to effectively find a way for their culture to survive the transition which it faces, the benefits will not be limited either to their own tribal group or to the nation of Kenya, but will benefit the whole continent. The Maasai people are not only one of the primary nomadic tribal peoples, but also are a picturesque and widely acclaimed historically significant culture.

Senegal

The primary benefits from the provision of safe water are once again being realized by the women and children in terms of better health and a reduced work load for the water carriers. A significant increase in water consumption per person has been observed in limited sampling. This will undoubtedly also benefit the men of the village, even if to a lesser extent.

An early benefit for the communities as a whole, but particularly for the men, is seen in some villages where additional water is available for agricultural use. Here there are some instances where the men are no longer obliged to migrate to the towns to find work during the dry season (January to July).

E. Local Participation

World Vision's experience over the past two decades indicates that impact and sustainability are significantly improved when the beneficiaries assume a role in needs assessment, project design and implementation.

As was expressed in the opening part of this section (Section V), quite different approaches have been taken in the four primary countries of the AWP. In Ghana and Senegal, where the hydrological and geological conditions have dictated that drilled wells would have to be the primary source for more water, local participation by the recipients in planning and in the actual well drilling has been more difficult to achieve.

At the other end of the spectrum, in Kenya, the Maasai People's Project has been totally dependent on both tribal and community participation.

Ghana

Local participation was often slow to start, but is now moving ahead much more rapidly as we have come to understand the communities, and as World Vision Ghana community participation and training programs have evolved and been institutionalized.

Detailed training programs which evolved under the project have been used to motivate the whole of the WV Ghana operations and regional coordination staff in the

field. They, in turn, are also then involved in the broad process of community motivation and animation.

Additional workshops have also been run for community leaders and lower-level volunteers in areas of community water supply, sanitation, health, hygiene, sanitation, nutrition, and agriculture.

Kenya

The project has been based on developing a high level of local participation and has been extremely successful in this, after a slow start while the Maasai team was being recruited and trained.

The emphasis has been on developing needs assessments and programs that address the perceived needs of the individual communities which are involved. The World Vision field team primarily act as relatively passive facilitators in this process. This is complex and slow within a tribe which has dominant structures of leadership through elders. Classically, the tribal structure has neither encouraged its younger members to be outspoken nor has it encouraged change. It is only the conditions which face the Maasai which have created the present openness and opportunity for intervention.

We are learning, too, in this process and hopefully will be able to replicate what we have learned elsewhere with other nomadic pastoralist groups.

Senegal

The communities are encouraged to participate as much as possible in the project, and World Vision will not work in communities where initial participation requirements are not met. Before drilling commences, a contract is drawn up with the villagers which emphasizes their obligations and participation in the process, leading to their ownership of all that has been done. The recipient community even has its role in the drilling process for members have to:

1. Select, provide, and clear the well site.
2. Raise the initial funds for spares and repair of the pump.
3. Feed the drill crew during the time that they are on site.

Participation is greater once the well is drilled. We are learning that the whole community can make major advances, once water becomes available and they abandon the fatalistic attitude that often surrounds the lack of water and perpetual threat of drought.

Pump repair "cottage industries" are evolving, and women's groups involved in water, agriculture (vegetable gardens), and health promotion are developing.

F. Leadership Development

World Vision seeks to develop, support, encourage, and strengthen "servant leadership" within its programs. The focus is on helping all of its staff to be servants first, as opposed to leaders first, in the belief that those who are servants first rather than leaders are more likely to persevere in finding out what serves a group's highest-priority needs.

Ghana

This has been addressed in Section IVC1.

Kenya

This has been addressed already in Section IVC2, for the community-based nature of the project inevitably is having an effect on leadership patterns within the communities. This has to be carried out slowly and patiently due to the classical dominant-elder leadership pattern of the culture. We believe that it is best facilitated by Maasai.

Malawi

The evaluation of the Malawi under the AWP Final Evaluation revealed that the WV Malawi project and field office management have a major need for further leadership development. It would seem that the requirements of the project are "stretching" the management capability of the field office. This situation is under active review by the newly appointed Southern Africa Regional Director, Mr. Max Chigwida.

Senegal

The project is being used to strengthen the leadership of the communities within their own cultural setting, as was indicated in the earlier paragraphs. This is a delicate process in many communities for there has been a long history of paternal leadership from the Islamic church Marabouts. Any changes which are made (for example, increasing the role of women in leadership) have to be sensitive to this heritage. However, some changes are slowly taking place, and women are seen to be taking a stronger role in the community.

G. Innovation and Technology Transfer

Ghana

We have avoided going too far into this process, for the basic India Mk II pump is a sufficient challenge for most of the villages where even the simplest concept of a screw thread is often unknown. The emphasis has been on consolidation of current technology. WV Ghana is evaluating the Aquadev pump as a more appropriate form of VLOM device. There have been early "teething troubles" with this, but the testing is continuing and shows hope.

Work is being done in-country and some work has been carried out at a university here in the United States on appropriate methods for the removal of iron from the water. An appropriate village level solution is urgently required.

Kenya

The principal new technology that has been introduced is the use of ferrocement. This is akin to the daub-and-wattle construction method used in building Maasai huts and has been readily assimilated.

Agriculture, tree planting, and the use of animal traction are all being introduced alongside the water project. Once again, these are new technologies to many of the Maasai, but are being accepted with mixed levels of success.

Senegal

The Louga region already has relatively well developed metal working skills at rural town level. Some aspects of these are being transferred to village level as the pump repair "bush technicians" are being trained to install and repair the India Mk.II hand pumps which are proving to be culturally appropriate.

Simple irrigated agricultural technology and aquaculture are also being taught as extension components built on the basic water work.

H. Collaborating/Networking with Other Agencies

The AWP program has given rise to relatively little direct collaboration with other agencies.

World Vision is currently collaborating with UNICEF in Uganda and is also now working with the Uganda government and the World Bank in Uganda.

In Ghana, World Vision is a member of the national steering group sponsored by UNDP to assure adequate coordination of water works in the country.

Finally, as a result of past World Vision activities, relationships also exist with a number of other agencies, including consulting/working relationships with UNHCR, WFP, WHO, and others. There has been particularly strong collaboration with UNICEF in carrying out Child Survival activities in Zimbabwe, Senegal, and Kenya, which World Vision hopes to extend to the water sector.

1. Replication

There is scope to replicate the establishment of water development projects within four of the priority countries and to start similar projects in other African countries. Similarly, requests for the type of training and technical assistance provided under the AWP have come from World Vision program offices in Uganda, Zambia, Zimbabwe,

Ethiopia, Mauritania, and Chad. The current major limitation to this is the lack of reliable long-term funding sources. World Vision had good success in FY90 in securing stable funding for an extension and expansion of the Ghana Rural Water Project, but this represents the only bright light for the moment.

At a detailed level it is unlikely that exact replicas of any of the projects would ever be initiated, either in the same country or in another, due to the differing circumstances obtaining. However, experience in techniques, training programs, and staff most certainly can be transferred to other situations. We see considerable opportunity for this to take place as funding increases.

VIII. RECOMMENDATIONS

Before listing specific recommendations, we believe it is important to review some items pertaining to the AWP grant which have neither been adequately addressed in the main body of this document nor in the A.I.D. final evaluation of the grant. Without so doing, we believe that any recommendations would have little real value to future readers or to those seeking to follow similar lines.

World Vision is a partnership of support offices, which raise funds internationally; and field offices, which implement the programs in the individual field countries (more than 80). The structure of the partnership is one of mutual trust shared around a common set of goals and a common set of Christian ethics. The partnership has grown up around small scale development activities funded by child-sponsorship donors who still remain the largest source of income for World Vision. The requirements for this form of activity are markedly different from those for large-scale development activities of the type that were envisaged under the Africa Water Program grant.

World Vision is not a monolithic organization but more a broad international "family" of individualistic entities operating in differing modes that best suit their individual cultures and circumstances. There is much of advantage for others to learn from this and much of disadvantage for the management of World Vision to learn from the limitations of this ill-ordered structure.

In preparing the proposal for the AWP grant, the complexities of how the structure of World Vision would inhibit the progress of the grant were either not well understood or were not well communicated. The proposal and resulting grant document assumed that World Vision would operate as a more disciplined organization than was likely to happen, or did happen. In stating this, we do not imply any specific criticism, for as the proposal was being studied and prepared, World Vision was experimenting with a new venture of Large-Scale Development (LSD). A new, somewhat independent division had been created to design and implement this new (to WV) form of activity on the African continent. The organizational concept of this division was planned to be much more structured and would have brought together the skills and management that World Vision would have needed in order to respond to the enormous amount of assistance that was seen to be required in the

wake of the "Africa Drought", and the strong potential response that was seen by the international donors to the crisis of 1984-86.

Whether the response of creating a whole new operating division to address large-scale development was appropriate is not an issue for this report, and has been reviewed elsewhere. However, the anticipated donor response to the plight of Africa did not materialize, and World Vision decided to close the independent division and merge the activities back into the Africa regional organization. This was taking place at the time that the AWP was getting under way and has had a major influence on the progress of the grant activities. The Louga Project in Senegal, the Ghana Rural Water Project, and the Maasai People's Project had all been started under the separate LSD divisional structure. They then had to be merged into a very loosely coordinated Africa regional organization that was ill equipped to accept them initially, and was short of both staff and funding as the AWP progressed.

THE OVERALL RESULT OF THIS WAS THAT THE AWP WAS PLANNED AND PROPOSED UNDER AN ORGANIZATIONAL STRUCTURE AND FUNDING CLIMATE WHICH WAS QUITE DIFFERENT FROM THAT UNDER WHICH IT WAS IMPLEMENTED.

In making any recommendations, we believe that this needs to be appropriately considered, and in reviewing the success of the work done under the AWP, this needs to be borne in mind.

1. Recommendations to A.I.D. and World Vision Leadership

We believe that the AWP would have been more effective if both the changed and changing circumstances had been more effectively recognized and acknowledged--and further, if the goals and objectives of the AWP had been modified in the light of the changed circumstances. A good example of this was the continued push to form a large centralized Regional Technical Team with the capability to plan and start a whole new series of large-scale WS&S projects in African countries, long after the point when it was recognized that new funding for this type of program was not going to be forthcoming.

The loose-knit nature of the WV partnership made this adaptivity to changing circumstances difficult if not impossible to accomplish. WV needs to find new ways to come to a more rapid consensus - even when it is distasteful to do so.

We believe that A.I.D. could also do much to facilitate a more dynamic response to changing conditions, and so ensure that their contributions were better invested. This could be done if A.I.D. became more effectively a partner with the PVO than the present grantor/grantee format permits. The AWP was a "matching grant" in which partnership was encouraged, in principle, by A.I.D. and the PVO sharing in the financing equally. This partnership could, and perhaps should, have extended into the management and operation of the grant. A midterm review could have provided a

vehicle where significant changes in the direction of the grant could have been considered and encouraged. We feel that the present format strongly discourages such changes in direction, even long after the need for them has become obvious.

2. Recommendations to World Vision Africa Regional Managers and Country Directors

A grant such as the AWP, together with the possibility of large-scale project funding, presents a completely new opportunity to meet the needs of impoverished tribal groups such as the Maasai, or particular sections of the poor of the field country. It also, however, brings a new set of responsibilities, challenges, and requirements which are likely to be beyond the existing capabilities of field offices. Much evaluation is needed to ensure that the additional burdens are acceptable and appropriate. And, having decided that they are acceptable, a long-term commitment to staff recruitment and training is essential if the potential of the new project is to be realized.

**DOCUMENTATION DATA BASE:
AFRICA WATER PROGRAM ACTIVITIES
SORTED BY DATE ISSUED**

#	TITLE	AUTHOR	DATE	CODE
505	PRE-FEASIBILITY STUDY MACRO PROJECTS SENEGAL	RESEARCH & COMMUNICATION WEST AFRICA DAKAR	03/15/85	AWPSEN. PRE. WARC
607	DIRECTIONAL STUDY MAASAI WATER PROJECT	MUSTARD SEED P.J. RIDDELL	02/20/86	AWPKEN. DIR. NAI
202	WVRO PROPOSAL 3 YEAR MATCHING GRANT A.W.P.	W.V. RELIEF ORGANIZATION	10/17/86	AWPWVR. PROP.1 WVRD
203	SUMMARY NOTES WASH WVRO AFRICA WATER PROGRAM STARTUP	WASH/WVRO/USAID	12/17/86	AWPGEN. AWP.1 WASH
418	MANAGEMENT CONSIDERATIONS GHANA	Barry HARPER WVI Consultant	05/01/87	AWPGHA. RAT.8 WVI
416	TECHNICAL CONSIDERATIONS GHANA	Nicolas ADRIEN WASH	05/01/87	AWPGHA. RAT.3 WASH
419	RAPID ASSESSMENT REPORT - GHANA	G.T. ROBERTS Regional LSD	05/05/87	AWPGHA. RAP.1 LSD
605	AGROFORESTRY COMPONENT MAASAI PEOPLE'S PROJECT	Ruth CLAY & REGIONAL TECHNICAL TEAM	05/06/87	AWPKEN. MPP. RTT
411	COMMUNITY DEVELOPMENT APPROACH	Florence EGAL WASH	05/06/87	AWPGHA. RAT.1 WASH
534	RAPID ASSESSMENT WV SENEGAL RURAL WATER PROJECT	Florence EGAL WASH	05/21/87	AWPSEN. RAT.1 WASH
532	TECHNICAL CONSIDERATIONS RAPID ASSESSMENT	Nicolas ADRIEN WASH	05/23/87	AWPSEN. RAT.2 WASH
535	RAPID ASSESSMENT REPORT BY AG CONSULTANT	J. SHOLTO DOUGLAS Reg LSD Team Nairobi	05/23/87	AWPSEN. RAT.8 LSDT
531	HYDROGEOLOGICAL ASSESSMENT	G.T. ROBERTS LSD REG. TECH. TEAM NAIROBI	05/23/87	AWPSEN. RAT.3 LSD

#	TITLE	AUTHOR	DATE	CODE
536	MANAGEMENT/FISCAL CONSIDERATIONS RAPID ASSESSMENT	Barry HARPER WVI Consultant	05/23/87	AWPSEN. RAT.7 WVI
533	IMPACT OF AGRICUL- TURAL ACTIVITIES	J. SHOLTO DOUGLAS Reg LSD Team Nairobi	05/23/87	AWPSEN. RAT.5 LSD
541	PROJECT PAPER SENEGAL - LOUGA RURAL WATERPROJECT	J. SHOLTO DOUGLAS Planning Meeting Reg LSD Team	06/08/87	AWPSEN. RPM. LSD
606	MAASAI PEOPLE'S PROJECT - PLANNING PAPER	LSD DIVISION	06/22/87	AWPKEN. MPP. LSD
402	ANNUAL REPORT GHANA FY 1986/87 LSD RURAL WATER	GHANA FIELD OF- FICE	10/10/87	AWPGHA. ANN1. GFO
804	WASH FIELD REPORT NO 304 AWP WORK- SHOP - NAIROBI	WASH - Robert GEARHEART David YOHALEM	11/01/87	AWPGEN. 304. WASH
525	EVALUATION PLAN REPORT - WV/SEN LOUGA INTEGRATED	David YOHALEM	01/01/88	AWPSEN. EPL88. wash
511	LOUGA BASELINE EVALUATION SENEGAL	TECHNICAL SERVICES COOKINGHAM/ YOHALEM	02/01/88	AWPSEN. BES88. TS
207	MINUTES & REPORT LSD/AWP MANAGEMENT OVERSIGHT MEETING	SAM ODUNAIKE LSD/CS/AWP	03/31/88	AWPGEN. MIN. WVI
711	DESIGN DOCUMENT WV MALAWI WATER PROGRAM	HAFNER, MLAKA, MTIKA, NAMARIKA, NICOLL, QUIST	05/01/88	AWPMLW. DSD. MFO
808	WASH REPORT 305 TRAINING PLAN & WORKSHOP WV/GHANA	WASH David YOHALEM	09/01/88	AWPGEN. 305. WASH
454	TRANSFERRING TRAI- NING TECHNOLOGIES	David YOHALEM WASH	09/01/88	AWPGHA. TRAIN. WASH
204	FIRST ANNUAL RE- PORT AFRICA WATER PROGRAM	WORLD VISION RELIEF & DEVELOP- MENT Inc.	10/31/88	AWPWVR. WVRD.2
404	ANNUAL REPORT GHANA FY 1987/88 RURAL WATERPROJECT	GHANA FIELD OF- FICE	01/01/89	

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB Approval No. 0412-0530
Expiration Date: 04/30/92

FOR OFFICIAL USE ONLY

PVO Type		Project Number OTR-0293-A-00-7143-00	
Appropriation		Level	
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 1	

PROJECT INFORMATION (PRIMARY)

Name of Organization World Vision Relief & Development, Inc.		Grant/Contract Number OTR-0293-A-00-7143-00	
Start Date (MM/DD/YY) 01/01/87	End Date (MM/DD/YY) 09/30/90	AID Project Officer's Name Charles Fields	

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT
87	-0-	90	80,000
88	80,000		
89	114,993		
LOP			274,993

Activity Description

The Ghana Rural Water Project encompasses water supply, sanitation and health and hygiene education. Under the grant the primary activities are assisting the project and the field office TSU in securing and training experienced staff to manage and support the project activities. In addition extensive training programs for field staff and community workers are being designed and institutionalized.

Status

This grant was completed as of 09/30/90. A final report will be submitted to A.I.D. as of 12/31/90.

COUNTRY INFORMATION (SECONDARY)

Country Ghana	Location in Country (Region, District, Village) All regions of Ghana
PVO Representative's Name	Local Counterpart/Host Country Agency Rural Communities

COUNTRY FUNDING INFORMATION (\$000)

YEAR	87	88	89	90	TOTAL
AID \$	-0-	80,000	114,993	80,000	274,993
PVO \$	645,011	882,043	1,034,934	746,365	3,308,353
INKIND					
LOCAL					
TOTAL	645,011	962,043	1,149,927	826,365	3,583,346

AID 1550-11 (6-86)

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Project Officer	Key 1	Key 1	

PROJECT INFORMATION (PRIMARY)

Name of Organization World Vision Relief & Development, Inc.		Grant/Contract Number OTR-0293-A-00-7143-00	
Start Date (MM/DD/YY) 01/01/87	End Date (MM/DD/YY) 09/30/90	AID Project Officer's Name Charles Fields	

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT
87	-0-	90	60,000
88	60,000		
89	75,463		
LOP			195,463

Activity Description

The Masai Peoples Project is the principal grant related activity in Kenya although a TSU is being built up in the field office which will benefit all water supply and sanitation activities within the country. In the project the Masai experienced staff have been recruited and trained to manage the large-scale water development activities. A comprehensive training program for project staff and community workers has been created and implemented. The project staff, country, TSU staff and RII are providing continuing technical assistance to community workers and in the Masai communities.

Status

This grant was completed as of 09/30/90. A final report will be submitted to A.I.D. as of 12/31/90.

COUNTRY INFORMATION (SECONDARY)

Country Kenya	Location in Country (Region, District, Village) Narok Region of Masailand
PVO Representative's Name	Local Counterpart/Host Country Agency Masai Communities

COUNTRY FUNDING INFORMATION (\$000)

YEAR	87	88	89	90	TOTAL
AID \$	-0-	60,000	75,463	60,000	195,463
PVO \$	-0-	140,359	301,555	312,788	754,702
INKIND					
LOCAL					
TOTAL	-0-	200,359	377,018	372,788	950,165

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Appropriation		Level	
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 1	

PROJECT INFORMATION (PRIMARY)

Name of Organization World Vision Relief & Development, Inc.		Grant/Contract Number OTR-0293-A-00-7143-00	
Start Date (MM/DD/YY) 01/01/87	End Date (MM/DD/YY) 09/30/90	AID Project Officer's Name Charles Fields	

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT
87	-0-	90	50,714
88	98,512		
89	57,294		
LOP		206,520	

Activity Description

The project is a Water Supply, Health Education and Sanitation activity aimed to serve a number of needy communities with piped water or water from boreholes equipped with locally manufactured handpumps. Under the grant assistance is being given: in securing and training experienced managerial and technical staff, in establishing a TSU within the field office, in instituting training programs for field staff and in procuring equipment and technical services.

Status

This grant was completed as of 09/30/90. A final report will be submitted to A.I.D. as of 12/31/90.

COUNTRY INFORMATION (SECONDARY)

Country Malawi	Location in Country (Region, District, Village) Various
PVO Representative's Name	Local Counterpart/Host Country Agency N/A

COUNTRY FUNDING INFORMATION (\$000)

YEAR	87	88	89	90	TOTAL
AID \$	-0-	98,512	57,294	50,714	206,520
PVO \$	-0-	41,254	129,190	94,745	265,189
INKIND					
LOCAL					
TOTAL	-0-	139,766	186,484	145,459	471,709

AID 1550-11 (6-86)

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Appropriation		Level	
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 1	

PROJECT INFORMATION (PRIMARY)

Name of Organization World Vision Relief & Development Inc.		Grant/Contract Number OTR-0293-A-00-7143-00	
Start Date (MM/DD/YY) 01/01/87	End Date (MM/DD/YY) 09/30/90	AID Project Officer's Name Charles Fields	

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT
87	-0-	90	65,000
88	65,000		
89	129,626		
LOP			259,626

Activity Description

The Louga project encompasses water supply, water extension training, food production, tree production, and child survival. Technical and managerial support is being given to the project under the AWP grant.

Status

This grant was completed as of 09/30/90. A final report will be submitted to A.I.D. as of 12/31/90.

COUNTRY INFORMATION (SECONDARY)

Country Senegal	Location in Country (Region, District, Village) Louga Region
PVO Representative's Name	Local Counterpart/Host Country Agency Rural Communities

COUNTRY FUNDING INFORMATION (\$000)

YEAR	87	88	89	90	TOTAL
AID \$	-0-	65,000	129,626	65,000	259,626
PVO \$	548,971	765,733	935,746	697,101	2,967,551
INKIND					
LOCAL					
TOTAL	548,971	830,733	1,085,372	762,101	3,227,177

AID 1550-11 (6-86)

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Country Code		Fund Type	Technical Code
Project Officer		Key 1	Key 1

PROJECT INFORMATION (PRIMARY)

Name of Organization World Vision Relief & Development Inc.		Grant/Contract Number OTR-0293-A-00-7143-00	
Start Date (MM/DD/YY) 01/01/87	End Date (MM/DD/YY) 09/30/90	AID Project Officer's Name Charles Fields	

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT
87	-0-	90	173,353
88	446,488		
89	359,557		
LOP			979,398

Activity Description

- 1) secure experienced staff to manage activities and provide management oversight for large scale water development projects;
- 2) establish a regionally-based technical information and documentation center to manage and implement these projects;
- 3) institute a comprehensive program of technology transfer, training and technical assistance for field staff;
- 4) strengthen the existing regional technical team's capability to provide on-going technical assistance and training to field staff;
- 5) establish small technical resource units within five ->

Status

This grant was completed as of 09/30/90. A final report will be submitted to A.I.D. as of 12/31/90.

COUNTRY INFORMATION (SECONDARY)

Country Hdqts (Institution Bldg., T.A. Contingency, Prog., Mgt, IDC)	Location in Country (Region, District, Village)
PVO Representative's Name	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION (\$000)

YEAR	87	88	89	90	TOTAL
AID \$	-0-	446,488	359,557	173,353	979,398
PVO \$	142,900	274,431	410,002	1,526,373	2,353,706
INKIND					
LOCAL					
TOTAL	142,900	720,919	769,559	1,699,726	3,333,104

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con't. Activity Description:

field offices; and 6) procure materials, equipment and technical services for the implementation of selected water projects. The scope of the program under this grant is limited to the five countries noted above.